

# **Lower Snake River Juvenile Salmon Migration Feasibility Study**

## **Community-Based Social Impact Assessment**

**Phase II - Southern Idaho**

**September 1999**



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## **Community-Based Social Impact Assessment Phase II - Southern Idaho**

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## Foreword

This document is the product of the US Army Corps of Engineers' (Corps) efforts to involve the region in the development of the Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement (FR/EIS). The Corps has reached out to regional stakeholders (states, tribes, federal agencies, organizations, and individuals) for the input and development of various work products. This and various other products associated with the development of the FR/EIS were authored and developed by these regional stakeholders and contractors. Although the Corps has acquired this document as part of its FR/EIS process, the opinions and/or findings expressed herein do not necessarily reflect the official policy or position of the Corps. The Corps will review and incorporate information from this product into our analysis and development of the draft FR/EIS.

Social scientists from the University of Idaho were contracted to conduct community assessments, analyze the data collected and to report the findings. The primary purpose of this research was to assess the past and current situation of selected communities and to better understand potential future impacts of improved salmon passage alternatives being considered at four Corps managed dams on the lower Snake River. An important goal of the forums was to ensure adequate community-level participation and involvement of a range of individuals in communities throughout Idaho, and eastern Washington and Oregon. Phase I of the impact assessments included the following communities:

**Washington:** Burbank, Clarkston, Colfax, Pomeroy, Prescott, and Washtucna

**Idaho:** Genesee, Lewiston, Orofino, Riggins, and Weippe

**Oregon:** Enterprise, Stanfield, Adams, and Umatilla

Phase II of the assessments included ten communities in Southern Idaho:

Salmon  
Ashton  
Firth  
Rupert  
Twin Falls  
Bliss/Hagerman  
Homedale  
Boise  
Cascade

This document is only one part of the social analysis of the FR/EIS. For a true social analysis of the implications of any of the study alternatives, all the components of the social analysis must be considered, without any individual component taken out of context.

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# EXECUTIVE SUMMARY

## INTRODUCTION

This report details the findings of Phase II of the University of Idaho's community-based social impact assessment obtained through nine interactive community forums conducted in southern Idaho as part of the *Lower Snake River Juvenile Salmon Migration Feasibility Study and Environmental Impact Statement (Feasibility Study/EIS)*. [Section 1](#) describes the purpose and scope of the interactive community assessment. [Section 2](#) provides the findings from each of the nine communities with respect to the community history, 1999 baseline situation, and the perceived impacts to individual communities due to each of the three proposed pathways for salmon recovery on the Lower Snake River. [Section 3](#) compares the communities and results from each of the individual community assessments and identifies common patterns for both the current situation in the sampled communities (current affected environment) and community-level impacts (or environmental consequences) under the three proposed pathways.

Key findings presented in this executive summary focus on a brief synopsis of results for Phase I, which assessed communities in the three Lower Snake River impact areas, as well as a more detailed summary of the results for the nine communities assessed in Phase II. This summary thus places the results from the southern Idaho communities in a broader, more complete context of the findings from Phase I, which assessed communities in the reservoir region of southeastern Washington, the upriver region of northcentral Idaho, and the downriver region of northeastern Oregon and south central Washington.

## PURPOSE AND OBJECTIVES

### Purpose

The purpose of the Community-Based Social Impact Assessment conducted for the *Lower Snake River Juvenile Salmon Migration Feasibility Study and Environmental Impact Statement (Feasibility Study/EIS)* was twofold. First, the study assessed the current condition and characteristics of selected communities in the regions of southern Idaho that may be affected by three different "pathways," or sets of alternatives, currently under consideration by the U.S. Army Corps of Engineers (or "Corps") for salmon recovery in the Lower Snake River. Two additional pathways, which focused on changes in the current flow augmentation on the Snake River, are included under Pathway A2 in Phase II. Each of these five pathways is briefly described below:

**PATHWAY A1** -- The first pathway is the baseline condition, or the "Existing System," whereby the situation with the four Lower Snake River dams would remain much the same as it is today. Juvenile salmon would continue to pass through turbines, through fish bypass systems, or over spillways. Some fish would continue to be transported by barge and truck to below Bonneville Dam. River flow would continue to be augmented by Upper Snake River water. Ongoing improvements include longer screens, additional barges, and flow deflectors on spillways.

**PATHWAY A2** -- Under implementation of this pathway, "Major System Modification," the four Lower Snake River dams would remain. Construction of surface bypass and fish guidance systems would occur, structural changes would be made to turbines and spill basins as well as modification of river flow and spills. River flow would continue to be augmented by Upper Snake River water. These modifications could be used with either the juvenile fish transportation system or in-river juvenile migration. Two "sub-pathways" under A2 were also assessed; the following were numbered for clarity and ease of understanding of forum participants, and are not the same as those listed in the EIS:

**PATHWAY A2b** -- Under this alternative for Pathway A2 ("Major System Modification"), all modifications would remain the same as under Pathway A2, except that flow augmentation on the Upper Snake River would be reduced from 427,000 acre-feet/year to 0 acre-feet/year.

**PATHWAY A2c** -- Under this alternative for Pathway A2 ("Major System Modification"), all modifications would remain the same as under Pathway A2, except that flow augmentation on the Upper Snake River would increase from 427,000 acre-feet/year to 1.427 million acre-feet/year.

**PATHWAY A3** -- Under implementation of this pathway, "Natural River Drawdown and Dam Breaching," the four lower Snake River dams would be partially removed. Existing reservoirs would be permanently lowered to a natural free-flowing condition by removing the earthen section of each dam, creating 140 miles of free-flowing river. Commercial navigation and hydropower would cease on the Lower Snake River, and irrigation and recreation opportunities would be affected.

The second purpose of the study was to assess community participants' perceptions of the range of impacts each pathway would have on their communities. The results from the forums provide an additional tier of more detailed information reported in the social assessment analysis and considered as part of the draft environmental impact statement and feasibility report.

## **Objective**

In particular, the objectives of the interactive community forums were to:

- Introduce community members to preliminary information from the U.S. Army Corps of Engineers' Lower Snake River salmon study to help them identify positive and negative social impacts;
- Understand communities' current situations and how they have changed since 1960;
- Provide residents with the opportunity to assess how their community would be affected by the major pathways under consideration (Pathways A1, A2, and A3; also included in Phase II were Pathways A2b and A2c)

- Obtain community residents' ideas about effective strategies for minimizing negative social impacts of the proposed pathways; and
- Provide people with an opportunity to have their input included by the U.S. Army Corps of Engineers' as part of the Lower Snake River Juvenile Salmon Recovery Feasibility Study.

The intent of the interactive community forums was to obtain formal public input on proposed pathways prior to the development of a recommendation and the draft EIS. In addition to the other components of the social assessment characterizing the human environment for the EIS and feasibility study (*e.g.*, regional economic analysis, recreation analysis, *etc.*), the interactive community forums represent a community impact assessment based on the perspectives of those citizens most directly affected by the salmon recovery pathways.

## **METHODOLOGY**

### **Research Approach and Sampling Design**

The research approach taken for the Lower Snake Community-Based Social Impact Assessment was a multiple case study. The unit of analysis and the sampling unit was the community, and the sampling frame was all communities located in the impact areas designated by the U.S. Army Corps of Engineers for consideration for Phase II of the assessment: the upriver region of south central and southern Idaho. The goal of the multiple case study was to provide a forum for a community-based assessment of impacts of the project pathways on a sample of nine communities in this region. Each assessment was conducted during a one-day 4-hour public meeting in each of the communities. The forums enabled the assessment team of social scientists to record local perspectives of past and current community responses to economic and social changes, and to assess potential social impacts resulting from the project on a variety of kinds of communities.

The communities of concern for this assessment included 90-plus communities within the geographic scope of the Phase II region. Given the large number of cities and towns in the region, it was not possible to adequately obtain sufficient information about each community within the timeframe of the decision-making process. Therefore, a range of communities in which to conduct community-based assessments was selected.

The range of potentially affected communities was identified with a theoretical sampling approach, whereby communities were selected based on a typology of predetermined criteria. Two dimensions, economic diversity and region of the state, were selected as the initial criteria for the theoretical sampling approach taken here. In particular, economic dependence on kinds of industries and an indicator of community resilience (an index of the capacity to adapt to change) were considered in the sampling process.

Communities were selected from across the geographic region, from a diversity of population sizes (from just over 200 to over 166,000), a diversity of levels of economic diversity (from low to high), and from a diversity of key industries (agriculture, food processing, timber, travel & tourism, government, and retail trade). The communities assessed in southern Idaho included Ashton, Boise, Cascade, Firth, Hagerman, Homedale, Rupert, Salmon, and Twin Falls

All of the community forums were open to the general public, but, in addition, active and involved community members were targeted and asked to attend to ensure that a range of potential interests and important perspectives were represented at each forum. The assumption was that these individuals represented the full diversity of knowledge and perspectives within each community, and that they were among the community residents who were most knowledgeable and capable of addressing key issues that could impact the future of their community.

Nonresidents of the sample communities were invited to attend the forums, but their participation was limited to providing general written comments about the assessment process and any input on the pathways they wished to make. This input was provided on comment cards that were transmitted directly to the U.S. Army Corps of Engineers. The premise was that participants in the interactive groups at each community forum needed to be community members who possessed in-depth knowledge about their community.

### **The Community Forum Assessment Process**

All of the individuals who attended the community forums participated according to a set of interactive, structured group activities. These activities were designed to promote discussion across varying community viewpoints, introduce the best available information about primary and secondary impacts of the project, and record the thoughts and reactions of the participants.

Forum participants were first asked to give their recollections about the histories of their community as a basis for beginning to think about key dimensions of their communities' changing characteristics and conditions. These dimensions were presented in terms of four broad categories of community characteristics: 1) a community's social make-up (or a community's "People"); 2) community economy (a community's "Jobs and Wealth"); 3) community character (the "Place"); and 4) community organization and leadership capacity (a community's "Vision and Vitality"). These four broad dimensions of community characteristics and conditions represented the elements of community used throughout the duration of the interactive forums. The significant historic changes in each community, as related to each of the four dimensions, were recorded and shared with the entire assembly of forum participants as illustrations of each dimension.

Forum participants were systematically assigned to different facilitated tables, based on self-reported community involvement roles (e.g., business, elected officials, land-production, education and health services, etc.). The purpose here was to maximize the diversity of community members in the group at each table. These participants were first asked to assess the 1999 current situation in their community in terms of the four

dimensions of community. A sheet listing a fairly comprehensive set of characteristics or conditions are related to each of the four community dimensions was reviewed to assist forum participants in 1) thinking about the specifics of each dimension; and 2) providing specific reasons or justifications for their ratings of their community based on particular characteristics or conditions of it. The facilitator at each table conducted an initial rating of each dimension with a rating form entitled, "Your Community in 1999," with a current community situation scale ranging from 1 ("As bad as it could be") to 10 ("As good as it could be"). The purpose of this rating exercise was to stimulate forum participants to begin thinking about their community's situation in 1999 in terms of each of the four dimensions. With this starting point, they would be better able to judge how things would change in the future (specifically, in the year 2020) if the U.S. Army Corps of Engineers adopted any of the three proposed pathways. This rating process also was intended to help the study team learn from forum participants about their community. Each form also obtained written responses from participants on the key or most salient characteristic or conditions for why they rated their community the way they did.

After about seven minutes of discussion of their numerical ratings of their community on a given dimension and the reasons for their ratings, participants were asked to re-rate their scale based upon what they had learned in their discussion. They were assured they could keep the same rating or change it. They then were reminded they needed to complete the second part of the question by filling in the blanks on the sheet with characteristics of the dimension from the corresponding sheet, or writing some other reason that was behind their rating. They were reminded that their justifications were equally important as the numeric rating they had given. The goal was to get them to justify their rating and explain the "why" behind it, based on the characteristics they considered most important in making their decision. This process was followed to assess the current situation in 1999 for all four dimensions.

Information was then presented to community members on the forecasted biological, economic and physical changes associated with each of the pathways under consideration by the U.S. Army Corps of Engineers (Pathways A1, A2, A2b, A2c, and A3). After presentation of the impact information, community members were asked to combine it with their knowledge of their community, "do some crystal-balling," and forecast the likely effects their community would experience, using a community impact rating scale and again providing specific reasons or justifications for those ratings in writing.

The impact rating scale was used by participants to rate the kind and degree of change in each of the four community dimensions that would result if a given pathway was implemented, based on the presentation of information about each pathway by the study team and discussed within the groups at the facilitated tables. This community impact scale ranged from -5 ("adversely affected" by the pathway) to +5 ("beneficially affected"), with a mid-point of "0" that was based on participants' rating for each dimension on the current community situation scale. Forum participants perceiving characteristics of a given dimension as being adversely affected were instructed to rate that dimension with a negative number on the impact rating scale; the higher that number, the more severe the impact was indicated to be. Those participants perceiving

a dimension of their community to be beneficially affected were instructed to rate that dimension with a positive number on the scale. The last task for the consideration of each pathway was to ask participants in each group to brainstorm ways to minimize negative social and economic effects on the community, should a given pathway be selected and implemented.

A different baseline was used when participants in the forums for Phase II considered Pathways A2b (major system modification, with flow augmentation on the Snake River reduced from 427,000 acre-feet/year to 0 acre-feet/year) and A2c (major system modification, with flow augmentation on the Snake River increased from 427,000 acre-feet/year to 1.427 million acre-feet/year). In the cases of rating these pathways, rather than using their rating of the current 1999 situation for the community as the baseline rating, or mid-point (0-point), on the impact rating scale, participants were instructed to use Pathway A2 as the 0 point, or no-change point. That impact rating scale again ranged from -5 ("adversely affected" by the pathway) to +5 ("beneficially affected").

### **Data Entry, Coding, Cleaning, Analysis, and Reporting**

The input from forum participants who participated in each community forum included both rating scores and written justifications for their ratings. The two types of data and their analysis in this report represent a direct matching of both the quantitative data (numerical scale ratings) and qualitative data (up to three characteristics for each community dimension or reason for the rating provided by participants as justifications for their rating). These responses were entered into a database for each community. Once the data were entered, they were inspected for errors, and any found were corrected.

Standard procedures were followed for coding and analyzing the assessment's qualitative data (Miles and Huberman, 1994). These data consisted of open-ended responses to questions requesting that participants give reasons or community characteristics to justify their numerical rating of each dimension of community, whether for the current (1999) situation or for the changes or impacts they perceived would result from each of the three pathways. The number of these responses was reduced, as follows. First, categories of broad kinds or themes of these justifications were developed, and a unique code number was assigned to each category. Individual participant's responses were then coded descriptively and thematically, with each response categorized in terms of these thematic categories and the appropriate code numbers assigned to each. Lastly, patterns among these thematic categories were identified, and analytical generalizations from these patterns were made. The scale ratings, as well as themes and actual text of the reasons given, were analyzed for each community to identify patterns across the groups of participants at facilitated tables at each community forum, as well as across communities in a cross-case analysis that compared results for all the communities assessed.

Key elements of analysis in multiple case study include: 1) use of a variety of kinds of data that seek to provide a high degree of internal validity; 2) triangulation (*i.e.*, similar findings from multiple measures and methods) and replication among different kinds and sources of qualitative and quantitative data, not only to assess internal validity but also to promote greater insights; and 3) pattern analysis (*i.e.*, detection and interpretation of patterns of results) and cross-case comparison to suggest broader empirical generalizations and conclusions for further research and more detailed data analysis (Government Accounting Office, 1990; Strauss and Corbin, 1990; Yin, 1989).

Scale ratings and figures depicting those ratings are reported for each of the four dimensions for the current situation in 1999 and each of the three pathways. In each case, the report's "Results" section first presents figures displaying the central tendency of the ratings recorded for different groups at different tables in terms of group medians, along with a discussion of each figure.

In addition, qualitative data are presented in the report in tables of coded justifications listed with three headings: "Across all Groups," "Invited Group," and "Other Groups." The logic underlying the pattern analysis of the qualitative data was that replication of justifications given for participants' ratings across facilitated groups at each forum was critical. This concern for replication of justifications was based on the premise that the more a characteristic or reason for a scale rating was repeated across various groups of participants at the same forum, the more salient, meaningful, and relevant that justification was as qualitative data supporting the overall central tendency reported for the community. When a justification or reason was reported out of all the groups of participants in a forum, it was included in the list under the heading "Across All Groups." These clustered justifications also provided the basis for the cross-community comparisons.

Two kinds of groups of people participated in each of the community forums. One group was comprised of people who were invited to participate, and who sat together and interacted at "invited" facilitated tables. Each of these tables was called an "invited group." Those community members who were invited to participate were selected to reflect a range of community interests. They were people from formal and informal community organizations who demonstrated involvement in their community, and who were recognized by the community for past community efforts.

The diversity of the group of participants at the invited facilitated tables (the "Invited Groups") and the output of their discussion were deemed to be very important in capturing the range of justifications. Therefore, justifications that were only listed by invited groups also were included in the analysis under a separate heading of the "Invited Group." A key assumption of underlying this approach to the analysis was that, along with the information presented at each forum, individual participants were also informed by their own knowledge, perceptions, and beliefs about their community's present and future. In addition, they likely were also influenced by the rich discussion among the wide variety of participants at their facilitated table.

Justifications that were listed by other groups at other tables at a forum also presented an important viewpoint. The people in those other groups, while they were determined to often be less likely to be highly involved activists, and more likely to represent particular "communities of interest" (*i.e.*, farming, business, or travel & tourism), also could have unique perspectives and knowledge not possessed by the more diverse group at the invited table. Accordingly, if participants at a super-majority of the groups at the other non-invited tables mentioned a justification, it was also included as a salient reason in the analysis for that community, under the heading of "Other Groups."

Because of the large number of justifications, the discussion in the "Results" section of this report emphasizes justifications that were mentioned across all groups at the facilitated tables at any given meeting, and thus replicated. Justifications falling under the other headings are provided for each community and may be mentioned, but they are not always the main focus of the discussion.

A cross-case community comparison also was conducted to identify patterns across the nine communities in terms of their 1999 current situation. Its purpose was to identify which communities might be more at greater risk from outside changes, based on both the quantitative and qualitative data. Salient justifications for the ratings were used to reinforce interpretation of the common patterns for the current (1999) situation. Likewise, in the analysis of the three pathways, a similar process was followed to examine the forecasts participants made about changes to the community in the year 2020 due to each pathway.

The results of this analysis are first provided for Pathway A1, the "no action" pathway, with the existing hydrosystem and waterway maintained in its current condition on into the year 2020. This forecast provided the basis for assessing the impacts of Pathways A2 ("major modifications of the existing hydro-system on the lower Snake River") and A3 ("natural river drawdown and dam breaching on the lower Snake River"). A2 and A3 were analyzed to identify changes of clustered numerical ratings and qualitative justifications from the baseline forecasts under A1, and A2b and A2c were analyzed to identify changes from the baseline forecasts under A2. The patterns of these changes were examined across types of communities developed on the basis of several key criteria, including the nature of their relationship to the river, their economic base and level of diversity, and population size, among others.

This report presents the results of the in-depth analysis conducted for each of the nine communities, as well as the findings across the types of communities identified for the community typology. A summary of the findings for each community is included in the report, along with summaries of findings for the community types as well.

The assessment methodology and report were reviewed and critiqued for scientific rigor, objectivity, substance and quality by Dr. Greg Brown, a professor at Alaska Pacific University. Dr. Brown has conducted research on rural communities in the Pacific Northwest and the state of Alaska.



## Limitations of the Community-Based Assessment Methods and Findings

One limitation of the assessment methodology and thus its findings was that the technical information from the U.S. Army Corps of Engineers was not finalized prior to the initiation of the community forums. During the period in which the community forums were conducted, the PATH report was under review by the National Marine Fisheries Service (NMFS). (However, it should be noted that the finalized information has not proven to be significantly different from that presented to forum participants.) Also, information on the economic impacts relating to recreation and anadromous fish was not available. Thus, the perceptions identified in the community forums must be considered in the context of information that was presented as preliminary or that was missing. In cases of missing information, information under review, or information that participants did not agree with, many participants were found to assume the worst case scenario and to base their ratings and justifications on that assumption.

Assessment findings for A2 should be considered with the understanding that community participants did not have the qualified anadromous fish findings from NMFS. In particular, no data were available regarding fish recovery under alternatives A2b and A2c. Although the uncertainty and limitations of the PATH data were made explicit to forum participants, they were asked to use those data for their assessment (*e.g.*, the probability of salmon recovery under A2 was less than or equal to A1). The revised NMFS interpretation still provides a basis for this conclusion, but with the qualification that under certain assumptions the probabilities of salmon recovery are above the threshold probability level set by the U.S. Army Corps of Engineers for salmon recovery.

Results of this assessment must be interpreted, understood, and used within the qualitative and quantitative research framework. Care was taken to employ conservative statistical analyses such as the use of median ratings within communities and to use replication logic as opposed to sampling logic to make scientifically defensible inferences. The ratings presented and discussed here are not representative of the total population of the communities studied. Rather, they present the diversity of perceived effects and associated justifications from citizens who are actively involved in their communities or interested in the salmon recovery issue. Also, it is important to note that equal-appearing interval scales used for rating the community dimensions should be interpreted in conjunction with the qualitative justifications for those ratings.

Finally, it is critical to stress that the benefits and costs to local residents of the three pathways can vary within communities, as well as across communities and the geographic region being assessed. The impacts and the communities assessed are unique, and each community has different capabilities to deal with distinct direct, indirect and perceived impacts. There may be common themes across all community types or within all community types, but there is not one single, "one-size-fits-all" set of impacts across all communities, or actions to minimize those impacts that are negative.

## **KEY FINDINGS**

Key findings for Phase II presented in this executive summary focus on four areas. One is the community typology that was developed on the basis of the community assessment. Key findings also focus on the kinds of impacts perceived by participants in the community forums, as well as findings about the resilience of the different types of communities assessed and the risk to them based on perceived impacts. The third area of key findings focuses on participants' ideas about actions that could be taken to minimize the negative effects on communities of efforts to recover salmon runs, both generally and specifically looking across pathways and at each type of community. Finally, other more general but important findings about the assessment process, participants in the forums, and the issue of salmon recovery are presented.

### **Community Types**

A typology of communities, or array of kinds of communities having common characteristics, emerged as a result of the interactive process conducted in the community forums. The typology depicts the range of kinds of communities that are found in the region, what they have in common, and what distinguishes among them in terms of significant differences. The community typology presented here is based on communities' relationships to the river, economic base and level of diversity, population, and other key factors identified in the community forums.

The community typology developed in the assessment for both Phases I and II includes seven types of communities: 1) the Trade Center Community Type; 2) the Highly Productive Dryland Agriculture Community Type; 3) the Productive Dryland Agriculture Community Type; 4) the Multiple Natural Resource Use Community Type; 5) the Lower Snake River Irrigated Agriculture Community Type; 6) the Columbia River Agriculture Community Type; and 7) the Middle Snake River Irrigated Agriculture Community Type. This last type was the only new type added in Phase II. Communities can be classified according to these types and their current affected environments surmised, and then the extent and kinds of impacts can be inferred based on that classification. Caution must be exercised in making these inferences, particularly given that the partitioning variables must be simultaneously considered along with community context.

## Findings Related to Perceived Impacts

Impacts perceived by forum participants are summarized here for Phase I as well as Phase II, placing all of these findings in a broader context. Forum participants in the agriculturally based communities and ones closest to the segment of the Lower Snake River perceived the impacts of Pathway A3 (dam breaching and natural river drawdown) on their communities to be the most severe and adverse. In Phase I, these towns and cities in the "reservoir region" included the Tri-Cities (Trade Center Type) and the small farming towns of the Columbia Basin, the Palouse, and the Camas Prairie. Towns perceived to be especially affected were ones dependent on irrigated farming (Prescott and Burbank, WA), for which additional pumping capacity would be needed at significant expense, and towns dependent on dry-land agriculture, for which transportation costs would increase (towns of the Productive and Highly Productive Dry-land Agriculture Community Types).

Although forum participants in the farming communities in the "downriver region" of south central Washington and northeastern Oregon were asked to focus on their local environment and the Snake River, as opposed to the Columbia River, these participants exhibited more of a "halo effect" in their assessment of impacts. This effect reflected their antipathy towards the Federal government and its activities and also their belief in a domino effect of dam breaching that eventually would extend to the Columbia and have major impacts on them, even if there were no direct impacts of Pathway A3 on the Snake River on them.

In Phase II, participants in those agriculturally based communities in southern Idaho (those of the Middle Snake River Irrigated Agriculture Type, including Firth, Hagerman, Homedale, and Rupert) perceived the impacts of Pathway A3 (dam breaching and natural river drawdown) on their communities to be the most severe and adverse. Overall, the participants from towns of this community type perceived dam breaching and natural river drawdown (Pathway A3) more negatively and as being more likely to create adverse community effects than did participants from most other community types. The analysis of the impact rating justifications suggests that these communities perceived themselves to be less directly related to fish recovery issues of the Snake River and more influenced by increased utility and transportation costs, as well as by the potential loss of irrigated water. Similar results were found for the traditionally multiple resource-use type of communities in which irrigated agriculture continues to play a major role (e.g., Ashton) in the upriver region of southern Idaho.

In contrast, participants in those towns of the Multiple Resource-Use Community Type (e.g., Salmon, Cascade) likely to be more directly affected by any loss of salmon runs perceived the impacts of Pathway A3 on their communities to be the most positive and beneficial, and those of Pathway A1 (maintaining the existing situation) to be most severe and adverse. Overall, the Multiple Natural Resource Use Community Type towns perceived natural river drawdown and dam breaching more positively, and as having greater potential to create beneficial effects, than did some other community types. The analysis of the impact rating justifications suggests that these forum participants were less focused on commodity transportation issues of the Snake River

and more influenced by desires for higher probabilities of salmon recovery. Recovered salmon populations were perceived to contribute to these towns' nature-based tourism industry, enhance their fishing opportunities, and strengthen their sense of place. However, some communities of this type, like Ashton, may be more traditional in their focus on commodity production and basic industries like agriculture, and thus more focused on the negative impacts of salmon recovery, such as higher utility costs, than on the positive ones.

Much the same results were found for the Trade Center Types of communities in southern Idaho, Boise and Twin Falls. The relationship of these Trade Center communities to the Lower Snake River is primarily indirect, with participants from them perceiving direct impacts on them in terms of a diminished quality of life and community character. More than any other community type, participants at the forums in these cities viewed the river and its associated fishery as a critical source of recreation and amenity value, with the exception of the above towns of the Multiple Resource-Use Community Type (Salmon, Cascade) that perceived themselves to be most directly affected by any loss of salmon runs.

### **Findings Concerning Community Resilience and Assessment of Risk**

An important contribution of the community impact assessment conducted in Phase II is its assessment of the risk to communities potentially affected by the three pathways under consideration by the Corps. The results of the assessment suggest that communities of some types would be at greater risk of being significantly affected by proposals to change the existing river system on the Lower Snake River than would other types. The degree to which a community is at-risk was assessed based on two factors: 1) the town or city's current community capacity to respond to change, which is dependent on the community's affected environment; and 2) the perceived degree and kind of impact the community would experience, or the environmental effects of a particular pathway, if each one of the three pathways was implemented. However, an exhaustive analysis of risk across communities examined in Phase II was beyond the scope of this research. The following is a brief summary of the risk identified by forum participants in Phase II and the degree of forecasted impacts as identified by members of communities categorized as types of communities based on the community typology.

### *The Trade Center Community Type:*

Forum participants in the Trade Center communities of Boise and Twin Falls in Phase II perceived positive impacts associated with the implementation of Pathway A3. Given the indirect nature of the relationship of these cities to the Lower Snake River, these cities' current comparatively high community capacity to respond to change, and the comparatively minimal degree and kind of impacts these communities would experience from the implementation of Pathway A3, risks associated with this pathway would be minimal for communities of this type compared to other community types. In contrast, risks associated with the implementation of Pathways A1 and A2 could be deemed more critical for communities of this type in terms of the personal effects and diminished quality of life and community character based on their assumption that the likelihood of losing the wild runs is greater under these pathways.

### *The Multiple Natural Resource Use Community Type:*

Forum participants in the Multiple Natural Resource Use communities perceived a range of potential impacts associated with the implementation of Pathway A3, from somewhat beneficial to very adverse. Salmon, Idaho, is more distant from the immediate Lower Snake River region, yet this town could be beneficially affected by increased salmon runs. As suggested by their identified impacts and the travel and tourism nature of their local economy, participants perceived some benefits from increased salmon runs and adverse impacts associated with declining salmon and steelhead runs under Pathways A2 and A3. Similar results were found for Cascade, Idaho. Communities of the Multiple Natural-Resource Use Community Type tended to be more resilient and economically diverse, indicating that they, too, would be less at-risk to changes resulting from the pathways; it should be noted, however, that residents of this type of town perceived that their community character -- a key attraction for the viability and diversity of their economy -- would be significantly adversely affected by Pathways A1 and A2. Communities of the Multiple Natural-Resource Use Community Type tended to be more resilient and economically diverse, indicating that they, too, would be less at-risk to changes resulting from the pathways; it should be noted, however, that residents of this type of town perceived that their community character -- a key attraction for the viability and diversity of their economy -- would be significantly adversely affected by Pathways A1 and A2.

However, participants in Ashton in southeastern Idaho perceived adverse impacts associated with the implementation of Pathway A3, such as increased transportation and utility costs and possible effects on the traditional forest industry of the area. Given these communities' varied perceptions of the risks associated with A3, the mix of beneficial and adverse impacts, and their active, ongoing efforts to adapt and respond to socioeconomic changes, these communities have a low to moderate level of risk.

### *The Middle Snake River Irrigated Agriculture Community Type:*

Forum participants in the Middle Snake River Irrigated Agriculture communities assessed in Phase II perceived substantial negative impacts associated with the implementation of Pathway A3. Towns like Firth, Homedale and Hagerman are small communities highly dependent on agriculture. Given their distance from the Lower Snake River ports and the subsidization of transportation to them, negative impacts associated with changes in transportation modes with the implementation of A3 are less significant compared to impacts on communities to the north that are of the Agriculture Community Type. Moreover, these communities vary in their level of resiliency and economic diversity, and their ability to adapt and respond to change also would depend on the situation for each. Hagerman and Rupert are most at-risk in terms of community capacity, while Firth has been found to be more resilient but also has a less diverse economic base than even other farm communities. In contrast, Homedale has a broader, more sound economic base.

Similarly, traditionally multiple resource-use type of communities ) in the "upriver region" of southern Idaho, where irrigated agriculture continues to play a major role (e.g., Ashton), differ from these towns of the Agriculture Community Type in their high levels of community resilience and economic diversity.

### **Findings Concerned with Minimizing Negative Effects to Communities: General Observations**

Participants at each community forum identified potential actions or efforts to minimize the negative socioeconomic impacts they identified for each pathway. This brainstorming activity was designed to be open and unstructured so that participants would feel free to provide any and all ideas about actions that could be taken to minimize impacts in their community. Several consistent and identifiable patterns emerged from these data. First, participants from nearly all communities found it necessary to propose actions that went beyond their community and were more regional in nature. Second, although participants were asked to suggest actions to address socioeconomic effects, they often felt compelled to say something about biological issues related to the potential decline of salmon populations. Third, there often was great disparity between the kinds and magnitude of effects identified by participants for each pathway and the actions they suggested to minimize the negative socioeconomic effects at the community level for that pathway. Fourth, communities and community types that were more directly dependent on the existing Lower Snake River system, and which would be more directly affected by changes to it, demonstrated the greatest ability to articulate community-level actions to minimize negative socioeconomic effects. A greater amount of diversity of local socioeconomic actions suggested by forum participants also occurred across the facilitated groups in these more directly affected communities. The community type where this was most prevalent was the Multiple Natural-Resource.

## **Findings Related to Minimizing Negative Effects to Communities Across Pathways**

In general, communities focused on regional actions, such as the need to address habitat improvement or to reduce Federal government involvement in natural resource decision-making. However, they also focused on local issues related to Pathways A1 and A2 such as compensation for losses to the recreation and fishing industries from reduced salmon numbers. Additionally, participants called for increased local involvement in salmon recovery decision making.

In the case of Pathway A3, participants identified the need to compensate those most directly affected by the breaching of the dams including farmers and the transportation infrastructure of the downriver and reservoir regions. This focus on downriver and reservoir communities for regional and non-local level efforts provides evidence that many upriver communities perceived they would be less, or more indirectly, affected by the implementation of this pathway than other communities. In contrast the highly productive dry-land farming communities from Phase I, perceived direct socioeconomic effects on their community, and these communities identified specific and detailed actions to minimize negative these socioeconomic effects under Pathway A3.

## **Findings Related to Minimizing Negative Effects to Communities by Community Type**

The following sections provide an overview of common themes identified across communities, within community types, and some unique possible actions or efforts identified at both the regional and local level to minimize negative impacts. It is important to note that these actions are specific to the community in which they were identified by community participants. Although there may be common themes across all community types or within all community types there is not a "one-size-fits-all" action to minimize negative impacts across all communities. The impacts and the communities are unique and each community has different capabilities to deal with distinct direct, indirect and perceived impacts. To minimize the negative impacts of implementing any of these pathways, it would be prudent to assess and design mitigation strategies at the community, county, and regional level with direct input from these stakeholders.

### *Trade Center Community Type:*

In Phase II, forum participants in Boise identified the need under the implementation of Pathway A1 to subsidize the fishing and guide industries for lost business opportunities as well as an increased focus on irrigation water. Specifically, forum participants mentioned the need to restore irrigation water to previous levels, encourage water conservation and provide federal money to aid irrigation uses. Regional considerations tended to focus more on specific elements of the management of the fisheries including a need to restore habitat for resident fish and fertilizing streams. Other issues identified a need to reduce funding for failed salmon recovery efforts and to compensate Native Americans for related treaty violations. Participants in the Twin Falls forum did not identify specific elements for A1.

For A2, forum participants in Boise felt that if this pathway were to be implemented, similar needs would arise as identified under A1. Specifically, participants again felt that the fishing and guide industries would need to be subsidized in addition to other losses from decreased recreation in the area. Additionally, issues of water conservation and irrigation uses dominated identified needs. Twin Falls participants identified the need to provide the public with more information and to make information more accessible. Regional considerations included the need for the Federal government to pay for water adjudication and to identify the amount of water currently being used. Other issues identified specific to water concerns were allowing the aquifer to recharge, increase upriver water storage and improve methods for releasing water. Additionally, Boise participants again felt that the government should reduce funding for failed salmon recovery efforts and compensate Native American for treaty violations.

Forum participants in Boise and Twin Falls generally perceived similar measures to minimize negative impacts associated with the implementation of A3. In particular, these communities identified a need for energy and water conservation, as well as a need to compensate economic losses associated to recreational fishers. They also identified the need to increase marketing efforts directed at recreation and tourism. Regional considerations addressed the need to minimize negative impacts to those more directly affected by dam removal, including compensation of farmers for lost income, road and highway improvement to handle the increased transportation of commodities, as well as the development of alternative forms of transportation and energy production.

#### *Multiple Natural Resource Use Community Type:*

In the forums in Cascade and Salmon, participants generally focused on specific issues unique to their communities under Pathway A1, and no similarity in actions to minimize adverse impacts was found. Forum participants in Cascade focused on specific elements of local land use planning and infrastructure including the need to improve transportation and increase light industry. Issues specifically relating to Pathway A1 included utilizing ground water rather than reservoir water and the need to extend boat ramps on Cascade Reservoir. Salmon's forum participants focused on the need to complete an economic loss inventory related to lost recreation and related business tied to salmon fishing. In addition, participants felt a need to increase local and state control of salmon recovery efforts and to revert resource management to the local government. Regional considerations included the need to increase the use of science in forest management and to recognize and utilize local scientific data. Data were not collected relating to minimizing adverse impacts for Ashton.

Under Pathway A2, community participants in Cascade identified the need to increase reservoir dredging with decreased water levels. Participants in Salmon focused on the need to compensate schools, businesses and residents for increased utility rates. They also perceived a need to increase funding related to generating alternative recreation opportunities and to increase federal land payments to schools. Other factors identified by both communities were similar to issues



identified in A1. Regional suggestions included the need to consider alternative bypass systems, increase utility rates only after successful results relating to this pathway have been shown, and expedite political decisions related to salmon recovery. Again, no data were collected relating to minimizing adverse impacts for Ashton.

Under Pathway A3, Cascade participants perceived similar needs as those identified for A1. In particular, they felt the need to increase reservoir dredging activities with decreased water levels and to extend boat ramps on Cascade Reservoir. In addition, Salmon participants felt that community utility rates should decrease in light of previous efforts residents have made to improve salmon habitat. Regional issues focused on the compensation of downriver residents for the effects of silt and sedimentation, and improvement of roads and highways in the area of direct impact from dam removal. Again, no data were collected relating to minimizing adverse impacts for Ashton.

*Middle Snake River Irrigated Agricultural Community Type:*

In the forums in Cascade and Salmon, participants generally focused on specific issues unique to their communities under Pathway A1, and no similarity in actions to minimize adverse impacts was found. Forum participants in Cascade focused on specific elements of local land use planning and infrastructure including the need to improve transportation and increase light industry. Issues specifically relating to Pathway A1 included utilizing ground water rather than reservoir water and the need to extend boat ramps on Cascade Reservoir. Salmon's forum participants focused on the need to complete an economic loss inventory related to lost recreation and related business tied to salmon fishing. In addition, participants felt a need to increase local and state control of salmon recovery efforts and to revert resource management to the local government. Regional considerations included the need to increase the use of science in forest management and to recognize and utilize local scientific data. Data were not collected relating to minimizing adverse impacts for Ashton.

Under Pathway A2, community participants in Cascade identified the need to increase reservoir dredging with decreased water levels. Participants in Salmon focused on the need to compensate schools, businesses and residents for increased utility rates. They also perceived a need to increase funding related to generating alternative recreation opportunities and to increase federal land payments to schools. Other factors identified by both communities were similar to issues identified in A1. Regional suggestions included the need to consider alternative bypass systems, increase utility rates only after successful results relating to this pathway have been shown, and expedite political decisions related to salmon recovery. Again, no data were collected relating to minimizing adverse impacts for Ashton.

Under Pathway A3, Cascade participants perceived similar needs as those identified for A1. In particular, they felt the need to increase reservoir dredging activities with decreased water levels and to extend boat ramps on Cascade Reservoir. In addition, Salmon participants felt that community utility rates should decrease in light of previous efforts residents have made to improve salmon habitat. Regional issues focused on the compensation of downriver residents for the effects of silt and sedimentation, and improvement of roads and highways in the area of direct impact from dam removal. Again, no data were collected relating to minimizing adverse impacts for Ashton.

### **Other Pertinent Findings**

Rural communities are in transition and on-going changes, such as increased commuting for employment opportunities, their use as "bedroom communities," out-migration of youth, and the continuing consolidation of farms, are common-place in participants' perceptions of their community's future. The assessment also found that rural community residents generally oppose Federal government intervention, although they are highly dependent on government projects and programs, subsidies, and employment. (These findings are not inconsistent, given that a major theme identified in the assessment is the perception, especially in smaller towns, that they are subject to outside forces beyond local control.)

The research team was surprised by how willing participants, especially those in small towns, were to come out, discuss and learn from one-another. The community forum process took over four hours, yet few people left prior to the completion of the forums. Participants were very willing to share with their opinions with their neighbors and learn how others felt the community might be affected by the proposed pathways.

These discussions and sharing of ideas increased participants' comprehension of the complexity of the issues involved, resulting in greater social learning and two-way communication between people and the U.S. Army Corps of Engineers. The interactive process applied in the community forums provided a rich source of information and insights into key issues, concerns and perceptions of impacts. The team concluded from its analysis of the qualitative data, in particular, that people did see the linkages among specific social and economic impacts of the pathways across community dimensions.

Another general finding was that the concept of dam removal is a very emotional issue. Participants came to the forums with intense feelings, whether pro or con, on the various pathways. The research team noted that the level of interest in the issue is apparently higher in small towns, where it is the talk of the town. Proportionately many more people came to the forums in the small communities than in larger ones, and even in terms of absolute numbers fewer people attended in the larger communities than in the smaller ones. Many possible reasons could explain this phenomenon. They include the perception that the implementation effects would be greater in smaller communities.

Also, in a city, residents may not be as close socially, or they may feel less empowered. Some people, whether from large or small towns, may have felt that the U.S. Army Corps of Engineers has already made their decision. Many potential participants could have been burned-out and exhausted from previous meetings and rallies. A final reason may have been that people in larger communities believed that they could rely on others to participate.

The assessment team noted that a common belief across all communities was that the U.S. Army Corps of Engineers had already made a decision and that the interactive community forums were an attempt to rationalize that decision post-hoc. Also, the team experienced residents' concerns over who is ultimately "in charge" and responsible for decisions affecting salmon recovery, as well as frustration over the perceived lack of local control over these decisions.

The complexity of the current situation, complete with a multitude of data sources and results, has led to confusion amongst the public and increased its anxiety over the lack of certainty in knowing what is happening and what is likely to happen in the future for the system of dams on the Lower Snake River. Some of this complexity and confusion is due to the sheer amount of information being collected and considered, while some is due to community members finding that competing sources and kinds of scientific information are confusing. Many people were well informed, which was reflected in the quality of questions asked and their desire to understand the science behind the issue.

A halo effect of negative perceptions was noted in some forum participants' ratings, especially in communities that had little or no direct relationship to the Snake River. Mistrust was apparent at many of the forums where participants expressed concerns that they were somehow being manipulated by the government to give certain answers desired by Federal agencies. This finding shows how challenging the task of meaningful public involvement really is for Federal agencies.

## **CONCLUSIONS**

The community assessment conducted as Phase I in the direct impact region (southeastern Washington, northeastern Oregon, and north central Idaho) was effective in meeting its stated goals of: 1) assessing the current characteristics and conditions of the region's communities (*i.e.*, affected environment); and 2) assessing residents' perceptions of the impacts on their communities of the three pathways being considered for salmon recovery on the Lower Snake River (*i.e.*, environmental effects on the communities). In a true two-way communication process, the UI research team informed the public about the information and data on the impacts of the pathways that decision-makers were assembling for evaluating those pathways and recommending a preferred

pathway; at the same time, the public from a theoretical sample of the diversity of communities in the impact region informed the assessment team with their perceptions of the affected environment and the likely environmental effects of the pathways on their communities. A typology of communities emerged as a result of conducting the interactive process involved in the community forums. It is based on communities' relationships to the river, economic base and level of diversity, population, and other key factors identified in the community forums.

Another contribution of the community assessment is the identification of social and economic risk to communities that could result if the proposed pathways for salmon recovery were implemented. Findings suggest that different types of communities would differ in the extent to which they would be at risk of being significantly affected by proposals to recover salmon runs on the Lower Snake River. Trade Center Community Type cities would be the least at-risk in terms of their comparative economic and social capacity, although their residents generally perceived the character of their community and the region in which it is located would be at-risk were wild salmon runs not to be recovered. Communities of the Multiple Natural-Resource Use Community Type tended to be more resilient and economically diverse, indicating that they, too, would be less at-risk to changes resulting from the pathways; it should be noted, however, that residents of this type of town perceived that their community character -- a key attraction for the viability and diversity of their economy -- would be significantly adversely affected by Pathways A1 and A2. Communities of the Irrigated Agriculture Community Type were more mixed in their community capacity, but tended to have the lowest capacity and thus would be the most vulnerable to pathways such as A2c.

This dominantly qualitative assessment of community perceptions has limitations. Results of this assessment must be interpreted, understood, and used within the qualitative and quantitative research framework developed for the assessment. Care was taken to use conservative statistical analyses such as median ratings for facilitated groups within communities and to apply replication logic as opposed to sampling logic to make scientifically defensible inferences. The ratings presented and discussed here are not representative of the total population of the communities studied, but rather capture the diversity of perceived effects and associated justifications from citizens who are actively involved in their communities or interested in the salmon recovery issue. Finally, it is important to note that equal-appearing interval scales used for rating the community dimensions should be interpreted in conjunction with the qualitative justifications for those ratings.

The benefits and costs to local residents of the pathways under consideration can vary within communities, as well as across the geographic region being assessed. Nonetheless, given the legal requirement currently mandating the Federal government to recover the salmon stocks, understanding who the likely winners and losers are, and the trade-offs associated with the various pathways, is critical for sound decision-making. To some people, the loss of the salmon stocks and the extinction of the

affected species, should it occur, is an irreversible and unacceptable outcome. To other people, the loss of jobs, and potentially families and social services, not to mention the character of the place they call home, is irreplaceable. For them, the welfare of people living and working in the region, which depends on economic development and the area's built environment, is paramount -- irregardless of the impact on the runs of wild salmon.

# 1.0 - INTRODUCTION

This report details the findings of Phase II of the University of Idaho's community-based social impact assessment obtained through nine interactive community forums conducted in southern Idaho as part of the *Lower Snake River Juvenile Salmon Migration Feasibility Study and Environmental Impact Statement* (Feasibility Study/EIS). [Section 1](#) describes the purpose and scope of the interactive community assessment. [Section 2](#) provides the findings from each of the nine communities with respect to the community history, 1999 baseline situation, and the perceived impacts to individual communities due to each of the three proposed pathways for salmon recovery on the Lower Snake River. [Section 3](#) compares the communities and results from each of the individual community assessments and identifies common patterns for both the current situation in the sampled communities (*current affected environment*) and community-level impacts (or *environmental consequences*) under the three proposed pathways.

## 1.1 - PURPOSE AND OBJECTIVES

The purpose of the Community-Based Social Impact Assessment conducted for the *Lower Snake River Juvenile Salmon Migration Feasibility Study and Environmental Impact Statement* (Feasibility Study/EIS) was twofold. First, the study assessed the current condition and characteristics of selected communities in the regions of southern Idaho that may be affected by three different "pathways," or sets of alternatives, currently under consideration by the U.S. Army Corps of Engineers (Corps) for salmon recovery in the Lower Snake River. Two additional pathways, which focused on changes in the current flow augmentation on the Snake River, are included under Pathway A2 in Phase II. Each of these five pathways is briefly described below:

*PATHWAY A1* - The first pathway is the baseline condition, or the "Existing System," whereby the situation with the four Lower Snake River dams would remain much the same as it is today. Juvenile salmon would continue to pass through turbines, through fish bypass systems, or over spillways. Some fish would continue to be transported by barge and truck to below Bonneville Dam. River flow would continue to be augmented by Upper Snake River water. Ongoing improvements include longer screens, additional barges, and flow deflectors on spillways.

*PATHWAY A2* - Under implementation of this pathway, "Major System Modification," the four Lower Snake River dams would remain. Construction of surface bypass and fish guidance systems would occur, structural changes would be made to turbines and spill basins as well as modification of river flow and spills. River flow would continue to be augmented by Upper Snake River water. These modifications could be used with either the juvenile fish transportation system or in-river juvenile migration. Two "sub-pathways" under A2 were also assessed; the following were numbered for clarity and ease of understanding of forum participants, and are not the same as those listed in the EIS:

*PATHWAY A2b* -- Under this alternative for Pathway A2 ("Major System Modification"), all modifications would remain the same as under Pathway A2, except that flow augmentation on the Upper Snake River would be reduced from 427,000 acre-feet/year to 0 acre-feet/year.

*PATHWAY A2c* -- Under this alternative for Pathway A2 ("Major System Modification"), all modifications would remain the same as under Pathway A2, except that flow augmentation on the Upper Snake River would increase from 427,000 acre-feet/year to 1.427 million acre-feet/year.

*PATHWAY A3* - Under implementation of this pathway, "Natural River Drawdown and Dam Breaching," the four lower Snake River dams would be partially removed. Existing reservoirs would be permanently lowered to a natural free-flowing condition by removing the earthen section of each dam, creating 140 miles of free-flowing river. Commercial navigation and hydropower would cease on the Lower Snake River, and irrigation and recreation opportunities would be affected.

The second purpose of the study was to assess community participants' perceptions of the range of impacts each pathway would have on their communities. The results from the forums provide an additional tier of more detailed information reported in the social assessment analysis and considered as part of the draft environmental impact statement and feasibility report.

In particular, the objectives of the interactive community forums were to:

- Introduce community members to preliminary information from the U.S. Army Corps of Engineers' Lower Snake River salmon study to help them identify positive and negative social impacts;
- Understand communities' current situations and how they have changed since 1960;
- Provide residents with the opportunity to assess how their community would be affected by the major pathways under consideration (Pathways A1, A2, and A3; also included in Phase II were Pathways A2b and A2c);
- Obtain community residents' ideas about effective strategies for minimizing negative social impacts of the proposed pathways; and
- Provide people with an opportunity to have their input included by the U.S. Army Corps of Engineers' as part of the Lower Snake River Juvenile Salmon Recovery Feasibility Study.

Key questions addressed by this report include the following:

- What have been the historic social and economic changes in the selected communities in relation to the Snake River system as perceived by residents?
- How do community members describe and project the potential social impacts (beneficial and adverse) associated with the proposed pathways?
- What are the social impacts of the DREW/PATH projected changes in the regional economy and other kinds of changes on selected communities?
- How do community members think their community will respond to the social and economic impacts resulting from the project's pathways?
- What efforts or actions do community members think are needed to minimize negative social impacts and maximize positive ones under each of the pathways?

The intent of the interactive community forums was to obtain formal public input on proposed pathways prior to the development of a recommendation and the draft EIS. In addition to the other components of the social assessment characterizing the human environment for the EIS and feasibility study (*e.g.*, regional economic analysis, recreation analysis, *etc.*), the interactive community forums represent a community impact assessment based on the perspectives of those citizens most directly affected by the salmon recovery pathways.

## **1.2 - METHODOLOGY**

The research approach taken for the Community-Based Social Impact Assessment conducted in southern Idaho was a multiple case study. The unit of analysis and the sampling unit was the community, and the sampling frame was all communities located in the region designated by the U.S. Army Corps of Engineers for consideration in Phase II of the community assessment: this region spans the Upper Snake River basin in southern Idaho. Embedded units of analysis (to be discussed in more detail later) within each community included:

- the groups in which forum participants were split into when they were seated at a particular table to maximize role diversity in each group (and the effects of the facilitated interactive processes experienced within their group);
- within those groups, the role that each participant represented; and
- within that role, the individual personality, knowledge, beliefs, and perceptions that each participant brought to the forum.



Key elements of analysis in multiple case study include: 1) use of a variety of kinds of data that seek to provide a high degree of internal validity; 2) triangulation (*i.e.*, similar findings from multiple measures and methods) and replication among different kinds and sources of qualitative and quantitative data, not only to assess internal validity but also to promote greater insights; and 3) pattern analysis (*i.e.*, detection and interpretation of patterns of results) and cross-case comparison to suggest broader empirical generalizations and conclusions for further research and more detailed data analysis (Government Accounting Office, 1990; Strauss and Corbin, 1990; Yin, 1989).

The following steps were implemented in conducting this community impact assessment as a multiple case study and analyzing its results:

1. Communities were selected across the types of communities in the study region as grouped on the basis of economic diversity, location by region within Idaho, population size, and other characteristics.
2. Dimensions of current community conditions and characteristics were developed for the community impact assessment.
3. Rating scales and forms were developed for each dimension of the current situation in 1999 and for each of the proposed salmon recovery pathways.
4. The "Agenda for Interactive Community Forums" was developed and described.
5. Results from DREW and PATH reports were distilled and synthesized for presentation to communities.
6. A community history presentation was developed based on information from secondary sources.
7. Community dimensions, rating forms, and the structure of the interactive meetings were pre-tested with local Palouse farmers and students.
8. A pilot-test of the process was conducted in three pilot communities, and the results were used to refine and improve that process.
9. The forums were advertised via local media for each community, and selected participants were identified and invited.
10. Community forums were conducted.
11. Qualitative data from each community were thematically coded and entered in computer files, along with corresponding numerical ratings.
12. Patterns within and between facilitated tables of participants at each meeting were analyzed, as well as among communities.
13. A report of the results was prepared.

### 1.2.1 Selection of Assessment Communities

The communities of concern for this assessment include 90-plus communities within the geographic scope of the regional analysis for Phase II; this scope includes towns and cities upriver from the immediate proximity of the U.S. Army Corps of Engineers projects, such as those in central and southern Idaho. Given the large number of communities in this region, it was not possible to adequately obtain sufficient information about each community within the time frame of the decision-making process. Therefore, a range of communities in which to conduct community-based assessments was selected. Identification of the range of potentially affected communities followed a theoretical sampling method whereby communities were selected based on a typology of predetermined criteria.

A theoretical sample was used to select the communities. Corbin and Strauss (1990) describe theoretical sampling as "a way to purposively choose persons, sites or documents that maximizes opportunities to elicit data regarding variations along dimensions or categories." Two dimensions, economic diversity and region of the state, were selected as the initial criteria for the theoretical sampling approach taken here.

A community that is economically diverse has an employment distribution in many industrial sectors, and is not especially dependent upon one sector. Economic diversity was chosen as one dimension due to the fact that those communities in the region with lower economic diversity would be affected differently by the impacts associated with each pathway than more economically diverse communities.

Economic diversity was measured with an index for each of the selected communities using data gathered for the Interior Columbia Basin Ecosystem Management project in conjunction with regional economist Dr. Hank Robison of the University of Idaho (see Harris *et al.*, Forthcoming). Community economic diversity was based on the percentage of a town's total direct employment attributable to each industrial sector contributing to that town's economy in 1995 (the latest information that was available). These data provide a community-level economic profile of each of the selected cities and towns in terms of 23 industrial sectors.

The economic diversity index was developed as a summative index of relative economic diversity. The index was calculated using standardized measures of the extent to which communities are dependent on a variety of industrial sectors, in terms of total direct employment. The first component of the index is a measure of the extent to which a given community's economy is comprised of only a few or, alternatively, many industrial sectors. This measures the total number of sectors having some proportion of total direct employment in that community. The second component of the index was a measure of the preponderance of total direct employment in any one sector. The higher this percentage was, the less economically diverse the community, hence, a positive or negative numerical sign was given to the index to provide an indicator consistent with the first component. Together, these component measurements were standardized and summed for a cumulative index of economic diversity.

Due to the nature of classification schemes, there are limitations to these variables. Specifically, resource changes and community actions are not exclusive to a particular geographic region. Although economic diversity is a strong indicator of a community's resiliency, it does not provide a direct relationship. Economic diversity can be used as an approximation of community responses to economic impacts; however, it is not an indicator for social and cultural changes to a community as a result of the proposed pathways.

Although communities ideally could be differentiated based on resource changes, changes in transportation, and others that are important influences on social impacts, doing so is neither simple nor clear-cut. For example, it is very difficult to clearly identify the magnitude of the social impacts that a small city like Twin Falls will experience due to increased transportation costs versus shifts in recreation opportunities. Likewise, a small town like Cascade might see social impacts due to changes in recreational opportunities, flows from Cascade Reservoir, and development of alternative transportation modes and routes.

Evaluating which changes should be considered and their diversity and magnitude should not be part of framing of the assessment process, which could pre-determine the results of that process. Rather, identification and measurement of those changes should be among the results of that process. Significantly, social and economic impacts could occur across the range of existing communities that researchers might not be aware of *a priori*.

To compensate for these limitations, economic diversity and state of residence were used only as the initial classification dimensions. Subsequent variables were analyzed to identify coverage of key issues and publics across the assessment region. Through this process, it was found that communities are adequately distributed across the following "second-tier" classification variables:

- Population
- Economic Diversity
- Natural resource dependency
- Community responses to changes in the past
- Shifts in and development of transportation modes and nodes
- Changes in transportation costs
- Changes in recreation
- Changes due to project construction
- Changes in U.S. Army Corps of Engineers employment

In particular, economic dependence on kinds of industries and an indicator of community resilience (an index of the capacity to adapt to change) were considered in the sampling process. Communities were selected from across the geographic region, from a diversity of population sizes (from just over 200 to over 166,000), a diversity of levels of economic diversity (from low to high), and from a diversity of key industries (agriculture, food processing, timber, travel & tourism, government, and retail trade). The diversity of communities and their attributes are shown in [Table 3.1](#).

From this theoretical selection, common patterns that emerge across communities are identified and described, and their implications for the three pathways are presented.

## **1.2.2 Structure of the Interactive Community Forums**

### **1.2.2.1 Pre-testing and Pilot Communities**

Community dimensions, definitions, rating forms, and the structure of the interactive meetings were reviewed in an informal pre-test with local Palouse farmers, professors, and students.

Two pilot community forums were conducted in Prescott, Washington and Washtucna/Kahlotus, Washington. As "pilot tests" of the process, comments and feedback from these community forums were used to streamline and refine the process for succeeding forums, and to improve the clarity of the presentation and workshop instructions given in them.

### **1.2.2.2 Structure of the Community Forums**

#### **Introduction**

A community forum is an interactive type of public involvement activity that provides members of a potentially affected population with the opportunity to interact and ensure their thoughts and ideas are incorporated into the social impact assessment process of an EIS (Burdge, 1994). The key purpose of the community forums conducted for the present assessment was to obtain credible information from a range of invited members of a community as well as other community members who participated in the forum. The goal of the forums was to capture as wide a range of diverse community knowledge and judgments as possible.

#### **Meeting Organization: Community Forum Agenda**

Information for the community self-assessment was collected in a four-hour-long forum conducted in each of the selected communities. In each forum, information was presented to community members on the biological, economic and physical changes associated with each of three main groups of alternatives. People were then asked to discuss and record their perceptions of specific social, cultural, economic impacts that would occur in their community in 2020 (that is, about 20 years into the future, or when their community's teens would be approaching middle age).

A standard agenda was followed for each forum, including the following components:

#### I. Setting the Stage

- Introduction
- Introduction and Clarification of the Process
- Study Communities and Forum Participants
- Community Forum Agenda
- Key Objectives
- Ground Rules
- Salmon Recovery Pathways
- Dimensions of the Community

#### II. Current Situation of the Community

- What Is The Situation In Your Community Today?
- Assess Baseline Conditions
- Share Perceptions of Community
- Identify Key Reasons For Judgments

#### III. Assessing the Impacts of the Salmon Recovery Pathways on a Community

- What Social Impacts Would Your Community Experience In the Year 2020?
- Presentation of U.S. Army Corps of Engineers Impact Information
- Assess the Social Impacts of Pathways A1, A2, A2b, A2c, & A3
- Identify Actions to Minimize Negative Social Impacts to Your Community

#### IV. Finishing Up

- Where Do We Go From Here?
- How This Information Will Be Used
- How To Stay Involved In the Study
- Any Other Comments

### 1.2.2.3 Forum Participants

The invited community members were identified using a snowball sampling technique and asked to participate in the interactive community forums on the basis of referral by fellow residents. Random sampling was not used because it would not have insured the inclusion of all the different interests within a community nor the key leaders who make things happen in a community. The research assumed that these members represented the diversity of knowledge and perspectives within each community and that they were among the most active and involved in addressing issues that impact the future of their cities and towns.

Two kinds of groups of people participated in each of the community forums facilitated by the UI. One group was comprised of people who were invited to participate, and who sat together and interacted at a facilitated table. Each of these was called an "invited table." Those community members who were invited to participate were selected to reflect a range of community interests. They were people from formal and informal community organizations who demonstrated involvement in their community, and had the community's recognition for past community efforts.

Individuals active in their community in the following roles were invited:

1. Elected official (mayor or city council member);
2. Civic organization (active in a prominent service organization or club);
3. Economic (economic development, business person, chamber of commerce);
4. Education (school official, teacher, parent group)
5. Health care (active citizen or professional in health care);
6. Historic preservation or environmental protection (organizational leader, active citizen, public affairs, historical society, soil conservation, NGO, *etc.*);
7. Land-based resource production (agriculture, forestry, mining, *etc.*);
8. Community liberal (person seen as active for liberal causes regardless of political affiliation);
9. Community conservative (person seen as active for conservative causes regardless of Political affiliation);
10. Religion (denomination is unimportant);
11. Ethnic group (could be more than one);
12. Newcomer (most highly involved new resident of 1-3 years residence);

13. Senior citizen (most highly involved persons 60 years of age or older); and
14. Other active residents (as identified in a particular community as a result of the modified snowball sampling process).

#### **1.2.2.3.1 Snowball Sampling of Invited Participants**

This group of participants was identified through a snowball sampling design and implemented as follows. Within each community, the town or city clerk, an elected official, the Chamber of Commerce executive or administrative secretary, an officer in a major civic group, and the school principle or superintendent were contacted and asked to provide a list of residents they felt best represented each of the roles. Subsequently, those people whose names were provided were contacted to provide a similar list of community members whom they felt best represented each category of community members. This process of contacting those people who were referred by fellow residents was repeated until several names for each category were identified.

From these lists, the person identified most often for each role was asked to participate in the community forum for their city or town. Through this process of local residents identifying individuals, a full range of interests, specialties and perspectives representing a diversity of community knowledge and experience was ensured in addition to the general public's participation. Of particular importance was the identification of minority representatives within the community.

Prior to the scheduling of each forum, individuals identified by fellow community members were notified of the intent of the meeting and invited to participate. Upon agreeing to participate, these targeted community members were formally invited to participate with an official letter. In the event that the identified participant could not participate, the person identified second-most frequently within that category was invited to attend.

In Phase II, the team attempted to identify and invite enough participants to fill two "invited" tables. The above process was repeated in an effort to ensure that two active community members from each of the categories had committed to participate in each of the forums conducted in southern Idaho. The rationale here was that, because salmon recovery might be of less concern to residents of southern Idaho, and thus these residents might be less likely to attend and participate, inviting more community residents would help ensure a higher level of participation in the forums.

#### **1.2.2.3.2 Non-Snowball (or "Self-Selected") Participants**

A second group of participants was comprised of other residents of the community who came and participated in the forum. Because the meetings were open to all residents of the community who were willing to participate, this group consisted of all community members who sat and interacted at one of the other tables facilitated along with the "invited tables." This group of "self-selected" participants in the community forum participated for a variety of reasons, ranging from a desire to preserve their lifestyle and distrust of federal government, to concerns about diminishing salmon returns, to their desire to learn more about and become more active in the process.

In order to use this volunteer energy in a scientifically defensible fashion, these individuals were systematically assigned to a group on the basis of community roles. The goal was to create replicated groups within a community with the greatest diversity of community roles possible.

#### **1.2.2.3.3 General Public**

In addition to the residents of the selected communities, the general public (or "nonresidents" of the selected communities) was formally invited to participate in the interactive community forums via the U.S. Army Corps of Engineers' Lower Snake River Newsletter and press releases sent out to local media approximately two weeks prior to the scheduled forums. Local media received announcements indicating the time and place of the forums as well as an explanation of the nature of the workshop type forum and an explicit statement that these were not public hearings. All community members were encouraged to participate with these announcements, and nonresidents were informed that they were invited to attend, listen, and observe, but that they would not be participating in the small groups. Instead, they were offered the opportunity to give comments via comment cards directly to the U.S. Army Corps of Engineers.

#### **1.2.2.4 Meetings, Scheduling and Participation**

All of the individuals who participated in the community forums were asked to do so according to a set of interactive, structured group activities. These activities were designed to promote discussion across varying community viewpoints, introduce the best available information about primary and secondary impacts of the project, and record the thoughts and reactions of the participants. Community forums were held at a time and location that was arranged in consort with the school and city government calendars and that would be mutually suitable to invited community members and the forum organizers. Meetings were thus scheduled to minimize conflicts with pre-existing community meetings and activities whenever possible and to maximize attendance. The forums typically were conducted weekday evenings, at a time when past experience has shown more people are available and willing to participate. Meetings took place between 6:30 and 11:00 PM, Monday through Thursday.

The community forums for Phase II of the community impact assessment were held over a 9-day period, June 14 through 22, 1999.



When and where possible, public facilities capable of housing large meetings (e.g., city centers, schools, libraries, civic organizations meeting halls, etc.) were used. Each forum followed an agenda based on an established meeting protocol that was repeated across all nine forums.

It was anticipated that between 25 and 100 community members would attend each meeting, based on the level of interest assessed with the size of the turn-out at the communities for Phase I. A total of 272 people attended the forums, including 194 who participated in the full 4-hour long process, and 78 who came to observe (most of the observers were nonresidents of the communities where the forums were held, but they also included residents who chose not to stay for the full session).

### **1.2.3 Conduct of the Forums**

#### **1.2.3.1 Organization and Registration of Participants**

All people who attended the forum and lived in the community or considered it home were asked to complete a registration form, indicating where they from, their age, occupation, and which of the roles listed above best described the nature of their involvement in their community. Those individuals who were invited were seated at an "invited" table. In southern Idaho, when enough participants who had been invited registered to participate in a given forum, two "invited tables" were facilitated along with the other tables of non-invited community residents. As discussed previously, the purpose of the invited tables was to ensure that at least one to two tables had as great a diversity of roles represented at them as possible.

Other residents of the community who were willing to participate for the forum's full four hours were assigned seats at other facilitated tables, and an effort was made to ensure a diversity of roles at each of those tables, thereby replicating the same diversity of roles present at the invited table. Numbers of facilitated tables at the different forums ranged from one to six.

Some people attending the forums were residents of the community but were unwilling to participate or unable to do so for the full four hours. Individuals from other communities that had not been selected attended, but did not participate in the facilitated groups. These people were told the following:

"As for those of you in the back who do not consider this community your home, we appreciate that some of you have come a great distance and that you are sincerely concerned about this issue. However, it doesn't make sense for you to participate in the forum here because you are not a member of the community, and because you can't know the kinds of details about it that we need to learn about tonight. We want all of you to have an opportunity to express your opinion on this important regional topic. If you have any questions about our process, any information you see here tonight, or any concerns you have about the Lower

Snake River Juvenile Salmon Migration Feasibility Study, we ask that you write them down on the comment cards we will now pass out. If you need additional ones, please ask a person from our team working in your area. You can return them to us or mail them directly to the address provided on the back. If you would like information on how to remain involved, be sure to pick up the materials, provided by the Army Corps of Engineers that we will be putting out later on the tables near where you signed in for the forum."

### **1.2.3.2 Introduction and Clarification of the Process**

The forums were conducted by a moderator who introduced the issue of salmon recovery, explained the process of the forum, laid out the objectives and agenda for the forum, answered initial questions, and made sure that the forum stayed on schedule.

Each forum began with the moderator asking residents to identify major events or developments in their community on a decade-by-decade basis. These accounts were recorded on a timeline for the period from 1960 to 1999. As the participants gathered at each forum's beginning, they identified specific historic events in terms of four dimensions of community that the researchers used to structure participants' input about community characteristics and conditions: People (social make-up), Jobs and Wealth (economics), Place (character), and Vision and Vitality (organization and leadership capacity). (These dimensions are discussed in-depth in [Section 1.2.3.8](#)). The purpose here was to obtain community resident's recollections of significant historic changes as they relate to the lower Snake River.

Once the timeline was completed and all participants had been registered and seated, the formal process began with introductions of the research team, followed by an expression of thanks to those who provided the facility for the forum and who helped in preparing for it.

The role of the community impact assessment as part of the larger social assessment was introduced to participants, as follows:

"Our reason for being here tonight/today is to learn what the impacts to communities would be if different things are done to try to recover wild salmon stocks in the Lower Snake River. This study, which you are a part of today, is just like all the other impact studies being conducted by consultants for the U.S. Army Corps of Engineers. The difference is this: A social assessment could have been done by scientists in Portland or Seattle looking at U.S. Census and other kinds of data to analyze and then draw conclusions. Instead, we are convinced that you are the best sources of information about your community. Whatever your background and role in your community, we are here to listen to you, collect information from you and transmit what we have learned from you to the U.S. Army Corps of Engineers. In comparison to you, we know little about your community, how it has developed through time, and how you want it to stay or change in the future -- so we are here to learn from you.

Where does this forum fit into the overall process that the Corps and we are all participating in? (An overhead of the EIS Process was displayed and explained.)

We will be presenting results of tonight's forum to the Corps. The results from this forum, along with those of 26 others, will become one of the study reports and part of the public record that will be used to develop the Corps' draft final proposals and statement of impacts. The truth is that the Corps has not made any decision at this point in time. They are still completing studies like this one to obtain information they will consider as they complete their evaluation of the situation on the Lower Snake and prepare an Environmental Impact Statement. The results of our forums and your contributions will be available to the public as well as to decision-makers."

The research team further explained that it had designed the process with the understanding that the issue of salmon recovery and dams was a very sensitive one that residents of the impact area felt very passionately about. The intent of the forum process was to work with residents to channel their interest, concern and local knowledge into a social science process that could organize, present, and communicate residents' input for the decision makers involved.

The team also explained that the assessment was like the other impact studies being conducted by consultants for the Corps, except for one important difference: Residents were treated as critical sources of information about their community. Whatever residents' backgrounds and roles in their community, the team stressed that it was there to listen to and collect information from residents about their judgments of the social impacts of the pathways, and then transmit what was learned to the Corps. In comparison to residents, the team noted that it knew comparatively little about the communities selected, how each developed through time, and how residents wanted it to stay or change in the future -- so it had come to them to learn from them.

### **1.2.3.3 Explanation of Selection of Study Communities**

The moderator explained to forum participants the intent of the study was:

"to include some real small communities, some larger ones, some mainly agricultural communities, some economically diverse communities, some communities who benefit from being able to use the river for barging, and still other communities that benefit from recreation and tourism associated with the river. You can think of the selected communities as being barometers for a set of similar communities in the region. As much as we would have liked to go to every community that would be impossible. Just like the fisheries biologist did not get a chance to study every fish we too had to scientifically select communities."

#### **1.2.3.4 Explanation of Forum Participants**

The study team relied on residents as experts in their community. People who attended a forum were told that:

"As participants in various activities and parts of their community's life, residents know more about a variety of economic, business and social aspects of their communities than anyone -- some are active in health care, others on education, and others on farming, still others own businesses or are active in civic affairs and clubs."

#### **1.2.3.5 Clarification of the Role of the Research Team**

The forums were conducted by a team of social scientists from the University of Idaho that was contracted by the U.S. Army Corps of Engineers to assess the social impacts on communities of pathways the Corps was studying for possible implementation on the Lower Snake River for salmon recovery. The team included professors, research associates, and some 10 facilitators from the UI. The team was hired because of its expertise in community development, group facilitation and, most importantly, because it would develop and conduct a neutral process for eliciting the input of community members.

#### **1.2.3.6 Introductions and Questions of Clarification about the Forum Process**

In the first small-group discussion of the forum, a breakout session was conducted at each facilitated table in which those seated at the table became acquainted with one another: the group facilitator at each facilitated table had everyone at the table introduce themselves by giving their name and their key area of interest in the community.

Next, as an ice-breaker, forum participants were asked to re-read an informational sheet entitled "Answers to Commonly Asked Questions," they were given as they registered. Then they asked if they had any other burning questions about the process and the use of the input that was to be gathered. To do this, forum participants were told the following:

There is some really important information on this sheet, so we ask that everyone remains quiet until everyone at the table is done reading. Your facilitator will then ask you one by one if there are any questions on the sheet that you would like to have further clarified. Your facilitator will record these. After 5-7 minutes, I will go around to each table and ask each facilitator to present questions from the purple sheet their group would like further clarified. We will do this for about 10 minutes before we move on. This way we can hopefully get most of your basic questions addressed before we begin the forum. Certainly throughout the night other questions may arise and they will be addressed at that time. Those of you observing might also wish to read the purple sheet and see if the groups come up the same type of clarification questions that you might ask.

From the beginning of each forum, it was made explicit that the forum was a workshop, not a traditional public meeting. There would not be an opportunity for residents to give testimony; rather they were being given an opportunity for structured interaction, dialogue and discussion, and input.

#### **1.2.3.7 Putting the Current Situation into Historic Context**

Historic information based on secondary data that were specific to each of the selected communities was presented to forum participants to begin explaining the four community dimensions and to place the current situation and potential impacts from the three pathways in an historic context.

The presentation of this information allowed the community forum facilitators to engage in meaningful dialogue with community members and begin eliciting information about their community's changing relationship with the Snake River. Forum participants had already been asked to think about their historic recollections of their community as a basis for beginning to think about key dimensions of their communities' changing characteristics and conditions, and for projecting future adverse and beneficial changes as a result of the salmon recovery pathways. Past accounts of community events and actions were especially important for understanding a community's future relationship with the river as influenced by their reactions and inaction (both formal and informal) to the NEPA process and the proposed salmon recovery pathways.

To begin residents thinking about the characteristics and conditions of their community in terms of each of the dimensions, community resident's recollections of significant historic changes, as they related to each of the four dimensions, were presented to the entire assembly of forum participants as illustrations of them.

#### **1.2.3.8 Dimensions of Community**

Dimensions of communities were presented to the forum participants on four separate and color-coded sheets. A sheet for each dimension was provided to each participant (see [Appendix A](#)), with the statements repeated below provided as introductory explanations for each dimension, followed by a list of questions intended to help residents think about important characteristics and conditions of their community in terms of each dimension.

These community dimensions were used to channel participants' input about the characteristics and conditions currently characterizing their communities and likely future changes in them into a format that could be organized, synthesized concisely and communicated as in this report. The dimensions had been identified in previous research and through the literature to describe the social and economic dynamics specific to individual towns and cities. These dimensions were presented with four broad categories: 1) a community's social make-up (or a community's "People");

2) community economy (a community's "Jobs and Wealth"); 3) community character (the "Place"); and 4) community organization and leadership capacity (a community's "Vision and Vitality"). These four broad dimensions of community characteristics and conditions represent the elements of community used throughout the duration of the interactive forums. The following are brief descriptions of the content of each dimension:

#### Community Social Make-up -- The "People"

The social make-up of a community was referred to in the forum process as "The People" dimension. This dimension refers to characteristics of individuals or households in a community. Characteristics relating to the individual or household might include a community's population size, how rapidly it is growing or losing population, its age and family structure, as well as the make-up of various groups of people, including their ethnicity, their values and lifestyles, and other kinds of diversity.

#### Community Economy -- "Jobs & Wealth"

The economy of a community was referred to in the forum process as the "Jobs & Wealth" dimension. This dimension refers to the major businesses and sources of jobs in a community, and the diversity of an economy in terms of the variety of businesses, industries, and financial assets (the amount of capital or wealth) available to support services and activities. The major businesses and industries within a community, such as manufacturing, services, retail and wholesale trade, agriculture, forestry, and government, are interrelated and provide a source of jobs and income. The relative mix of jobs and income in these industries is an indication of a community's economic diversity.

#### Community Character -- "The Place"

The character of a community was referred to in the forum process as "The Place" dimension. This dimension refers to the characteristics of the human-built and natural environment of a community. The physical infrastructure and built-environment includes characteristics such as the attractiveness of the downtown, the quality of the community's roads, and traffic safety and congestion, as well as the level of social services provided. A community's natural environment includes characteristics such as parks, fields and rivers, as well as the attractiveness of the surrounding scenery.

## Community Organization and Leadership Capacity -- "Vision & Vitality"

The organization and leadership capacity of a community was referred to in the forum process as the "Vision & Vitality" dimension. This dimension refers to the characteristics of a community's social organizations, including the number of civic groups and their level of activity. This dimension also refers to a community's degree of cohesiveness -- the extent to which people identify with their community, are committed to it, and work together to get things done. In addition, this dimension refers to the effectiveness and vitality of a community's government and its ability to accomplish its goals. Finally, this dimension refers to a community's vision for the future and their desire and preparedness to make that future a reality.

### 1.2.3.9 Assessing the Current Situation in 1999 in the Community

To help people at the forums think about the "current situation" in their community in terms of the four dimensions of community -- *People, Jobs & Wealth, Place, and Vision & Vitality* -- the facilitators provided the forum participants at their table with a rating and response form entitled "Your Community in 1999." The form for rating and describing the community's current situation asked the participant the following question for each community dimension:

How would you rate the situation for the [community dimension] of your community in 1999?

In 1999, the situation in my community is as <b>bad</b> as it could be	1	2	3	4	5	6	7	8	9	10	In 1999, the situation in my community is as <b>good</b> as it could be
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For each community dimension, the moderator took the participants through a four step process: Step 1 was to read over the appropriate dimension and think about key characteristics of their community, then make an initial rating of a community dimension on the above *current community situation rating scale*; Step 2 was to discuss in their group the results of their rating and the characteristics, conditions, or reasons justifying their rating; Step 3 was to give a final rating; and Step 4 was to justify or explain their final rating in writing in blanks provided on the form, listing the most important characteristics from the community dimension sheet, along with any other reasons that most influenced the rating they had given.

This four-step process was repeated four times, once for each of the four dimensions of community. The purpose of this rating exercise was to familiarize forum participants with each of the dimensions so that participants would have a sound and commonly-shared basis for judging how things would change in the future (2020) if the U.S. Army Corps of Engineers adopted a proposed pathway. It also was intended to help the study team learn about the community from forum participants.

Each facilitator had been trained to get everyone at their table to talk and to remind people to listen to what others had to say. After participants focused on the reasons for circling the rating number they did, they were asked which characteristics were most responsible for them giving the rating they did. For one dimension, the discussion of the current situation scale would begin by asking forum participants who had given a high rating (9 or 10, at the as good as it could be end) to explain to the group why they had done so. Then, someone who gave a low rating (1 or 2, at the as bad as it could be end of the scale) was asked to explain why they had rated a dimension on the low end. Finally, those participants who rated it in the middle were asked to explain their logic.

For another dimension, the discussion started with the facilitator asking a participant who had given a low rating (1 or 2) to explain why they had rated a dimension low; then, participants who rated it at the high end were asked to explain their reasons; and so.

After about seven minutes of discussion, participants were asked to re-rate their scale based upon what they had learned in their discussion. They were assured they could keep the same rating or change it. They then were reminded they needed to complete the second part of the question by filling in the blanks on the sheet with characteristics of the dimension from the corresponding sheet, or writing some other reason that was behind their rating. They were reminded that their justifications were equally important as the numeric rating they had given. The goal was to get them to justify their rating and explain the "why" behind it, based on the characteristics they considered most important in making their decision.

#### **1.2.3.10 Presentation of Pathways and Impact Information**

In the next step of the forum process, detailed information on each pathway and its likely broad, general impacts on each community were presented to the forum (see [Appendix B](#)).

The Drawdown Regional Economic Workgroup (DREW) and the Plan for Analyzing and Testing Hypotheses (PATH) provided the community assessment team with estimates of various kinds of impacts. (The DREW was formed by regional interests to conduct a collaborative regional economic analysis for the Lower Snake Juvenile Salmon Migration Feasibility Study. The PATH is a workgroup of fish biologists conducting a parallel analysis for the biological assessment of the situation for the salmon on the Lower Snake River.) Prior to the dissemination of these results, the principle investigators working on studies of major areas of impact -- including salmon recovery, transportation, power, recreation, air and water quality, regional economic effects, and costs of implementing each pathway -- were contacted to solicit information on the intended formats of the information.



Thus, the best available preliminary data were presented from the numerous studies that the U.S. Army Corps of Engineers commissioned from a diversity of scientists and consultants, such as fish biologists, transportation experts, economists, and other contractors assessing the impacts of the pathway. Key findings were extracted from them, and those findings were checked by the specialists conducting the studies. In addition, other information related to the Lower Snake River Juvenile Salmon Feasibility Project and its Environmental Impact Assessment were collected, reviewed, and presented as they became available.

It is important to note that, at the time of the community assessments, many of the reports were under review. Two reports (recreation and the economics of anadromous fish) were unavailable to report to the public. Of particular relevance for the forums in southern Idaho, no data were available regarding fish recovery under alternatives A2b (major system modification, with flow augmentation on the Snake River reduced from 427,000 acre-feet/year to 0 acre-feet/year) and A2c (major system modification, with flow augmentation on the Snake River increased from 427,000 acre-feet/year to 1.427 million acre-feet/year). The limitations of not having final reviewed impact information nor having even preliminary findings for two of the key studies are discussed at the conclusion of this section.

Templates were developed for aggregating and displaying these data, as appropriate, for each of the selected communities. The intention of the templates was to provide a consistent, clear format for presenting the projected social, environmental, and economic impacts of the three pathways at the community level at each of the interactive community forums. These templates were developed to communicate with community members during the interactive forums about the impacts and their relevance to each community. The impact information presented for each individual community may be found in [Appendix B](#).

The team of facilitators stressed that, because they were not the technical experts who had prepared the information, they would not attempt to defend the data. They would not spend time arguing about the methods or results they were reporting, but would only try to clarify it. If the participants had any comments or concerns about the data, their validity, or their implications, they were encouraged to write them on official U.S. Army Corps of Engineers comment cards, as well as on forms the researchers had provided.

Throughout this part of the forum, participants were reminded that the purpose was not to debate or question the findings. Rather, the participants were instructed to adopt the position that the projected impacts were what decision makers would base their decisions on, and so the participants needed to base their judgements of the impacts of the pathways on the community in 2020 on these data as well.

### 1.2.3.11 Assessing the Impacts of Pathways A1, A2, and A3

Community residents were asked to think about the information that was presented one pathway at a time. After the presentation of the impact information, community members were asked to combine it with their knowledge of their community, then "do some crystal balling" and forecast the likely impacts their community could face. This presentation of information for each pathway was followed by a session where participants rated and discussed likely impacts to each of the four community dimensions -- *People, Place, Jobs & Wealth and Vision & Vitality*.

For each of the pathways, a different scale was used than the one used to rate the current community situation; this scale was called a *community impact rating scale*. The impact rating scale was used by participants to rate the kind and degree of change in each of the four community dimensions that would result if a given pathway was implemented, based on the presentation of information about each pathway by the study team and discussed within the groups at the facilitated tables. This community impact rating scale ranged from -5 ("adversely affected" by the pathway) to +5 ("beneficially affected"), with a mid-point, or "0," that was based on their rating for each dimension on the current community situation rating scale. Forum participants perceiving characteristics of a given dimension as being adversely affected were instructed to rate that dimension with a negative number on the impact rating scale; the higher that number, the greater the impact was indicated to be. Those participants perceiving a dimension of their community to be beneficially affected were instructed to rate that dimension with a positive number on the scale. The last task for the consideration of each pathway was to ask participants in each group to brainstorm ways to minimize negative social and economic effects on the community, should a given pathway be selected and implemented.

In the case of Pathway A1, for example, which focused on maintaining the existing hydro-system on the Lower Snake River on into the future, the facilitators at each facilitated table passed out a form for rating and describing the pathway's likely effects entitled "Pathway A1: Maintain the Existing System." The form asked the participant the following question for each of the community dimensions:

In comparison to your community today, how would the situation for [community dimension] change in the year 2020 if the existing Snake River system were maintained into the future?

My community will be <b>adversely</b> affected and much <b>worse</b> in 2020	-5	-4	-3	-2	-1	0	1	2	3	4	5	My community will be <b>beneficially</b> affected and be much <b>better</b> in 2020
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To ground the rating scale in reality, forum participants were instructed to use their community's 1999 situation, which they had just rated and described for each dimension, as the mid point (0) of the scale from which to determine the magnitude of adverse (negative) or beneficial (positive) effects to their community. Participants were specifically instructed to focus on adverse and beneficial impacts only on their community and not on the entire region.

The moderator gave the forum participants the following instructions:

"Read the first question-- the People Dimension on the white Pathway A1 form -- and circle a number (-5 to +5) that best represents how you feel. When you have assigned an initial rating to all four dimensions, stop and wait for the next instruction. Now the facilitator will lead group members in a discussion of these initial ratings. During this discussion you are welcome to talk about any one, or all four of the dimensions of community. Remember - this holistic discussion is about the year 2020."

Facilitators stressed that the participants' ratings should reflect impacts to their community, and not to the region, and also they were to probe to get other perspectives on a dimension. As appropriate, they also could keep the discussion more holistic. Facilitators also continued to ask the participants at their table which characteristics on which dimensions were most influential on their giving a particular rating on a particular dimension. Facilitators also encouraged the forum participants to think about specific connections between the impacts that were presented and characteristics of their community.

As was done for the current situation, participants were asked to discuss their ratings and the reasons for them. They were then given the opportunity to re-rate their scale based upon what they had learned from the group discussion. After about seven minutes of discussion, they were assured they could keep the same rating or change it. They then were reminded they needed to complete the second part of the question by filling in the blanks using characteristics of the dimension from the corresponding sheet, or writing some other reason that was behind their rating. They were reminded that their justifications were as important as the numeric rating they had given. The goal was to get them to explain the "why" behind their rating, based on the characteristics from the appropriate sheet they considered most important in making their decision.

Facilitators then asked the participants at their table to suggest the kinds of things could be done to minimize or reduce negative social impacts to their community. The facilitators led a brainstorming session to try to identify ways to eliminate or at least minimize community impacts from Pathway A1. Their suggestions were recorded on a large sheet.

This same process was used with the presentations, discussions and ratings for Pathway A2, "major system modifications." When asked to consider Pathways A2b (major system modification, with flow augmentation on the Snake River reduced from 427,000 acre-feet/year to 0 acre-feet/year) and A2c (major system modification, with flow augmentation on the Snake River increased from 427,000 acre-feet/year to 1.427 million acre-feet/year), however, participants were instructed to use Pathway A2 as the baseline rating for the mid-point, or 0-point, rather than their current 1999 situation rating. For Pathway A3, "natural river drawdown/dam breaching," the same process was used as for Pathways A1 and A2.

## **1.2.4 Data Analysis Procedures**

### **1.2.4.1 Data Entry and Coding**

The input from forum participants who participated in each community forum included both rating scores and written justifications for their ratings. The two types of data and their analysis in this report represent a direct matching of both the quantitative data (numerical scale ratings) and qualitative data (up to three characteristics for each community dimension or reason for the rating provided by participants as justifications for their rating). These responses were entered into a database for each community. Once the data were entered, they were inspected for errors, and any found were corrected.

Standard procedures were followed for coding and analyzing the assessment's qualitative data (Miles and Huberman, 1994). These data consisted of open-ended responses to questions requesting that participants give reasons or community characteristics to justify their numerical rating of each dimension of community, whether for the current (1999) situation or for the changes or impacts they perceived would result from each of the three pathways. The number of these responses was reduced, as follows. First, categories of broad kinds or themes of these justifications were developed, and a unique code number was assigned to each category. Individual participant's responses were then coded descriptively and thematically, with each response categorized in terms of these thematic categories and the appropriate code numbers assigned to each. Lastly, patterns among these thematic categories were identified, and analytical generalizations from these patterns were made. The scale ratings, as well as themes and actual text of the reasons given, were analyzed for each community to identify patterns across the groups of participants at each forum, as well as across communities in a cross-case analysis that compared results for all the communities assessed.

### **1.2.4.2 Addressing Problem Respondents**

Participants were told at every forum that they needed to provide justifications for their numerical ratings and, further, that the recorded reasons or characteristics they provided to justify their ratings were as important as their ratings. Accordingly, if no justification or reason was given for a particular rating, that numerical score was excluded from the pattern analysis of numerical ratings. The rationale here was that participants were sometimes observed, say, to simply be stating a comparative

preference for a given alternative, or "voting," by giving ratings but not specifying impacts related to those ratings. Participants had been cautioned against doing this, and they were constantly reminded that the nature or kinds of the impacts being projected were deemed to be as important as the degree of impact. Typically no more than one or two individual ratings on a given alternative were eliminated from a community database.

#### **1.2.4.3 Analysis of Individual Communities**

Scale ratings and figures depicting those ratings are reported for each of the four dimensions for the current situation in 1999 and each of the three pathways. These data represent a direct matching of both the quantitative and qualitative data analyzed and presented here. Where numerical rating data in the form of a "median rating across all groups" are reported, the text is referring to the median rating for all participants in a forum. The scale ratings, themes and actual text were analyzed to identify patterns across the groups of participants at the facilitated tables at each community, as well as across communities in a cross-case analysis.

#### **The Current Situation - 1999**

In the case of the current situation in 1999, a figure showing the relative clustering around numerical scale values of the different groups, at the facilitated tables, is presented for the four dimensions for each community. Groups at the invited facilitated table are indicated as the "Invited Group," with additional groups at other facilitated tables labeled as group 2, group 3, and so on, depending on the number of tables that were facilitated at a given forum. The scale used for each of the dimensions was a ten-point ordinal scale (hereafter referred to as the "1999 current situation rating scale").

Qualitative data are presented in the report in tables of coded justifications listed with three headings: "Across all Groups," "Invited Group," and "Other Groups." The logic underlying the pattern analysis of the qualitative data was that replication of justifications given for participants' ratings across facilitated groups at each forum was critical. This concern for replication of justifications was based on the premise that the more a characteristic or reason for a scale rating was repeated across various groups of participants at the same forum, the more salient, meaningful, and relevant that justification was as qualitative data supporting the overall central tendency reported for the community. When a justification or reason was reported out of all the groups of participants in a forum, it was included in the list under the heading "Across All Groups." These clustered justifications also provided the basis for the cross-community comparisons.

The diversity of the groups of participants at the invited facilitated tables (the "Invited Group") and the output of their discussions were deemed to be very important in capturing the range of justifications. Therefore, justifications that were only listed by the invited groups also were included in the analysis under a separate heading of the "Invited Group." A key assumption of underlying this approach to the analysis was that, along with the information presented at each forum, individual participants were also informed by their own knowledge, perceptions, and beliefs about their community's present and future. In addition, they likely were also influenced by the rich discussion among the diversity of participants at their facilitated table.

Justifications that were listed by other groups at other tables at a forum also presented an important viewpoint. The people in those other groups, were often less likely to be highly involved and active residents, and more likely to represent particular "communities of interest" (such as farming, business, or travel & tourism). Nonetheless, they also could have unique perspectives and knowledge not possessed by the more diverse group at the invited table. Accordingly, if participants at a super-majority of the groups at the other non-invited tables mentioned a justification, it was also included as a salient reason in the analysis for that community, under the heading of "Other Groups."

The report's "Results" section presents figures displaying the central tendency of the ratings recorded for different groups at different tables in terms of group medians, along with a discussion of each figure. In addition, qualitative data are presented in the report tables of coded justifications listed with three headings: "Across all Groups," "Invited Group," and "Other Groups."

Because of the large number of justifications, the discussion in the "Results" section of this report emphasizes justifications that were mentioned across all groups at the facilitated tables at any given meeting, and thus replicated. Justifications falling under the other headings are provided for each community and may be mentioned, but they are not always the main focus of the discussion.

### **The Impacts of the Three Pathways**

The logic underlying the pattern analysis of the qualitative data for the impact rating scale for each of the pathways was that, as with the current situation scale, the more consistently a justification was given for the rating participants reported on the above scale across the various groups at the different facilitated tables at the forum, the more salient and thus significant that justification was as qualitative data supporting the overall central tendency for numerical ratings reported for the community. Thus, if a justification was given by all the groups at the facilitated tables present, they were included in the analysis. The same logic applied for presenting the qualitative data for the current situation thus was used here, as well.

In the case of changes across the three pathways, Pathway A1 was treated as the base-case, or the situation in a given community in 2020 if the river system remained unchanged. Under this pathway, forum participants were instructed to assume that other social, economic, and cultural trends continued on their current trajectory, as they were perceived by the participants. Changes from Pathway A1 to Pathways A2 and A3 are presented here, both in quantitative and qualitative terms.

### **1.2.5 Cross-Case Analysis Comparing All Communities**

A cross-case community comparison also was conducted to identify patterns across the nine communities in terms of their 1999 current situation. Its purpose was to identify, based on both quantitative and qualitative data gathered, those communities that might be at greater risk from outside changes affecting their social, economic, and environmental characteristics and conditions. Salient justifications for the ratings were used to reinforce interpretation of the common patterns for the current (1999) situation.

#### **Comparison of Pathways A1, A2, and A3**

Likewise, in the analysis of the three pathways, a process was followed similar to that for the 1999 current situation to examine the forecasts participants made about changes to the community in the year 2020 due to each pathway. The results of this analysis is first provided for Pathway A1, the "no action" pathway with the waterway in its current condition. This forecasting provided the basis for assessing the impacts of Pathways A2 (major modifications of the existing hydro-system on the lower Snake River) and A3 (natural river drawdown and dam breaching on the lower Snake River). A2 and A3 were analyzed to identify changes of clustered numerical ratings and qualitative justifications from the baseline forecasts under A1. Pathways A2b (major system modification, with flow augmentation on the Snake River reduced from 427,000 acre-feet/year to 0 acre-feet/year) and A2c (major system modification, with flow augmentation on the Snake River increased from 427,000 acre-feet/year to 1.427 million acre-feet/year) were analyzed to identify changes in clustered numerical and qualitative justifications from the baseline forecasts under A2. The patterns of these changes suggested commonly affected communities.

#### **Report of Results**

This report presents the results of the in-depth analysis conducted for each of the nine communities in southern Idaho, as well as the findings across the types of communities identified in Phase II for the community typology. A summary of the findings for each community is included in the report, along with summaries of findings for the community types as well.

The assessment methodology and report were reviewed and critiqued for scientific rigor, objectivity, substance and quality by Dr. Greg Brown, a professor of Environmental Studies at Alaska Pacific University. Dr. Brown has conducted extensive research on rural communities in the Pacific Northwest and the state of Alaska.

### 1.2.6 Limitations of the Assessment Study Findings

One limitation of the assessment was that the technical information from the U.S. Army Corps of Engineers was not finalized prior to the initiation of the community forums. Forums were conducted with information available on most kinds of impacts. During the period in which the community forums were conducted, the PATH Committee's report on salmon recovery was under review by National Marine Fisheries Service (NMFS). (However, it should be noted that the finalized information has not proven to be significantly different from that presented to forum participants.) Also, information on the economic impacts relating to recreation and anadromous fish was not available. Thus, the perceptions identified in the community forums must be considered in the context of information that was presented as preliminary or that was missing. It is unclear if the participants would have perceived impacts differently with more definitive information. In cases of missing information, information under review, or information that participants did not agree with, many participants were found to assume the worst case scenario and to base their ratings and justifications on that assumption.

Assessment findings for A2 should be considered with the understanding that community participants did not have the qualified anadromous fish findings from NMFS. In particular, no data were available regarding fish recovery under alternatives A2b and A2c. Although the uncertainty and limitations of the PATH data were made explicit to forum participants, they were asked to use those data for their assessment (*e.g.*, the probability of salmon recovery under A2 was less than or equal to A1). The revised NMFS interpretation still provides a basis for this conclusion, but with the qualification that under certain assumptions the probabilities of salmon recovery are above the threshold probability level set by the U.S. Army Corps of Engineers for salmon recovery.

Our findings for A3 are similarly limited by the fact that forum participants were not exposed to the quantified positive economic impacts associated with changes in recreation, anadromous fish and implementation. These benefit categories from the economic analysis might have shifted the ratings in some communities towards the beneficial end of the rating scale and triggered more positive justifications from the forum participants.

Additionally, care should be taken with the use of the numerical ratings to indicate actual magnitude of impacts. The scale scores are relative to each community and their current situation, and cross-community comparisons must be qualified and interpreted cautiously. The scales used do not provide ratio-level measurement (*i.e.*, a -2 is not twice as bad as a -1), but rather interval-level data about the direction and magnitude of the projected impacts and the relative nature of the ratings across dimensions within each community.



Accordingly, the results of this assessment must be interpreted, understood, and used within the qualitative and quantitative research framework. Care was taken to employ conservative statistical analyses such as the use of median ratings within communities and to use replication logic as opposed to sampling logic to make scientifically defensible inferences. The ratings presented and discussed here are not representative of the total population of the communities studied. Rather, they present the diversity of perceived effects and associated justifications from citizens who are actively involved in their communities or interested in the salmon recovery issue. Also, the ratings based on the interval-level scales developed for this research have little utility without the companion use of the qualitative justifications.

Finally, it is critical to stress that the benefits and costs to local residents of the three pathways can vary within communities, as well as across communities and the geographic region being assessed. The impacts and the communities assessed are unique, and each community has different capabilities to deal with distinct direct, indirect and perceived impacts. There may be common themes across all community types or within all community types, but there is not one single, "one-size-fits-all" set of impacts across all communities, or actions to minimize those impacts that are negative.

## **2.0 - RESULTS OF THE ASSESSMENT FOR EACH COMMUNITY**

This section reports the results of the community assessment for each of the selected communities. These results are presented community-by-community, with a subsection for each community. Each subsection begins with a brief summary of the findings for the community being reported on. It then provides a summary of the history of that community. This background is followed by a detailed overview of the positive and negative characteristics of the current (1999) situation in the community, as identified by forum participants in terms of the four dimensions of community assessed in the study. Next, the results of the assessment of the effects of Pathway A1, or "maintaining the existing hydro-system on the Lower Snake River," on the community in the year 2020 are presented. The magnitudes and kinds of changes in community dimensions between Pathway A1, which is treated as the baseline situation, and Pathways A2 ("major modifications to the existing hydro-system on the Lower Snake River") and A3 ("dam breaching and natural river drawdown") are then described. This discussion includes key justifications for the rating scores for the three pathways and reasons for the differences in them. Finally, ideas identified by participants for lessening the adverse impacts associated with the three pathways are summarized.

Throughout the "Results" section of the report, quotes based on the actual text of comments made by forum participants are indicated with quotation marks.

### **2.19 Ashton, Idaho, Community Assessment**

The presentation of the results of the assessment for each community begins with a summary of findings for the community. Each summary provides a brief synopsis of the community's history and current situation, the impacts of the three pathways on it in 2020 as perceived by participants at the forum held there, ideas identified by participants for lessening any impacts perceived to be adverse, and finally a concluding overview. Throughout the summary, quotes based on the actual text of comments made by forum participants are indicated with quotation marks.

#### **2.19.1 Summary of Key Findings About Ashton**

Ashton is a small agricultural community of approximately 1,100 people in southeastern Idaho. The population of Ashton, which reached a high of 1,250 in the 1960s, has since declined due to changes in the area's agriculture, specifically in that industry's labor requirements and in farm ownership. Historically, agriculture in the region has consisted of irrigated farming. Major sectors of the economy in Ashton in 1995 were agriculture and agricultural services that, when combined with wood manufacturing, equaled almost 40 percent of all jobs in Ashton.

Participants in the forum at Ashton depicted a town in 1999 whose current situation, in terms of People, Place, and Vision & Vitality, varied considerably by individual participant ratings on the current situation rating scale. Yet that situation was perceived to be relatively positive in terms of median ratings. The people are "honest and stable" while "supportive of and involved in community activities," but they are losing their extended families and younger population to employment opportunities outside the community. Although struggling businesses and vacant storefronts are common, the Place dimension overall was perceived to be improving. While there seemed to be no disagreement that Ashton has good air and water quality, attractive scenery, and a strong sense of place, people also felt that the character of the place is changing for the worse as a result of the decline in farm numbers, increasing farm size, changes in land use, and loss of money reinvestment by residents shopping in other communities with more services. In terms of the Vision & Vitality dimension, the participants in the community report it has been successful in getting and using grants, good at planning for the future, and that it is a place with great pride in the achievement of its strong school system. In contrast, Ashton is perceived as not coping well with change, lacking in civic organizational capacity, and lacking in its control over outside sources. The median ratings for the Jobs & Wealth dimension were the only ones to tend towards the *as bad as it could be* end of the scale. This negative rating was justified by a shrinking agricultural, mining, and timber base, declining or limited shops and businesses, a high level of commuting, poor job opportunities with low wages, and a lack of money reinvestment.

Participants were guardedly optimistic about Ashton's future under Pathway A1 (the existing situation on the Lower Snake River continued on into 2020), with ratings of its effects generally being on the positive, beneficial end of the scale for all four community dimensions. Residents generally saw improvement and growth on all dimensions, with the only concerns including a "continued regulation/intervention by the federal government" (People dimension) and "jobs becoming more service oriented" (Jobs & Wealth dimension). Ratings and justifications reflected little impact in 2020 under Pathway A2 (major modifications to the existing system) except for negative implications for the Jobs & Wealth dimension. In this case, participants perceived a declining economy, increasing utility costs, and decreasing job opportunities (especially in agriculture) as causes for concern.

Participants perceived the implementation of Pathway A2b (elimination of flow augmentation to 0 acre-feet) as having either generally positive or little or no impact on Ashton. Positive ratings and justifications focused on the increased availability of water to the community, which would result in an increase in irrigation water, less impact and stress on farmers, and an increase in job opportunities in both agriculture and recreation tourism industries. In contrast, Pathway A2c (increase of flow augmentation to 1.4 million acre-feet) was perceived as having highly negative, adverse impacts on the Ashton community. This pathway was by far the most consistently negatively rated one. Participants perceived that the loss of additional Snake River water would result in a loss of economy, jobs, lifestyles, agriculture, tourism, recreation, families, businesses, and population. Participants perceived that implementation of this pathway would result in "complete community ruin."

Participants at the Ashton forum were also very concerned about their community's future under Pathway A3 (dam-breaching and natural river drawdown). Ratings of its effects in 2020 clustered at the extreme negative, adverse end of the impact rating scale. Major justifications for this rating included loss of population, increase in utility costs, loss of families, loss of industries and job opportunities, decreased wages and increased poverty, and a negative change in population demographics. However, there also were positive comments concerning Pathway A3, such as growth in resource amenity recreation and tourism, positive economic opportunities, and maintaining an environmental balance where "natural systems are given priority which is essential to the long term health of the region."

Overall, the situation and perceptions of the community of Ashton is not unlike those of other agricultural towns in the region. Perhaps the main difference is that this community has traditionally had an economy dependent on a diversity of natural resources, including an expanding recreation and tourism sector. Nonetheless, agriculture has long been the keystone of the town's economy. Consequently, it is not unexpected that the community's assessment of its situation reflected a stronger concern for the future of their community's agricultural base, and for the fate of that industry throughout the region, than support for efforts to recover salmon whose effectiveness is uncertain and that are perceived to have major economic and social consequences.

### **2.19.2 Interactive Community Forum Participants**

Thirteen community members provided perspectives on the history, 1999 situation and Pathways A1, A2, A2b, A2c and A3 for Ashton, ID. These forum participants sat at two facilitated tables (see methodology), working in interactive small groups (hereafter, "groups"). The overall diversity index rating for participants was 0.57 (on a scale from 0 to 1.0), which indicates that 8 of 14 pre-identified community roles were present at the forum (see methodology). Of the total number of participants completing the sign-in questionnaire, 38 percent were associated with the agriculture industry. Other community roles that were represented include educator, business interests, and elected officials.

### **2.19.3 Community Background**

Ashton is a small town of 1,100-some people in southeastern Idaho. The town is located in the center of a fertile agricultural region in the extreme upper Snake River Valley, a few miles south of Island Park Reservoir. The town of Ashton was incorporated in 1906. The town's population soared in the 1960s to about 1,250 and has since declined. In the 1970s, the railroad moved to West Yellowstone, which began the removal of the local train tracks. During this period, a slight decline in small farms began that has continued up until today. The 1970s also saw a decline in the town's business district, which continued in the 1980s. Other dramatic changes occurred in Ashton in the 1980s, with the loss of all the railroads servicing the town, loss of the local hospital, the cessation of logging, the beginning of subdivision development, and an increase in recreation and tourism. In 1985, Ashton passed a school levy. Between 1987 and 1997, farm acreage in Fremont County decreased to just above 300 thousand acres. In 1995, major

economic sectors in Ashton included agriculture and services, which along with wood manufacturing, equaled almost 40 percent of all employment in Ashton. In 1998 the school enrollment totaled 687 students. Currently seed peas, wheat grains and potatoes are the leading crops of Ashton. The town is a center for outfitting and guiding and for big game hunting and fishing. The region north of town is a popular tourist resort and dude ranch area. Just out of town is a summer resort and hot springs. The annual Dog Derby is still a proud tradition of Ashton, as it has been for decades.

## 2.19.4 Community Assessment of 1999 Situation

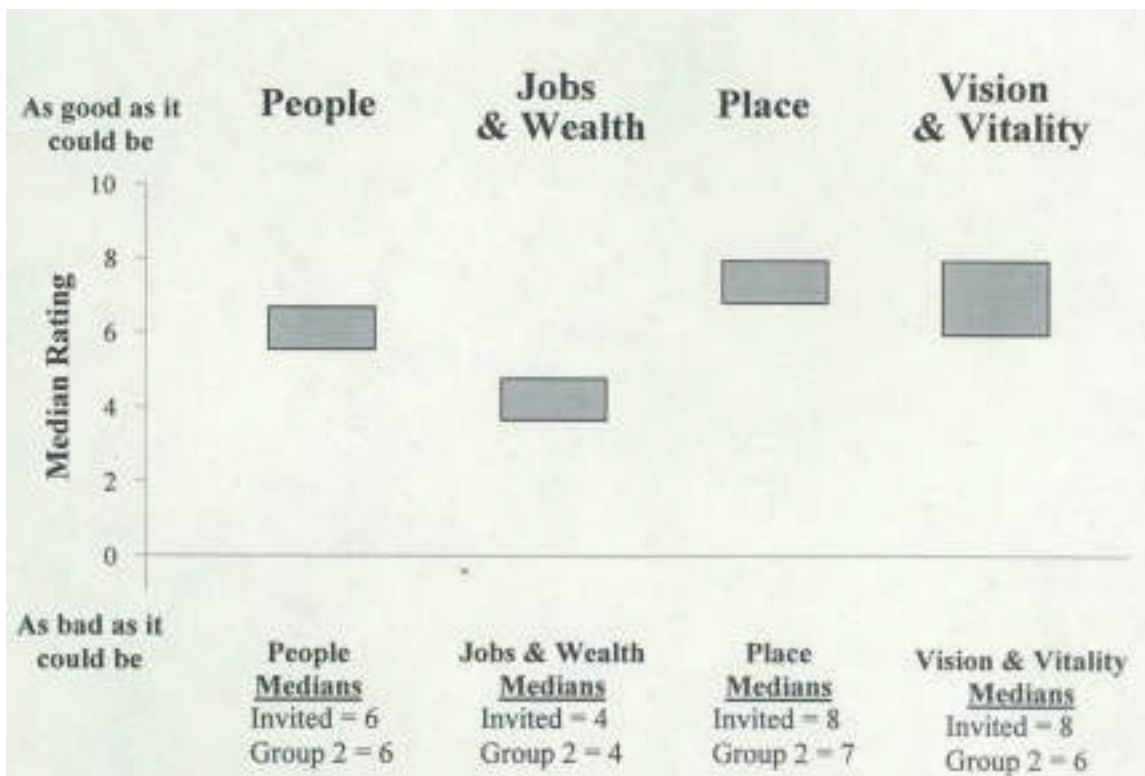
### 2.19.4.1 1999 Situation: Community Dimensions and Rating Scale

The following "current community situation" rating scale was used by participants from Ashton to rate the current (1999) situation of the following four dimensions: 1) *People* -- Social Make-up; 2) *Jobs & Wealth* -- Economy; 3) *Place* -- Character; and 4) *Vision & Vitality* -- Organization and Leadership Capacity. Following a presentation of descriptive information about their community and a community timeline they developed (see above), forum participants were asked to rate the extent to which their community situation was good or bad on a 10-point scale for each of the four dimensions and to write justifications for each of their numerical ratings.

<p>In 1999, the situation in my community is as <b>bad</b> as it could be</p>	<p>1 2 3 4 5 6 7 8 9 10</p>	<p>In 1999, the situation in my community is as <b>good</b> as it could be</p>
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### 2.19.4.2 Situation: Ratings

As Figure 2-1 presents, the medians across the four community dimensions for the two groups at the forum ranged from a 4 on the Jobs & Wealth dimension, to an 8 on both the Place and Vision & Vitality dimensions. The range of ratings on all dimensions were very consistent with two out of the four having the same median rating for both groups. The greatest variation (2 points on the rating scale) was in the Vision & Vitality dimension. Across both groups, the People, Place, and Vision & Vitality dimensions were perceived as being most oriented to the *as good as it could be* end of the scale, with an overall low median score of 6 for the People dimension and a high median score of 8 for the Vision & Vitality dimension. Alternatively, the Jobs & Wealth dimension was perceived as being most oriented towards the *as bad as it could be* end of the scale, with an overall median rating of 4.



**Figure 2-1. Median scale ratings of the current (1999) situation in Ashton, Idaho, by community dimension, across groups**

In the case of Ashton’s community dimensions, the difference between the invited group’s median score and that of the other facilitated group ranged from 0 to 2 rating points on the current (1999) situation rating scale. Relative agreement was found as to Ashton’s current situation among the participating community members, especially in terms of the People and Jobs & Wealth dimensions. For the Vision & Vitality dimension, the invited group felt that Ashton had slightly better leadership capacity than indicated by the other group of community participants. For the Jobs & Wealth dimension, the clustering of group medians around 4 demonstrates that the groups independently came to similar conclusions about the state of their community’s economy in terms of the extent to which its current situation was "bad."

#### **2.19.4.3 1999 Situation: Ratings Justifications**

[Table 2-1](#) presents the clustering of justifications for the two facilitated groups. Justifications noted across the invited group and other groups are categorized as "All Groups." Justifications noted by only the invited group are categorized as "Invited Group." Finally, justifications noted by groups other than the invited one are categorized as "Other Groups."

### **People**

The People dimension received a median rating of 6 across both groups. Individual ratings ranged from 4 to 8 across both groups. [Table 2-1](#) presents the clustering of justifications across the two groups, illustrating why the People dimension was rated toward the good end of the scale. Key factors mentioned across all groups included the perception that Ashton has good prevalent values with people who are supportive of and involved in community activities. The invited group and other group added that Ashton has stable families, a strong sense of community spirit and pride, and good customs and lifestyles. Negative characteristics identified by the invited group, which may have decreased the ratings, were families becoming less stable, lack of opportunities for young people, people changing for the worse with an aging population ("values of our community have changed for the worse since new people mostly older are moving in"). A review of the specific reasons people gave for their ratings further reinforces the perception of new, older people moving in with younger families leaving as having a negative effect on the Ashton community.

### **Jobs & Wealth**

The Jobs and Wealth dimension was the one most oriented towards the *as bad as it could be* end of the scale with a median rating of 4 across both groups and individual responses ranging from 3 to 6 across all forum participants. Indicative of the low median rating, there were no positive justifications clustered across both groups, yet increasing construction related jobs, low utility costs, and economic diversity were some positive justifications provided by the invited group. All groups perceived Ashton to have a shrinking agriculture, mining, and timber base, poor job opportunities with low wages, and declining or limited businesses and shops with money leaving the community.

### **Place**

The Place dimension also received a median rating of 7 across both groups. Individual ratings ranged from 5 to 9 across all forum participants. [Table 2-1](#) presents the clustering of justifications across the two groups that illustrate why the Place dimension was rated toward the good end of the scale. Key factors mentioned across all groups included the perception of Ashton as having good air and water quality, attractive scenery, improving business and revitalization, and a safe and crime free atmosphere. The invited group and other groups added that Ashton has good people, a good quality of life with close proximity to outdoor recreation opportunities, and a family oriented, small-town, pleasant atmosphere. Negative comments that tended to detract from groups' ratings were the community's struggling businesses, vacant store fronts, and negative impacts associated with changing land-use patterns, a decrease in number of farms, an increase in farm size, absentee owners, and corporate farms. A review of the specific reasons people gave for their ratings would suggest that other important considerations here were the perceptions of a poor appearance in the town but that this was improving ("main street is looking better but still needs a lot of improvement"), the love of the surrounding scenery, and a strong sense of place and community among residents.

**Vision & Vitality**

The Vision & Vitality dimension was the highest rated dimension, with an overall median rating of 8. Individual responses ranged from 3 to 9 across all forum participants. Positive justifications that clustered across all groups included success at getting and using grants by a friendly, sociable, cohesive community ("we are a Gem Community which enables us to apply for grants...[we are] friendly and cohesive"). The invited group added that planning exists for a good future base, improving or good schools, and a high level of participation in an interesting community as justifications influencing their positive ratings. The negative justification mentioned by both groups was a decreasing or lack of community vision and vitality ("lack of coherent consensus about future direction"). The invited and other groups added that Ashton does not cope well with change, lacks community control of outside forces, lacks the support and ability to pass bonds and levies, has diminishing organizational capacity, and that economic factors are decreasing its vision and vitality (see [Table 2-1](#)).

<b>Table 2-1                      Rating Justifications for the Current (1999) Situation                      In Ashton, Idaho,                      By Community Dimension and Type of Group</b>			
<b>Dimension</b>	<b>Replication Across All Groups</b>	<b>Invited Group</b>	<b>Other Groups</b>
<b>People</b>			
Positive	Good prevalent values (61)	Growth of businesses/good diverse strong economy (541)	Strong sense of community among residents (203)
	Supportive of community activities and involved (241)	Good customs and lifestyles/change for the better (51)	Stable families (103)
	Recreation and tourism is important (positive) (441)	Strong sense of spirit and pride in community (211)	
Negative		People changing for worse/negative change (312)	
		Lack of opportunities for young people (11)	
Other	Increasing/high population (41)	Aging population (2)	
	Diversity (general) (309)	Changing age structure (5)	
		Decreasing/low population (42)	



<b>Jobs and Wealth</b>			
Positive		Increasing construction-related jobs (17)	
		Low utility costs (79)	
		Economically diverse (121)	
		Land mass is an asset (237)	
Negative	Shrinking agriculture, mining, and timber base (135)		
	Poor job opportunities (3)		
	Low paying jobs (31)		
	Money leaves (51)		
	Declining/limited business and shops (136)		
	High commuting (66)		
Other	Increasing property values (201)		Agricultural/food processing-based economy (143)
	General job opportunities (1)		
<b>Place</b>			
Positive	Good, health environment and great outdoors (775)	Good quality of life (901)	Good/improving community appearance (511)
	Decreasing store vacancies/new shops coming in (530)	People shop elsewhere due to lack of businesses/not spending money here (522)	Close proximity to outdoor recreation opportunities (602)
	Improving business appearances/revitalization (535)	Good people (832)	Family-oriented, small town with pleasant atmosphere (681)
	Attractive scenery (771)	Community improvements, general (845)	
	Strong sense of place/heritage/morale and community (670)		
	Good air and water quality (780)		
	Safe and crime free (902)		

Negative	Struggling businesses and vacant storefronts (520)	Increased commercial and residential development/loss of open space to it (761)	Decreased number of farms; and increased farm size, absentee owners, corporate farms (653)
	Decline in farming (654)	Negative impacts of changing land-use patterns (634)	
		Appearance needs improvement (516)	
Other		New planning agency (718)	
<b>Vision and Vitality</b>			
Positive	Successful at getting and using grants (241)	Lack of support and ability to pass bonds and levies (182)	
	Friendly, sociable community (305)	Interesting community (307)	
	Strong, cohesive community (341)	Planning and plans exist, good base for the future (403)	
		Improving/good schools (811)	
		Strong, high level of community participation (work together) (561)	
Negative	Decreasing/lack of community vision and vitality (602)	Do not cope well with or resist change (362)	Inadequate community cohesiveness (342)
		Lack of community control of outside forces (economics/regulations) (442)	Diminished civic organizational capacity (12)
		Economic factors decreasing vision and vitality (583)	

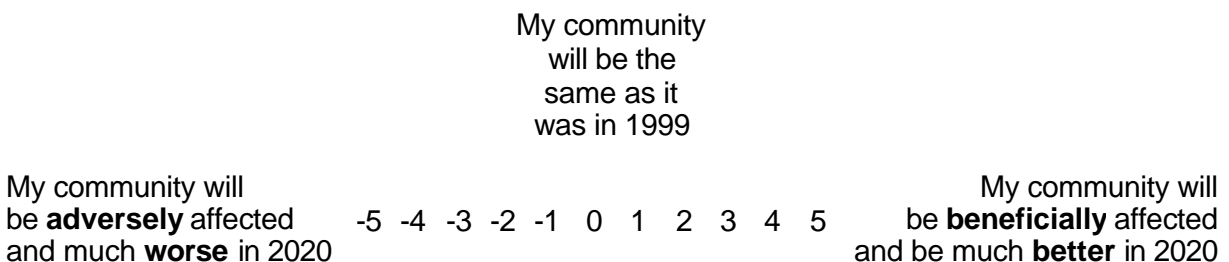
## 2.19.5 Comparison of Salmon Recovery Pathways A1, A2, and A3

### 2.19.5.1 Community Dimension Impact Rating Scale

Forum participants were asked to assess how their community would be impacted in the year 2020 by implementation of the three salmon recovery pathways proposed by the U.S. Army Corps of Engineers to return juvenile salmon to the Lower Snake River. Pathway A1 was to maintain the existing Lower Snake River System, A2 was to make major modifications to the existing Lower Snake River System, and A3 was natural river drawdown or dam breaching. Supplementing Pathway A2, A2b involved the elimination of flow augmentation (from the current 427,000 acre-feet to 0 acre-feet), while A2c involved increasing flow augmentation (by 1 million acre-feet) into the Snake River system.

A second rating scale was used by forum participants to indicate the situation for each of the four community dimensions (*People, Jobs & Wealth, Place, and Vision & Vitality*) in terms of how adversely or beneficially they felt their community would be impacted in the year 2020. In thinking about the future, participants were asked to consider all of the normal changes that are likely to occur in their community over time, along with specific changes they would expect to result from a pathway. To provide a basis for thinking about their community's future situation, forum participants received information from Corps and NMFS' studies specific to their community for each pathway. Information provided to participants included salmon recovery probabilities, physical changes, and economic changes. (For more information on the information presented and their sources, see [Appendix A](#).) Community members then gave an initial rating of the impacts on their community in the year 2020 for each dimension. After a facilitated group discussion of how and why their community would be affected or not affected, participants re-rated the community dimensions and listed their justifications.

To ground the rating scale in reality, forum participants were instructed to use their community's 1999 situation, which they had just rated and described for each dimension, as the mid-point (0) of the scale from which to determine the magnitude of adverse (negative) or beneficial (positive) effects to their community. To rate Pathways A2b and A2c, participants were instructed to use their rating for Pathway A2 as the mid-point of the scale for each dimension. In each case, the zero or mid-point represents the "no impact" or "no change" situation. Participants were specifically instructed to focus on adverse and beneficial impacts only on their community and not on the entire region.



### 2.19.5.2 Summary of Findings on Pathways A1, A2, and A3

[Figure 2-2](#) illustrates that, across the two facilitated groups, forum participants generally perceived that the situation for their community would be better and beneficially affected in the year 2020 for each of the dimensions under A1. The medians across both groups for Pathway A1 for all dimensions were positive 1. For Pathway A2, community participants generally perceived that their community would not be affected for the People, Place, and Vision & Vitality dimensions. The Jobs & Wealth dimension was the one exception where participants felt Ashton would be affected negatively as reflected by a median rating of -1 across both groups. In the case of A3, group medians were clustered at the "adversely affected" end of the scale for all dimensions, with group medians clustering around -2 and -3.

Under both A1 and A2, the degree of clustering among groups remained relatively constant for the People and Place dimensions. The Jobs & Wealth and Vision & Vitality dimensions exhibited a lower level of clustering but maintained a consistent range of 1.5 to 2 rating points in deviation of group two's median from the invited group's median rating score. Under Pathway A3, group medians deviated across all dimensions and ranged from 0.5 to 2 rating points in median difference. This suggests that all groups perceived Ashton to be worse off under A3 in 2020, and the degree of change in terms of adverse effects was similar for all four dimensions when looking across all groups.

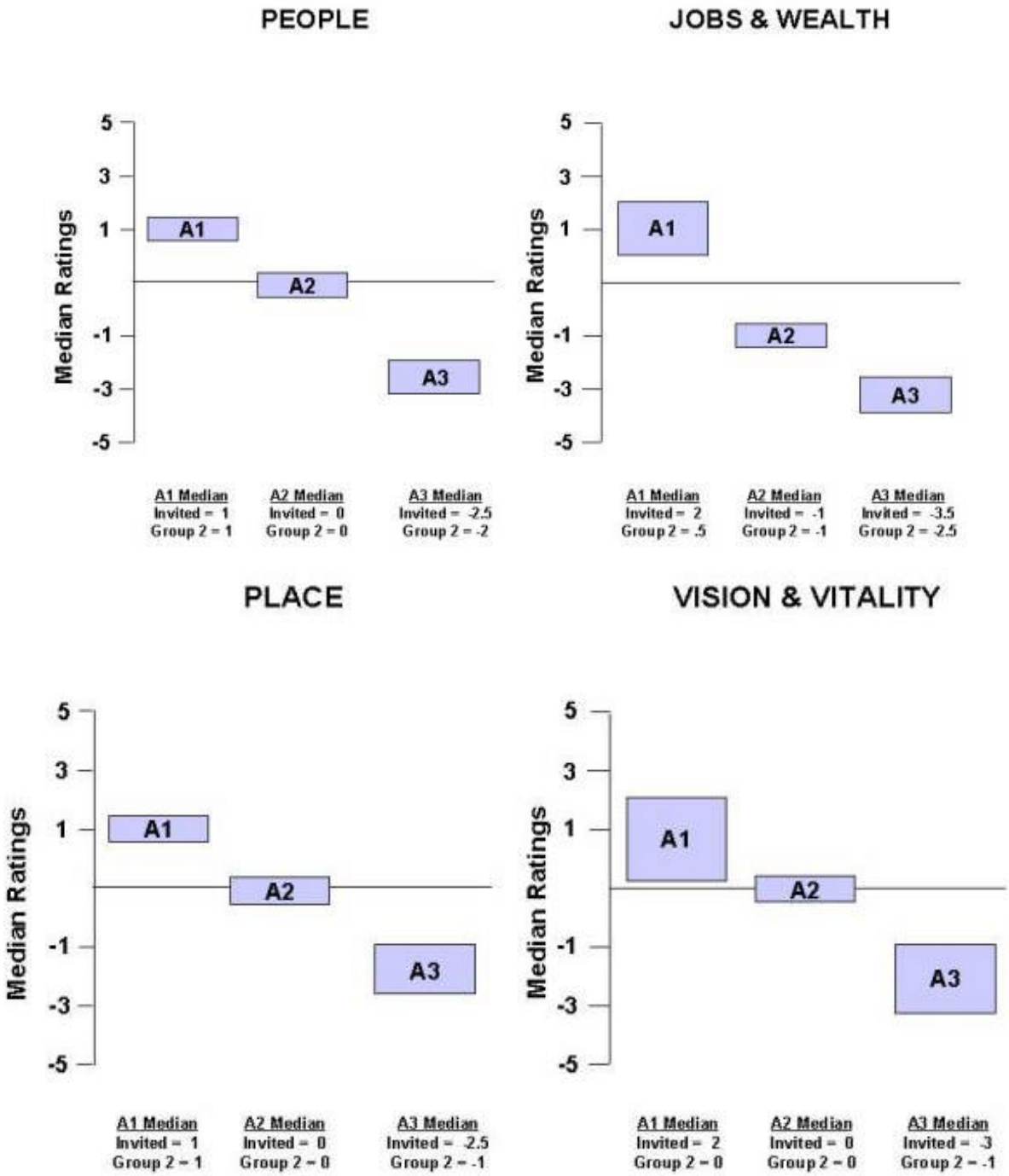


Figure 2-2. Median scale ratings of pathways A1, A2, and A3, for Ashton, Idaho, by community, across groups

### **2.19.5.3 Rating Justifications Across Pathways A1, A2, and A3**

In the analysis of A1, the "no action" pathway, a process similar to that for the 1999 current situation was followed to examine participants' perceptions of likely future changes to the community in 2020. The premise for the scenario was that the river system would remain unchanged but other social, economic, and cultural trends would continue on their current trajectory, as perceived by forum participants. Both numerical scores and the reasons and changes underlying them were examined. Pathway A1 was treated as the base-case, and the results for this pathway provided the basis for assessing the impact of both A2 ("major modification") and A3 ("natural river drawdown and dam breaching"): A2 and A3 were analyzed to identify changes of clustered numerical ratings and qualitative justifications from the baseline forecasts under A1.

### **2.19.5.4 Pathway A1**

#### ***People***

In the case of the People Dimension for A1, both group medians were a positive 1, with individual responses across all forum participants ranging from -2 to 2. As presented in [Table 2-2](#), characteristics consistently mentioned across all groups were that 1999 trends would continue, heavy government regulation would continue, and there would be little or no change in power costs. The invited group added that their population would continue to increase, would be younger, customs and lifestyles would remain stable, recreation and tourism opportunities would increase, and that no change in water flow is tolerable.

#### ***Jobs & Wealth***

For the Jobs & Wealth dimension, median ratings ranged from a 0.5 to 2.0 across both groups with an invited group median of positive 2. Individual responses ranged from -3 to 3 across all forum participants. Positive changes were perceived across groups for this pathway and dimension. These included low utility costs, resource tourism and amenity growth, increasing wealth, and high property values. The invited group also suggested that jobs would become more service and tourism recreation oriented, agriculture would remain stable, the economic base would expand, and cheap utilities would help grow the economy (see [Table 2-2](#)).

#### ***Place***

For the place dimension, the median rating for both groups was a positive 1. Individual responses varied from -4 to 3 across all forum participants. No changes or little impact were perceived for this pathway and dimension across both groups. The invited group, however, suggested several positive rating justifications including a good or improving community appearance, decreasing store vacancies, and an improved farming and agricultural infrastructure. They also felt that Ashton's population would increase and that it would have strong values with community growth and improvement under Pathway A1 (see [Table 2-2](#)).

**Vision & Vitality**

The median rating for both community groups for Vision & Vitality was a positive 2 with individual ratings ranging from -3 to 3. Justifications for these ratings did not cluster across groups, however. The invited group felt that under Pathway A1 Ashton would have several positive changes including confident, caring leaders, success at getting and using grants, community control over outside forces, positive impacts on parks and recreation facilities, and that young people would stay in the community. They also felt that an increasing population would bring improvements including an adequate or increasing and well-managed city budget.

<b>Table 2-2                      Comparison of Rating Justifications For Pathways A1, A2, and A3                      For Adams, Oregon,                      By Community Dimension and Type of Group</b>					
<b>Year 2020 Rating Justifications</b>	<b>Pathway 1 Existing Condition</b>	<b>Pathway 2 System Modification</b>	<b>Pathway 2b 0 Flow Augmentation</b>	<b>Pathway 2c 1.427 Flow Augmentation</b>	<b>Pathway 3 Drawdown</b>
<b>People</b>					
Across All Groups	Heavily regulated by government/intervention (255)	No change in people/little/no impact (313)	No change in people/little/no impact (313)	Decreasing/low population (42)	Decreasing/low population (42)
	Current trends will continue/little/no impact (325)	Increased utility, transportation costs, and taxes; and decreased irrigation and loss of power (482)		Loss/change in recreation and tourism opportunities (442)	Negative impacts (general) (322)
	Little to no change in power costs (484)			Loss of industries and lack of job opportunities (492)	Increased utility, transportation costs, and taxes; and decreased irrigation and loss of power (482)
				Decrease/loss of agricultural-based economy (503)	
				Decrease in water availability (604)	

Invited Groups	Younger population (3)	Population (general) (48)	Good community attitude (221)	Lifestyles changing (54)	Lose families (107)
	Increasing/high population (41)	Increasing people own homes/many own homes (151)		Families are becoming less stable (102)	Families (general) (109)
	Stable population (43)	People changing for worse/negative change (312)		Lose families (107)	Home ownership (general) (159)
	Stable customs and lifestyles (53)	Growth in recreation and tourism opportunities (443)		Negative impacts (general) (322)	Low quality, unfriendly, unhelpful people (202)
	Increasing people own homes/many own homes (151)	Jobs/industry (general) (495)		Unstable/poor/decreasing economy (542)	Growth in recreation and tourism opportunities (443)
	Stability of community (general) (323)	Decrease/loss of agricultural-based economy (503)			Loss of industries and lack of job opportunities (492)
	Growth in recreation and tourism opportunities (443)				Jobs/industry (general) (495)
	Recreation (general) (449)				Low/decreased income and wages with increased poverty (534)
	Decrease/loss of agricultural-based economy (503)				
	Reliance on water/importance to people (601)				
No change in water flow is tolerable (603)					
Other Groups	People changing for better/positive change (311)		People changing for better/positive change (311)		
	No change in people/little/no impact (313)		More water (positive) (608)		



Jobs and Wealth					
Across All Groups	Low utility costs (79)	Increasing utility costs (73)	Increasing job opportunities (general) (10)	Decreasing job opportunities (general) (18)	Increasing utility costs (73)
	Resource tourism and amenity recreation growth (126)	Declining economy (162)	Increase in agriculture (105)	Bad for irrigating farming (no water in dry years) (69)	Increasing transportation costs (75)
	Increasing wealth (180)		Resource tourism and amenity recreation growth (126)	Loss of recreation and tourism-related business (134)	Uncertainty causes problems (242)
Across All Groups	High property values (198)			Shrinking agriculture, mining, and timber base (135)	
	Same/no change (245)			Declining/limited business and shops (136)	
				Decreasing property values (202)	
Invited Groups	Increased tourist and recreation-related jobs (38)	Decreasing job opportunities (general) (18)	Increase in irrigation/more water for irrigation (107)	Jobs decrease due to the ripple effect from agriculture losses (26)	New people moving in change wealth, make-up (9)
	Jobs becoming more service oriented (41)	Decreasing agricultural jobs (22)	Less impact/stress on farmers (156)	Decreasing income and wages (33)	Decreasing agricultural jobs (22)
	Good for agriculture/stable agriculture (104)	Increase in irrigation/more water for irrigation (107)		High commuting (66)	Jobs becoming more service oriented (41)
	Expanding economic base (125)	Decreased economic base (124)		Declining economy (162)	Decreasing farms and increased farm size (109)
	Cheap utilities keep economy growing (160)	No new industries, businesses (140)		Increasing poverty (187)	Resource tourism and amenity recreation growth (126)
	Population growth (207)	Agricultural/food processing-based economy (143)		People will leave (206)	Negative economic aspects of recreation and tourism (128)

	Good rural area (228)	Decreasing wealth (181)		Bad for community (956)	Shrinking agriculture, mining, and timber base (135)
					Increasing wealth (180)
					Increasing poverty (187)
					Poor roads/degraded roads from trucking (223)
Other Groups		Stable job opportunities/employment (8)			Decreasing job opportunities (general) (18)
					Increased costs of doing business (88)
<b>Place</b>					
Across All Groups	No negative changes, little impact (849)	Maintain status quo, no change (841)		Decline in farming (654)	
				Poor/loss of recreation and tourism opportunities (666)	
				Poor air and water quality (782)	

	Good/improving community appearance (511)	Increased power rates (594)	Stability of agriculture and farms (652)	Poor/declining community appearance (513)	Poor public facilities (572)
	Community appearance will stay the same (514)	Decreased number of farms and increased farm size, absentee owners, corporate farms (653)	Good irrigation systems and wells, maintenance of irrigation systems (657)	Struggling businesses and vacant storefronts (520)	Decline in school enrollment (581)
	Decreasing store vacancies/new shops coming in (530)	Poor land-use planning, concern over plan (713)	Increase in recreation opportunities is good (661)	Increasing store vacancies (521)	Negative impact from increased transportation (609)
	Good utility/power rates (590)	Declining grants and bonds (719)		No money for community improvement (567)	Negative impacts of changing land-use patterns (634)
Invited Groups	Importance of agriculture (644)	Economic decline/loss of economic diversity (733)		Negative impacts on the number of farms and farm families (642)	Negative impacts on the number of farms and farm families (642)
	Improved farming and agriculture infrastructure (651)			Loss of tourism (664)	Decreased number of farms and increased farm size, absentee owners, corporate farms (653)
	Stability of agriculture and farms (652)			Economic decline/loss of economic diversity (733)	Decline in sense of place and community pride (672)
	Strong values (676)			Community improvements are dependent on economy (753)	An increase in tourism is bad for the community (673)
	Community growth and improvement (general) (721)			Decreased fishing (812)	Service-based economy (735)
	Increasing population (821)			Decreasing population (823)	Negative impacts associated with population change (822)
					Good tax base and revenues, property values (881)

Invited Groups					Increased taxes, taxes wasted, competition for tax money (883)
					Increasing crime and drug-use/less safety (903)
Other Groups			No negative changes, little impact (849)	Importance of water to community (618)	Maintain an environmental balance (774)
			Ruin of community, complete negative community change (844)		
<b>Vision and Vitality</b>					
Across All Groups				Negative economic opportunities (582)	Negative economic opportunities (582)
				Decreasing/lack of community vision and vitality (602)	
				Outmigration of population (892)	
Invited Groups	Confident, caring leaders (181)	Reduced budgets (484)	Stable jobs and wealth (723)	Overwhelmed, poor leaders (142)	Support for bonds and levies (181)
	Successful at getting and using grants (241)	Positive/increasing community characteristics (541)	Positive attributes of people (881)	Loss of community cohesiveness (344)	Loss of community cohesiveness (344)
	Planning and plans exist, good base for the future (403)	Strong/increasing community vision and vitality (601)		Lack of planning and ability to plan for the future (404)	Lack of planning and ability to plan for the future (404)
	Community control of outside forces (441)	Community growth (605)		Economic factors decreasing vision and vitality (583)	Adequate/increasing well-managed city budget (481)
	Adequate/increasing well-managed city budget (481)	Increased costs related to modifications (702)		Negative impacts on vision and vitality related to water (663)	Positive economic opportunities (581)

Invited Groups	Positive/increasing community characteristics (541)	Impacts related to increased utility rates (750)		Decreasing quality of life (842)	Decreasing/lack of community vision and vitality (602)
	Jobs and wealth (general) (580)			Impacts of changing demographics (886)	Fish-related uncertainty (665)
	Community growth (605)				Economic base will change (726)
	Schools growing (814)				Impacts of changing demographics (886)
	Positive impact on parks and recreation/facilities (833)				Increased population and related improvements (891)
	Quality of life (general) (863)				Outmigration of population (892)
	Positive attributes of people (881)				
	Negative attributes of people (882)				
	Young people stay (883)				
	Increased population and related improvements (891)				
Other Groups	No change (673)	No change (673)		Reduced, pessimistic visions of the future (384)	
				Negative/decreasing community characteristics (542)	

### **2.19.5.5 Comparison of Pathway A2 to A1**

Under the implementation of Pathway A2, the community generally perceived that the People, Place, and Vision & Vitality dimensions of Ashton would not be affected. The median rating for both groups was 0 for these three dimensions, meaning that there would be no change in 2020 from their 1999 situation under A2. Community members did perceive a negative change in the Jobs & Wealth dimension, however, with the median rating for both groups at a -1. Justifications across both groups for this negative median rating included increasing utility costs and a declining economy. The invited group added that they would expect decreasing job opportunities, decreasing agricultural jobs, an increase in irrigation, no new industries or businesses, and decreasing wealth. In contrast, the other group felt that there would be stable job opportunities under this pathway (see [Table 2-2](#)). There was general agreement that this pathway would have little or no impact on Ashton across three out of the four dimensions. There was also general agreement across groups, that this pathway would have negative impacts on the Jobs & Wealth dimension of Ashton in the year 2020 (see [Figure 2-2](#)).

#### **2.19.5.5.1 Comparison of Pathway A2 to A2b and A2c**

Under the implementation of Pathway A2b (elimination of flow augmentation to 0 acre-feet), the community generally perceived that the People and Vision & Vitality dimensions would not be affected, as illustrated by group medians of 0 for both dimensions (see [Figure 2-3](#)). They did feel, however, that this pathway would benefit the Place and Jobs & Wealth dimensions as illustrated by group medians of positive 1 for both dimensions. For Jobs & Wealth, justifications given across groups included increasing job opportunities, increasing agriculture, and growth in resource tourism and amenity recreation. The invited group added that irrigation would increase, with greater water availability and less impact and stress on farmers. For the Place dimension, there was no clustering of justifications across groups. The invited group, however, felt that there would be stability of agriculture and farms, good irrigation systems and wells, and a positive increase in recreation opportunities. The other group felt that there would be no negative impacts or changes from Pathway A2b.

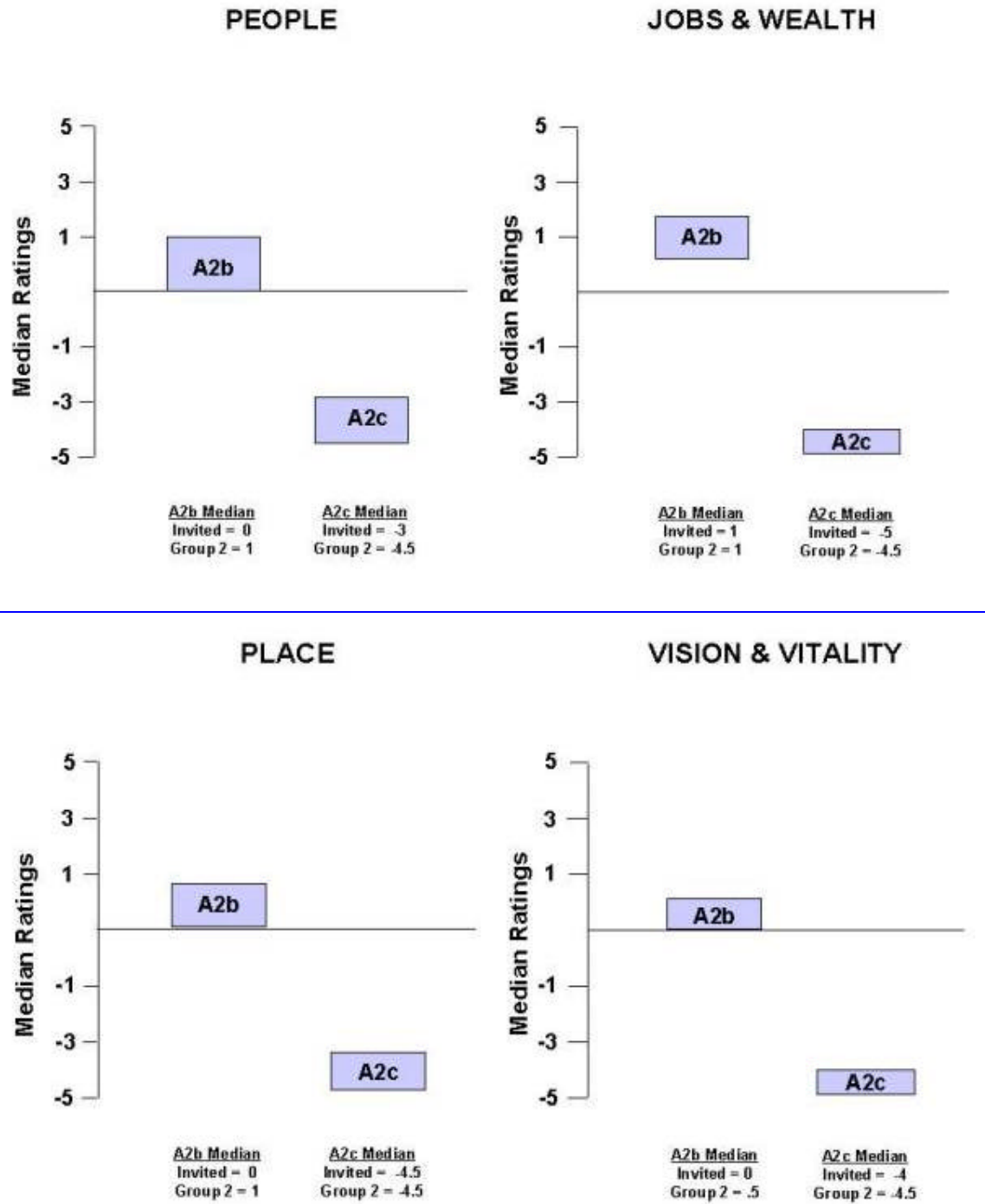


Figure 2-3. Median scale ratings of Pathways A2b and A2c for Ashton, Idaho, by community, across groups

Under the implementation of Pathway A2c (increase of flow augmentation to 1.4 million acre-feet), the community participants generally perceived extremely negative impacts across all four dimensions. Median ratings across both groups were -4 for the People dimension, -5 for the Jobs & Wealth dimension, -4.5 for the Place dimension, and -4.5 for the Vision & Vitality dimension (see [Figure 2-3](#)). Justifications across both groups for the negative People rating included decreasing population, loss of recreation and tourism opportunities, loss of industries and lack of job opportunities, a loss or decrease of an agricultural based economy, and a decrease in water availability. Justifications across both groups for the negative Jobs & Wealth rating included decreasing job opportunities, bad for irrigation farming (no water in dry years), loss of recreation and tourism related business, a shrinking agriculture, mining and timber base, declining or limited businesses and shops, and decreasing property values. Justifications across both groups for the negative Place rating included a decline in farming, loss of recreation and tourism opportunities, and poor air and water quality. Justifications across both groups for the negative Vision & Vitality rating included negative economic opportunities, decreasing or lack of community vision and vitality, and out-migration of population. There were no positive ratings across all individuals when considering implementation of this pathway.

#### **2.19.5.6 Comparison of Pathway A3 to A1**

The median group ratings for A1 shifted toward the "adversely affected" end of the impact rating scale for all dimensions under the implementation of A3. Median ratings for the four dimensions, which loosely clustered around 1 for A1, ranged from "1 to "3.5 for A3 across both groups (see [Figure 2-2](#)). The invited group median differed from the other group median by as many as 2 points for the Vision & Vitality dimension and as little as 0.5 points for the People dimension.

##### ***People***

Individual ratings ranged from -4 to 5 across all forum participants, with group medians of about -2 and a median of -2 across both groups. Justifications mentioned across groups included decreasing population ("see more people moving up river"), increasing utility costs ("higher utility rates could adversely affect society"), transportation costs and taxes, decreased irrigation and loss of power, loss of industries and lack of job opportunities ("loss of jobs in agriculture"), and low or decreased income and wages with increased poverty ("low pay would degrade quality of population"). The invited group also added that there would be growth in recreation and tourism opportunities.



### ***Jobs & Wealth***

Individual responses ranged from -5 to 5 across all forum participants with group medians of -2.5 and -3.5. Justifications provided by all groups for this negative rating included increasing utility costs, increasing transportation costs, and the problems caused by uncertainty. The invited group also noted reasons for their ratings that included that new people moving in would change the wealth make-up, an increase in wealth, a decrease in agricultural jobs, jobs becoming more service oriented, decreasing farms and farm size, and growth in resource tourism and amenity recreation. Other justifications included decreasing job opportunities and increase costs of doing business.

### ***Place***

For the Place dimension of Ashton, individual responses ranged from -4 to 5 across all forum participants and group medians from -1 and -2.5. Justifications from the invited group included poor public facilities, a decline in school enrollment, negative impact from increased transportation, decline in sense of place and community pride ("our sense of place would be lost"), an increase in tourism that is bad for the community, a good tax base, and increased revenues and property values ("higher property taxes"). Other justifications included maintaining an environmental balance ("returning rivers will restore the natural integrity of the area").

### ***Vision & Vitality***

For the Vision & Vitality dimension, individual responses ranged from -5 to 5 across all forum participants and group medians of -1 and -3. The common justification perceived across both groups focused on negative economic opportunities. The invited group added loss of community cohesiveness, lack of planning and ability to plan for the future, positive economic opportunities, and increased population and related improvements.

## **2.19.6 Minimizing Adverse Impacts**

No suggestions for lessening the adverse impacts of the pathways were recorded for the community of Ashton, Idaho.

## **2.20 Boise, Idaho, Community Assessment**

### **2.20.1 Summary of Key Findings About Boise**

The city of Boise is the capital of the State of Idaho and its largest city, with a population of over 166,000. It is situated on the Boise River in the northern part of Ada county in southwestern Idaho. The town of Boise was incorporated as a city and the capital of the Idaho Territory in 1864. The late 1930's brought a large migration of Basques from the Western Pyrenees Mountains, and became the primary shepherders of that time. In the 1960s, the Boise airport was constructed and the population totaled more than 20,000, which has rapidly increased since. During the 1960s, two other dramatic changes were the building of I84 through Boise and the founding of Boise State

College. In 1977 Boise became a stop on Amtrak's Seattle-Ogden line. The 1980s brought increased commerce and business to Boise with the location of Micron in the city and the building of a mall. A high percentage of jobs in 1995 were in government, retail trade and recreation/tourism. In the late 1990s, Internet-based businesses began to appear. The greater Boise area currently is a booming population and trade center experiencing the growing pains of rapid commercial and residential development. A number of international, national, regional and state corporations have their headquarters in Boise.

Participants in the forum at Boise perceived a city in 1999 whose current situation, as depicted by the four community dimensions, varied considerably by individual participant ratings on the current situation rating scale. The group median ratings on that scale, however, clustered fairly consistently around the invited group medians. Medians across the four community dimensions for the five groups at the forum ranged from a low of 4 on the Vision & Vitality dimension, to a high of 8 on the Place dimension. Four of the five groups, including the invited group, rated People, Jobs & Wealth, and the Place dimensions as being most oriented to the *as good as it could be* end of the scale. Dissenting groups on these three dimensions all gave a more moderate median rating of 5 (neither particularly good nor bad). Alternatively, the Vision & Vitality dimension was perceived as being most oriented towards the *as bad as it could be* end of the scale, with an overall median rating of 5 across all groups, and individual group medians ranging from 4 to 6. The People dimensions of Boise was perceived in terms of good customs, lifestyles and values, being supportive of community activities, and having a strong sense of community spirit and pride. A review of the specific reasons people gave for their ratings, however, suggests the perception that uncontrolled, rapid population growth, a lack of planning, a lack of ethnic and cultural diversity, and "a deteriorating natural environment" were concerns for the Boise participants. In terms of Jobs & Wealth, the economy was reported to be strong and diverse with low unemployment. Low paying jobs ("many new jobs are low paying service jobs"), high costs of housing ("housing costs beyond the ability of most to buy"), and income stratification within the community ("the distribution of wealth is poor") were economic concerns of the Boise participants, however. In terms of Place, close proximity to outdoor recreation opportunities, good parks and open space, and a safe, crime free environment were characteristics that Boise participants enjoy. Poor land use planning, a loss of open space to commercial development, and a lack of an adequate public transportation system were Place concerns, however. On the Vision & Vitality dimension, which was the lowest rated dimension, the only positive justification across all groups was the perception of strong, active civic organizational capacity. Negative justifications across all groups included the perception that politics were dominated by special interests and a one-party system, a lack of planning for the future, and developers and special interests controlling development.

Participants were negative about Boise's future under Pathway A1 (the existing situation on the Lower Snake River continued on into 2020), with median ratings across groups at the negative, "adversely affected" end of the scale for all four dimensions. However, median scale ratings differed across the groups of participants by as many as three rating scale points for the People and Vision & Vitality dimensions, indicating a lack of consensus about the perceived impacts of this pathway on these community dimensions. Overall, however, group medians were decidedly negative.

The outcome was much the same when participants considered Pathway A2. Again, group medians were negative, with the general perception that salmon fisheries would not recover under these pathways the rationale for the negative median ratings. The loss of the fishery was perceived to impact the community's customs, lifestyles, values, sense of place, environmental integrity, future leadership, and economy in negative ways.

Participants perceived the implementation of Pathway A2b (elimination of flow augmentation to 0 acre-feet) as having little or no impact on Boise in comparison to Pathway A2 as a baseline rating. Again, justifications focused on the unlikely nature of fish recovery as having negative impacts on the Boise community across all dimensions. Pathway A2c (increase of flow augmentation to 1.4 million acre-feet) was perceived to be generally worse than both Pathway A2 and A2b, with median ratings ranging from -3 to -2. There was more mention of negative impacts to agriculture as justification for these negative median ratings than was found for the two prior pathways.

Participants at the Boise forum perceived Pathway A3 (natural river drawdown and dam breaching) as having positive, beneficial impacts on the Boise community across all four dimensions. Median ratings across all groups ranged from a minimum of 3 for the People and Place dimensions to a maximum of 5 for the Vision & Vitality dimension. Justifications across groups that influenced these positive ratings included a strong sense of community spirit and pride, growth in recreation and tourism opportunities, strong and improving fisheries, a strong, growing economy, strong sense of place and heritage, and new optimistic visions for the future -- all due to a recovered salmon fishery.

Overall, a strong, healthy salmon fishery was perceived as having significant beneficial impacts to the Boise community. Perhaps more than any other community, forum participants focused on negative impacts on them and their community due to the loss of wild salmon stocks they perceived would result if the existing situation continues. These impacts included the loss of recreation and tourism opportunities, a decline in sense of place and community pride, declining values, spirit, and more stress. The invited group, in particular, noted a perceived loss of environmental beauty, rivers, and scenery, decreased wildlife and fish, a decrease in fishing opportunities, and negative spiritual, symbolic, and material impacts due to the loss of fish. Participants offered a diversity of suggestions for minimizing negative impacts of various pathways to Boise.

These focused on minimizing the perceived negative effects on their community of Pathways A1 and A2, such as halting current government spending on ineffective actions to recover salmon stocks, and those of downriver groups, including farmers and run-of-river operations like barging, that would be negatively affected under A3 by compensating them for losses.

### **2.20.2 Interactive Community Forum Participants**

Forty-nine community members provided perspectives on the history, 1999 situation and impacts of Pathways A1, A2, and A3 for Boise, ID. These forum participants sat at five facilitated tables (see methodology), working in interactive small groups (hereafter, "groups"). The overall diversity index rating for participants was 0.79 (on a scale from 0 to 1.0), which indicates that 11 of 14 pre-identified community roles were present at the forum (see methodology). Of the total number of participants completing the sign-in questionnaire, 27 percent identified themselves as active in historical or environmental protection issues. Other community roles that were represented include local civic groups (8 percent), educators (8 percent), land resource production interests (4 percent), and conservative representatives (8 percent).

### **2.20.3 Community Background**

The city of Boise is the capital of the State of Idaho and is the state's largest city, with a population of over 166,000. It is situated on the Boise River in the northern part of Ada County in southwestern Idaho. Boise is located on a high desert plain, mid-way between Salt Lake City, Utah and Portland, Oregon. Boise was incorporated as a city, as well as designated the capital of the Idaho Territory, in 1864. In 1926, the first commercial airmail service in the U.S. began in Boise. A large number of Basques immigrated to the area from Europe in the late 1930s, and they became the primary sheep-herders in the region at that time. Joe Albertson opened his first supermarket in Boise. In the 1960s, the Boise airport was constructed, and two other significant changes were the construction of the interstate highway (I-80) through Boise and the founding of Boise State College, which later became Boise State University. Since the 1960s, when the population totaled only a little more than 20,000, the city has seen a rapid increase in size, geographically as well as in people. In 1977 Boise became a stop on Amtrak's Seattle-Ogden line. In the 1980s, the city's commerce and business began to expand significantly with companies like Micron, a high-technology corporation, locating there, as well as the building of the History and Art Museum and the city's first mall. In the late 1980s, the city experienced a housing depression, but the city's growth soon resumed, along with an increase in housing prices. A high percentage of jobs in the city in 1995 were in government, retail trade, and travel and tourism. In 1996, bond levies were passed to build two junior high schools and four new elementary schools, and to improve older facilities. In the mid-1990s, another newer mall was built, increasing retail trade in the city. A sense of rebirth and revitalization in Boise began with the re-development of the downtown. Some of the new and revitalized developments included 8th Street Market Place, Old Boise, Boise Factory Outlets, Capitol Terrace, Boise Town Square, The Marketplace and Hyde Park. Also part of that revitalization was the development of the Boise Greenbelt, which includes 25 miles of paved pathway and

accommodates walkers, bikers, skaters, joggers, runners, wildlife-watchers and fishermen. In the late 1990s, Internet-based businesses began to appear. Boise currently is a booming town with a population of a little over 166,000. A recreational attraction to Boise is Bogus Basin ski area. A number of international, national, regional and state corporations have their headquarters in Boise. These include Hewlett-Packard, Boise Cascade, Simplot Corporation, Albertsons, Micron Technology, and Morrison-Knudsen. Boise is also the headquarters for Boise National Forest and Payette National Forest. As a hub of commerce, banking and government in the state of Idaho, Boise's challenge for the future is to continue to accommodate economic growth while protecting the community's quality-of-life.

## 2.20.4 Community Assessment of 1999 Situation

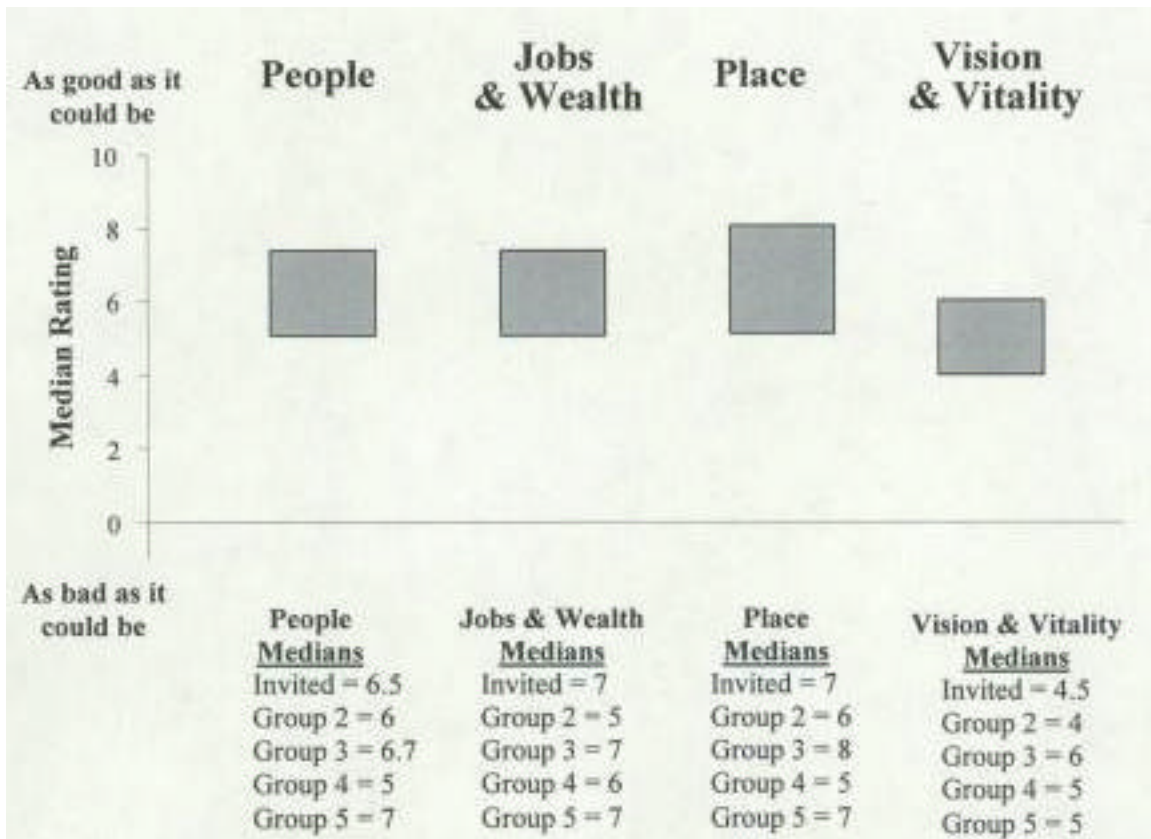
### 2.20.4.1 1999 Situation: Community Dimensions and Rating Scale

The following "current community situation" rating scale was used by participants from Boise to rate the current (1999) situation of the following four dimensions: 1) *People* -- Social Make-up; 2) *Jobs & Wealth* -- Economy; 3) *Place* -- Character; and 4) *Vision & Vitality* -- Organization and Leadership Capacity. Following a presentation of descriptive information about their community and a community timeline they developed (see above), forum participants were asked to rate the extent to which their community situation was good or bad on a 10-point scale for each of the four dimensions and to write justifications for each of their numerical ratings.

<p>In 1999, the situation in my community is as <b>bad</b> as it could be</p>	<p>1 2 3 4 5 6 7 8 9 10</p>	<p>In 1999, the situation in my community is as <b>good</b> as it could be</p>
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### 2.20.4.2 1999 Situation: Ratings

As [Figure 2-4](#) presents, median ratings on the current situation rating scale for the five groups at the forum ranged from a low of 4 on the Vision & Vitality dimension to a high of 8 on the Place dimension. The greatest variation between the invited group median and other groups (2 points on the rating scale) was for the Jobs & Wealth and Place dimensions. Across all groups, four out of the five, including the invited group, rated People, Jobs & Wealth, and the Place dimensions as being most oriented to the *as good as it could be* end of the scale. The dissenting groups for these three dimensions all gave a median rating of 5, with the People and Place dimensions rated by the same group. Alternatively, the Vision & Vitality dimension was perceived as being most oriented towards the *as bad as it could be* end of the scale, with an overall median rating of 5 across all groups. Individual group medians for this dimension ranged from a low of 4 to a high of 6.



**Figure 2-4 Median scale ratings of the current (1999) situation in Boise, Idaho, by community dimension, across groups**

In the case of Boise’s individual community dimensions, the difference between the invited group’s median score and that of the other facilitated groups ranged from 0 to 2 rating points on the current (1999) situation rating scale. There was always at least one group for each dimension that deviated from the invited group median by more than one rating scale point. For each dimension, however, there were always four out of five groups that agreed as to the relative direction of their ratings as either towards the *as good as it could be* or the *as bad as it could be* end of the scale.

#### 2.20.4.3 1999 Situation: Ratings Justification

[Table 2-3](#) presents the clustering of justifications for the five facilitated groups. Justifications noted across the invited group and other groups are categorized as ‘All Groups.’ Justifications noted by only the invited group are categorized as ‘Invited Group.’ Finally, justifications noted by groups other than the invited one are categorized as ‘Other Groups.’

### **People**

The People dimension received a median rating of 6 across all groups. Individual ratings ranged from 2 to 9 across all groups. [Table 2-3](#) presents the clustering of justifications across the two groups that illustrate why the People dimension median was toward the good end of the scale. Key factors mentioned across all groups included the perception of Boise as having good customs and lifestyles, stable families, and a strong, diverse economy. The invited group and other groups added that Boise has strong schools and education, a strong sense of community pride and spirit, good prevalent values, good friendly, helpful people, is family oriented, is a safe place to live, and is supportive and involved in community activities. Negative characteristics identified by the invited group and other groups which may have lowered the ratings were the inability of schools to keep up with growth ("schools are crowded"), a lack of vision ("lack of vision of elected officials"), lack of transportation infrastructure ("a traffic and road system that is thirty years behind the times"), and a deteriorating environment ("air quality has been compromised...natural environment deteriorating"). A review of the specific reasons people gave for their ratings further reinforces the perception that uncontrolled, rapid population growth, a lack of planning, and a lack of ethnic and cultural diversity are concerns for the Boise participants.

### **Jobs & Wealth**

The Jobs and Wealth dimension was most oriented towards the *as good as it could be* end of the scale with a median rating of 6.85 across all forum participants and individual responses ranging from 4 to 9 across all groups. Positive justifications across all groups included good job opportunities, a diverse economy, and low unemployment. The invited group along with other groups added that Boise has a high amount of wealth, a strong and growing economy, and low utility rates. Negative justifications which decreased participants' ratings across all groups included low paying jobs ("many new jobs are low paying service jobs"), and high costs of housing ("housing costs beyond the ability of most to buy"). The invited and other groups added that there is a high amount of commuting, money leaves the community ("money not reinvested"), and income stratification within the community ("the distribution of wealth is poor").

### **Place**

The Place dimension received a median rating of 7 across all groups. Individual ratings ranged from 3 to 9 across all groups. [Table 2-3](#) presents the clustering of justifications across the all groups that illustrate why the Place dimension was rated toward the good end of the scale. Key factors mentioned across all groups included the perception of Boise as improving business revitalization, having a close proximity to outdoor recreation opportunities, good parks and open space, and a safe, crime free environment. The invited and other groups added that Boise has a good or improving community appearance, good social services, good schools, attractive scenery, and good air and water quality. Negative comments that tended to detract from groups' ratings were poor land use planning, poor/increased traffic congestion, a loss of open space to commercial development, and negative impacts associated with population change. A review of the specific reasons people gave for their ratings would suggest that another important consideration is the lack of an adequate public transportation system ("there are not enough transportation alternatives").

### **Vision & Vitality**

The Vision & Vitality dimension was the lowest rated dimension, with an overall median rating of 5. Individual ratings varied from a minimum of 1 to a maximum of 8. The only positive justification that clustered across all groups was the perception of strong, active civic organizational capacity. Positive justifications added by the invited and other groups included economic factors increasing vision and vitality ("the progressive influence of new industries"), numerous, varied, and good social activities, and a friendly, sociable community. Negative justification far outweighed positive ones, resulting in the medians clustering towards the "bad" end of the scale. Justifications appearing across all groups included the perception that politics are dominated by special interests and a one party system, a lack of planning for the future, and developers and special interest controlling development. Negative comments added by the invited and other groups included a lack of involvement in community affairs, lack of proactive vision in development or ("poor development plans"), declining or poor schools, and weak, ineffective leadership. (see [Table 2-3](#)).

<b>Table 2-3 Rating Justifications for the Current (1999) Situation In Boise, Idaho, By Community Dimension and Type of Group</b>			
<b>Dimension</b>	<b>Replication Across All Groups</b>	<b>Invited Group</b>	<b>Other Groups</b>
<b>People</b>			
<b>Positive</b>	Good customs and lifestyles/change for the better (51)	Children and education are high priority (66)	Good prevalent values (61)
	Stable families (103)	Strong schools/education (81)	High/increasing home/property values (162)
	Growth of businesses/good diverse strong economy (541)	Good, friendly, helpful people (201)	
		Strong sense of spirit and pride in community (211)	
		Supportive of community activities and involved (241)	
		Family-oriented community (426)	
		Recreation and tourism is important (positive) (441)	



Positive		Good/increased economic opportunity (544)	
		Increasing people own homes/many own homes (151)	
Negative		Adversarial values (68)	Harm environment and resources (472)
		Unable to keep up with growth/crowded (93)	
		Lack of vision (237)	
		Lack of transportation infrastructure (433)	
Other	Increasing/high population (41)	Conservative values (65)	Customs and lifestyles (general) (59)
	Growth (general) (49)	Increasing school enrollment (71)	
	Prevalent values (general) (69)	Schools/education (general) (89)	
	Ethnic diversity is high/increasing (301)	Stability of community (general) (323)	
	Ethnic diversity is low/decreasing (302)	Negative impacts (general) (322)	
	Diversity (general) (309)	Appearance/environment (general) (419)	
		Transportation (general) (439)	
		Recreation (general) (449)	

<b>Jobs and Wealth</b>			
Positive	Good job opportunities (2)	Strong/growing economy (157)	Low utility costs (79)
	Economically diverse (121)		
	Low unemployment (192)		
	High property values (198)		
Negative	Low paying jobs (31)	Money leaves (51)	Few technical jobs/high skilled jobs (5)
	High cost of housing (76)	High commuting (66)	Income stratification within the community (179)
		Increasing/higher taxes (74)	
		weak economy (153)	
		Increasing property values (201)	
Other		High number of public sector jobs (47)	Jobs becoming more service oriented (41)

Place			
Positive	Improving business appearances/revitalization (535)	Good/improving community appearance (511)	Increase subdivision/farm development (636)
	Close proximity to outdoor recreation opportunities (662)	People shop within the community (532)	Good air and water quality (780)
	Good parks and open spaces, public lands (667)	Improving business appearances/revitalization (535)	
	Safe and crime free (902)	Good residential appearance (540)	
		Good social services, same access to services (561)	
		Good schools (563)	
		Strong sense of place/heritage/morale and community (670)	
		Good community location (684)	
Negative		Attractive scenery (771)	
	Traffic congestion/increased traffic (603)	Decline in farming (654)	Decreased opportunities for parks and open spaces (668)
	Lack of public transportation/needs improvements (608)	Increased commercial and residential development/loss of open space to it (761)	
	Poor land-use planning, concern over plan (713)	Negative impacts associated with population change (822)	
	Poor air and water quality (782)		
Other	Cultural events (general) (702)		

<b>Vision and Vitality</b>			
Positive	Strong, active civic organizational capacity (11)	Confident, caring leaders (141)	Numerous, varied, good, or improving social activities (301)
		Leadership development in place for the future (145)	Friendly, sociable community (305)
		Coping with change (360)	
		Economic factors increasing vision and vitality (584)	
		Strong/increasing community vision and vitality (601)	
Negative	Politics dominated by special interests/one party system (84)	High/increasing taxes (204)	Weak, ineffective leadership (122)
	Inadequate community cohesiveness (342)	Not prepared for future (382)	Poor, lack of political leadership (82)
	Lack of planning and ability to plan for the future (404)	Lack of proactive vision and development (406)	
	Developers/special interests control development (407)	Limited budget (482)	
		Lack of community involvement in community affairs (562)	
		Decreasing/lack of community vision and vitality (602)	
		Declining/poor schools (812)	
	Negative attributes of people (882)		

Other	Civic organizations (general) (40)	
	General role of bonds and levies (189)	
	Community growth (605)	
	Uncertainty in the future (664)	

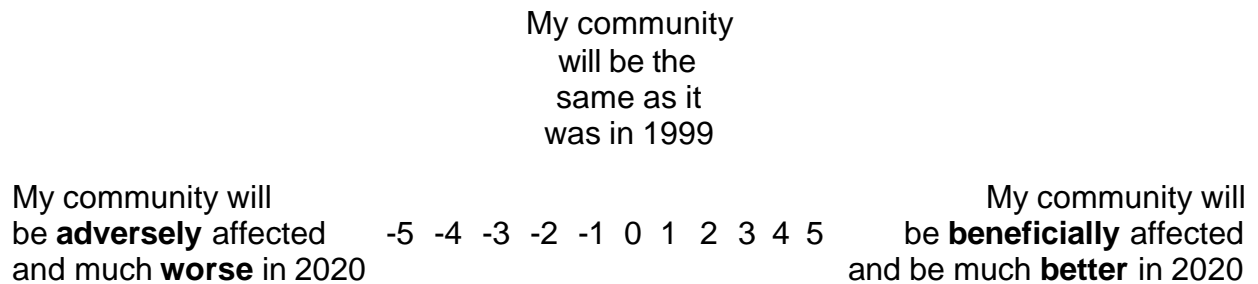
## 2.20.5 Comparison of Salmon Recovery Pathways A1 to A3

### 2.20.5.1 Community Dimension Impact Rating Scale

Forum participants were asked to assess how their community would be impacted in the year 2020 by implementation of the three salmon recovery pathways proposed by the U.S. Army Corps of Engineers to return juvenile salmon to the Lower Snake River. Pathway A1 was to maintain the existing Lower Snake River System, A2 was to make major modifications to the existing Lower Snake River System, and A3 was natural river drawdown or dam breaching. Supplementing Pathway A2, A2b involved the elimination of flow augmentation (from the current 427,000 acre-feet to 0 acre-feet), while A2c involves increasing flow augmentation (by 1 million acre-feet) into the Snake River system.

A second rating scale was used by forum participants to indicate the situation for each of the four community dimensions (*People, Jobs & Wealth, Place, and Vision & Vitality*) in terms of how adversely or beneficially they felt their community would be impacted in the year 2020. In thinking about the future, participants were asked to consider all of the normal changes that are likely to occur in their community over time, along with specific changes they would expect to result from an pathway. To provide a basis for thinking about their community's future situation, forum participants received information from Corps and NMFS' studies specific to their community for each pathway. Information provided to participants included salmon recovery probabilities, physical changes, and economic changes. (For more information on the information presented and their sources, see [Appendix A](#).) Community members then gave an initial rating of the impacts on their community in the year 2020 for each dimension. After a facilitated group discussion of how and why their community would be affected or not affected, participants re-rated the community dimensions and listed their justifications.

To ground the rating scale in reality, forum participants were instructed to use their community's 1999 situation, which they had just rated and described for each dimension, as the mid-point (0) of the scale from which to determine the magnitude of adverse (negative) or beneficial (positive) effects to their community. To rate Pathways A2b and A2c, participants were instructed to use their rating for Pathway A2 as the mid-point of the scale for each dimension. In each case, the zero or mid-point represents the "no impact" or "no change" situation. Participants were specifically instructed to focus on adverse and beneficial impacts only on their community and not on the entire region.



### 2.20.5.2 Summary of Findings on Pathways A1 to A3

[Figure 2-5](#) illustrates that, across all facilitated groups, forum participants generally perceived that the situation for their community on all four dimensions would be adversely affected in the year 2020 under A1. The median across all groups for Pathway A1 was -2 for the People and Jobs & Wealth dimensions and -3 for the Place and Vision & Vitality dimensions. For Pathway A2, community participants generally perceived that their community would be adversely affected as well. The median across all groups for Pathway A2 was -3 for all four dimensions. In the case of A3, group medians were clustered at the "beneficially affected" end of the scale for all dimensions, with group medians at positive 3 for the People and Place dimensions, positive 4 for the Jobs & Wealth dimension, and positive 5 for the Vision & Vitality dimension.

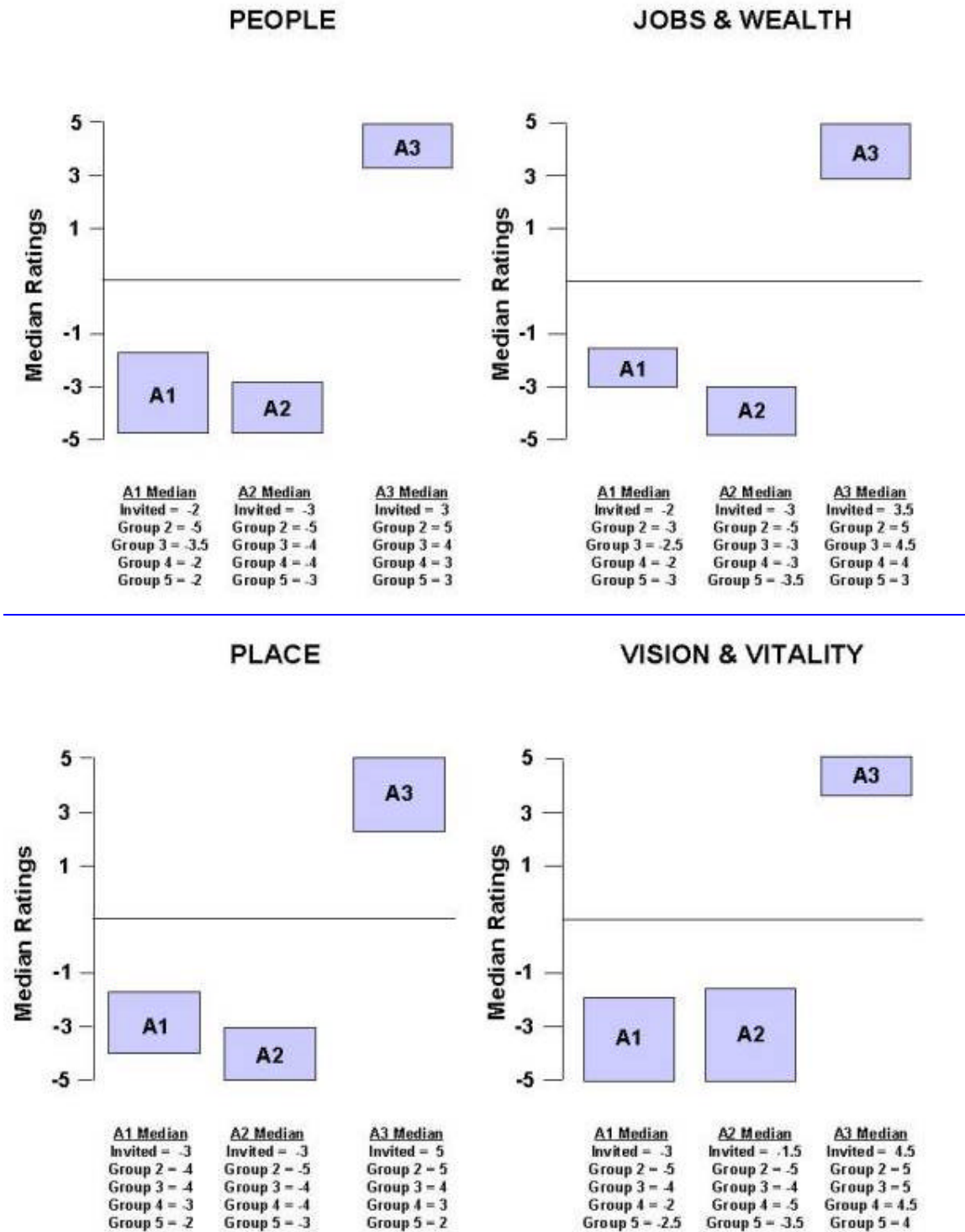


Figure 2-5. Median scale ratings of pathways A1, A2, and A3, for Boise, Idaho, by Community dimension, across groups

Under Pathways A1, A2, and A3, the degree of clustering among groups varied with group medians deviating from the invited group from 1 to 3 rating points. Clustering around the invited group median (maximum deviation up to 2 rating scale points) was found for Pathway A1 in the Place and Jobs & Wealth dimensions, for Pathway A2 across all dimensions, and for Pathway A3 in all dimensions except Place. Little clustering was found around the invited group median ratings for Pathway A1 in the People and Vision & Vitality dimensions and for Pathway A3 for the Place dimension, where the difference in medians was 3 rating scale points. Despite these group median deviations, all group medians for Pathways A1 and A2 were on the "adversely affected" end of the scale, while for Pathway A3 they were on the "beneficially affected" end of the scale. Therefore, deviations from the invited group median suggest that the groups differed in their perception not of whether Boise would be adversely or beneficially affected, but rather the degree to which it would be affected.

### **2.20.5.3 Rating Justifications Across Pathways A1, A2, and A3**

In the analysis of A1, the "no action" pathway, a process similar to that for the 1999 current situation was followed to examine participants' perceptions of likely future changes to the community in 2020. The premise for the scenario was that the river system would remain unchanged but other social, economic, and cultural trends would continue on their current trajectory, as perceived by forum participants. Both numerical scores and the reasons and changes underlying them were examined. Pathway A1 was treated as the base-case, and the results for this pathway provided the basis for assessing the impact of both A2 ("major modification") and A3 ("natural river drawdown and dam breaching"): A2 and A3 were analyzed to identify changes of clustered numerical ratings and qualitative justifications from the baseline forecasts under A1.

### **2.20.5.4 Pathway A1**

#### ***People***

In the case of the People Dimension for A1, group medians ranged from -5 to -2, with an overall group median of -2. Individual responses across all forum participants ranged from -5 to 5. As presented in [Table 2-4](#), justifications mentioned across all groups included customs and lifestyles changing for the worse, a loss or change in recreation and tourism opportunities, and a declining, federally listed fish population. The invited group added that prevalent values would be poor, quality of life would decrease, fish recovery is good and important, and there would be little or no change in power costs. Comments given by the invited group that may indicate why the generally negative ratings were not more so, included perceptions of a stable population and the pathway having little or no impact on the people of Boise.

#### ***Jobs & Wealth***

For the Jobs & Wealth dimension, median ratings ranged from -3 to -2 across all groups, with an invited group median of -2. Individual responses ranged from -5 to 3 across all forum participants. Negative changes perceived across groups for this pathway included negative impacts to jobs from declining fish populations, a decreasing economic base, loss of recreation and tourism-related business, and loss of the fishery.



The invited and other groups added that this pathway would not help the declining salmon populations and that money would continue to be wasted on subsidized barging generated through their tax revenue. A comment given by the invited group that may indicate why the generally negative ratings for this pathway were not more negative was a perception that situation for the town's Jobs & Wealth will be better under implementation of A1 (see [Table 2-4](#)).

### ***Place***

For the place dimension, the median ratings ranged from -4 to -2, with an invited group median of -3. Individual responses varied from -5 to 2 across all forum participants. Justifications common across groups included a loss of recreation and tourism opportunities, a decline in sense of place and community pride, declining values, spirit, and more stress all due to the loss of these salmon populations. The invited group added a perceived loss of environmental beauty, rivers, and scenery, decreased wildlife and fish, a decrease in fishing opportunities, and negative spiritual, symbolic, and material impacts due to the loss of fish. Comments given by the invited group as negative perceptions included maintaining the status quo, with no change in Boise as a place, and an increase in tourism (see [Table 2-4](#)).

### ***Vision & Vitality***

The median group ratings ranged from -5 to -2 for Vision & Vitality, with an invited group median of -3. Individual responses ranged from -5 to 4. Justifications that clustered across groups included the perception that politics would be dominated by special interests and a one-party system and that with less fish there would be a decline in Vision & Vitality. The invited and other groups added that Boise would have weak and ineffective leadership, a loss of community cohesiveness, reduced, pessimistic visions of the future, and decreasing community characteristics related to fish recovery ("loss of wild Idaho character"). Comments given by the invited group as positive perceptions included that Boise would be prepared for the future and have an increasing quality of life.

**Table 2-4  
Comparison of Rating Justifications For Pathways A1, A2, and A3  
For Boise, Idaho,  
By Community Dimension and Type of Group**

<b>Year 2020 Rating Justifications</b>	<b>Pathway 1 Existing Condition</b>	<b>Pathway 2 System Modification</b>	<b>Pathway 2b 0 Flow Augmentation</b>	<b>Pathway 2c 1.427 Flow Augmentation</b>	<b>Pathway 3 Drawdown</b>
<b>People</b>					
<b>Across All Groups</b>	Poor customs and lifestyles/change for the worse (52)	Poor customs and lifestyles/change for the worse (52)	Declining fish populations/listed (462)	Loss/change in recreation and tourism opportunities (442)	Strong sense of spirit and pride in community (211)
	Prevalent values (general) (69)	Negative impacts (general) (322)			Growth in recreation and tourism opportunities (443)
	Negative impacts (general) (322)	Declining fish populations/listed (462)			Strong/improving/recovered fisheries (461)
	Loss/change in recreation and tourism opportunities (442)				
	Declining fish populations/listed (462)				
<b>Invited Groups</b>	Decreasing/low population (42)	Stable population (43)	Stable population (43)	Adversarial values (68)	Increasing/high population (41)
	Stable population (43)	Prevalent values (general) (69)	Poor sense of community among residents (204)	Poor community attitude (222)	Strong sense of community among residents (203)
	Customs and lifestyles (general) (59)	Employment/economy (general) (549)	No change in people/little/no impact (313)	Polarization on natural resource issues (223)	Ethnic diversity is high/increasing (301)
	Poor prevalent values (62)	Poor sense of community among residents (204)	Growth in recreation and tourism opportunities (443)	Less community vitality (232)	Environment (general) (475)

Invited Groups	Sense of community and quality of life (200)	Poor/decreasing quality of life (208)	Fish recovery is good/important (463)	No change in people/little/no impact (313)	Increased utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)
	Poor/decreasing quality of life (208)	Civic groups (general) (249)		Recreation (general) (449)	Little to no change in power costs (484)
	Ethnic diversity is low/decreasing (302)	Ethnic diversity is low/decreasing (302)		Water (general) (600)	Businesses suffer (512)
	No change in people/little/no impact (313)	Poor community appearance (412)			
	Fish recovery is good/important (463)	Jobs/industry (general) (495)			
	Little to no change in power costs (484)				
	Jobs/industry (general) (495)				
Other Groups		People changing for worse/negative change (312)		Declining fish populations/listed (462)	People changing for better/positive change (311)
		Loss/change in recreation and tourism opportunities (442)		Do not know/no comment (people) (560)	
					Decrease in water availability (604)

Jobs and Wealth					
Across All Groups	Stable job opportunities/employment (8)	Loss of recreation and tourism-related business (134)	Same/no change (245)	Decreasing job opportunities (general) (18)	Resource tourism and amenity recreation growth (126)
	Negative impact to jobs from declining fish populations (25)	Loss of fishery (138)		Declining economy (162)	Strong/growing economy (157)
	Decreased economic base (124)				
	Loss of recreation and tourism-related business (134)				
	Loss of fishery (138)				
	Declining economy (162)				
Invited Groups	Economic base (general) (120)	Negative impact to jobs from declining fish populations (25)	Decreasing job opportunities (general) (18)	Decreasing agricultural jobs (22)	Increasing habitat restoration jobs (12)
	Recreation and tourism-based economy (147)	Increasing/higher taxes (74)	Loss of recreation and tourism-related business (134)	Ripple effect in community and all dimensions (93)	Increasing construction-related jobs (17)
	Not enough information (249)	Economic base (general) (120)	Loss of fishery (138)	Need irrigation/irrigation-dependent farming (106)	Increasing high-tech-related jobs (40)
	Will be better (955)	Declining economy (162)	Declining economy (162)	Fish will improve economy (133)	Increasing utility costs (73)
	Will not help (958)	Do not know (248)	Pathway 2 does not benefit fish or people (246)	Population growth (207)	Strong sense of place (84)
		Not enough information (249)	Do not believe the data (250)	Same/no change (245)	Increased fishing/maintenance of fishery and fish (129)

Invited Groups				Bad for community (956)	Stable economy (155)
					Increasing property values (201)
					Population growth (207)
					Increased recreation and leisure (236)
Other Groups	Wasted money/subsidies/taxes for barging (59)			Loss of recreation and tourism-related business (134)	Increasing job opportunities (general) (10)
				Shrinking agriculture, mining, and timber base (135)	
<b>Place</b>					
Across All Groups	Poor/loss of recreation and tourism opportunities (666)	Decline in sense of place and community pride (672)	Increase in recreation opportunities is good (661)	Poor/loss of recreation and tourism opportunities (666)	Strong sense of place/heritage/morale and community (670)
	Decline in sense of place and community pride (672)	Loss of fish results in a loss of sense of place, pride, and values (678)			Pride in/commitment to community (671)
	Declining values and spirit, more stress (677)				
	Loss of fish results in a loss of sense of place, pride, and values (678)				
Invited Groups	Increase in tourism (663)	Increase in tourism (663)	Declining values and spirit, more stress (677)	Community character is poor/declining (577)	Good, healthy environment and great outdoors (775)
	Loss of environmental beauty, rivers, scenery (777)	Declining values and spirit, more stress (677)	Decreased wildlife and fish (802)	Importance of water to community (618)	Fish recovery (general) (806)

Invited Groups	Decreased wildlife and fish (802)	Loss of environmental beauty, rivers, scenery (777)	Maintain status quo, no change (841)	Negative impacts associated with fish decline/symbolic/spiritual/material (811)	Positive impacts associated with fish recovery (808)
	Negative impacts associated with fish decline/symbolic/spiritual/material (811)	Decreased wildlife and fish (802)	Loss of environmental diversity and environmental balance (778)	Maintain status quo, no change (841)	Increase in fishing (813)
	Decreased fishing (812)	Negative impacts associated with fish decline/symbolic/spiritual/material (811)		Loss of flood control (878)	Good quality of life (901)
	Maintain status quo, no change (841)	Negative impacts (general) (850)			
	Negative impacts (general) (850)				
Other Groups		Poor/loss of recreation and tourism opportunities (666)	Decline in sense of place and community pride (672)	Decline in farming (654)	Community character is good (566)
		Loss of environmental diversity and environmental balance (778)			Increase in recreation opportunities is good (661)
<b>Vision and Vitality</b>					
Across All Groups	Politics dominated by special interests/one party system (84)	Poor, lack of political leadership (82)	None	Negative impacts on agriculture and land tenure (544)	New, optimistic visions of the future (385)
	Negative impacts on vision and vitality with less fish (682)	Decreasing/lack of community vision and vitality (602)			Positive impacts on vision and vitality with more fish (681)
		Negative impacts on vision and vitality with less fish (682)			

	Weak, ineffective leadership (122)	Weak, ineffective leadership (122)	Loss of community cohesiveness (344)	Loss of community cohesiveness (344)	Active, strong leadership (121)
	Loss of community cohesiveness (344)	Loss of community cohesiveness (344)	Negative/decreasing community characteristics related to fish recovery (546)	Lack of proactive vision and development (406)	Leadership improvement (125)
	Do not cope well with or resist change (362)	Do not cope well with or resist change (362)	No change (673)	No change (673)	Increased community cohesiveness (345)
	Prepared for the future (381)	Role of local/Federal government (460)	Negative impacts on vision and vitality with less fish (682)	Negative impacts on vision and vitality with less fish (682)	Community control of outside forces (441)
	Reduced, pessimistic visions of future (384)	Mistrust in government (464)	Emotional comments (911)	Negative impact on parks and recreation facilities (832)	Positive/increasing community characteristics (541)
	Negative/decreasing community characteristics (542)	Outmigration of population (892)			Positive/increasing community characteristics related to fish recovery (545)
	Negative/decreasing community characteristics related to fish recovery (546)				
	Strong/increasing community vision and vitality (601)				
	Decreasing/lack of community vision and vitality (602)				
	Increasing quality of life (841)				
Other Groups	Poor, lack of political leadership (82)		Don't know/no comment (998)		Strong/increasing community vision and vitality (601)

### **2.20.5.5 Comparison of Pathway A1 to A2**

Under the implementation of Pathway A2, the community generally perceived that Boise would be adversely affected across all four dimensions. The median rating for all groups was -3 for the People and Jobs & Wealth dimensions and -4 for the Place and Vision & Vitality dimensions. This indicates that participants perceived that Boise would be worse off, not only from their 1999 situation under A2 implementation, but even worse off than under Pathway A1. Individual ratings ranged from -5 to 0 across all four dimensions, indicating that those participants who did not rate the pathway negatively felt that it would have no impact on the Boise community. There were no positive ratings for this pathway. Justifications across all groups were very similar to those given under Pathway A1. These included customs and lifestyles changing for the worse, decreasing quality of life, loss in recreation and tourism opportunities, negative impacts to jobs, decline in sense of place and community pride, and a decrease in community vision and vitality all due to the loss of the salmon fishery. Again, comments given by the invited group that may have resulted in raising these negative ratings included maintenance of a stable population and an increase in tourism. It is clear that there was general agreement as to the relative adverse impact this pathway would have on Boise across all groups and dimensions (see [Figure 2-5](#)).

#### **2.20.5.5.1 Comparison of Pathway A2 to A2b and A2c**

Under the implementation of Pathway A2b (elimination of flow augmentation to 0 acre-feet), median ratings across all groups indicate that the participants generally perceived the impacts from this pathway would be no different than those cited for Pathway A2 (see [Figure 2-6](#)). Two groups, however, felt that Pathway A2b would affect Boise more adversely than Pathway A2. Negative median ratings for these groups across the four dimensions ranged from -3 to -1. The range of individual ratings indicate a significant amount of variation in perceived impacts under this pathway from -5 to 5. Despite this variation, rating justifications are very similar to those given under Pathways A1 and A2, focusing on negative impacts associated with the loss of salmon fisheries. A perceived loss of recreation and tourism-related business, a declining economy, declining values, spirit, loss of environmental diversity, loss of community cohesiveness, and sense of place are justifications given for these pathway ratings. These negative comments are tempered with a more frequent occurrence of neutral comments including maintenance of the status quo, no change, and little impact when using Pathway A2 as a baseline. Positive comments, which may have increased participants' negative or neutral scores, included population stability and growth in recreation and tourism opportunities. Negative and neutral comments were more numerous than positive justifications under implementation of this pathway.



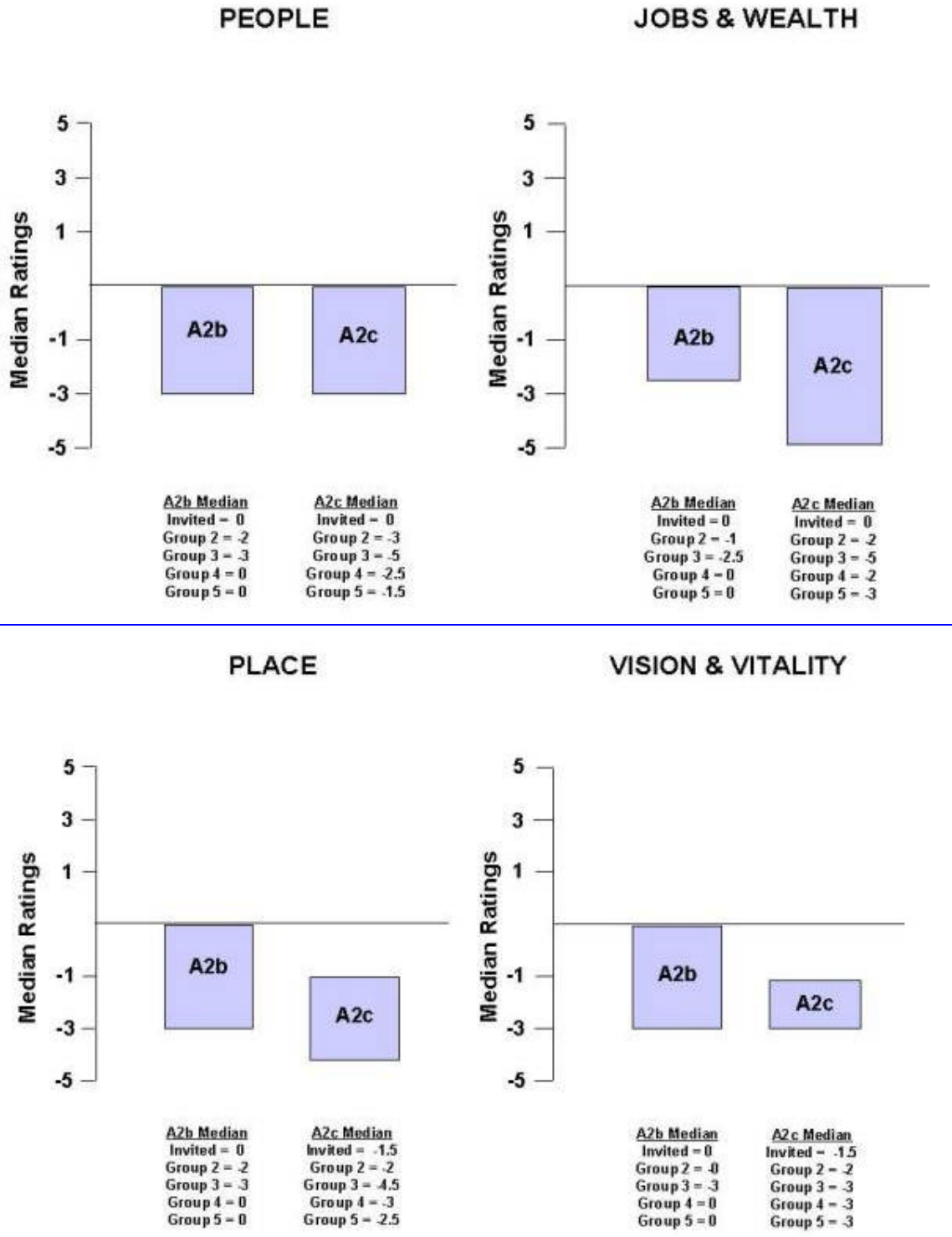


Figure 2-6. Median scale ratings of Pathways A2b to A2c, for Boise, Idaho, by community dimension, across groups

Under the implementation of Pathway A2c (major system modifications with increase in flow augmentation to 1.4 million acre-feet), the community generally perceived negative impacts across all four dimensions using Pathway A2 as a baseline (with A2c leaving Boise worse off than Pathway A2). An exception was that the invited group perceived no change from Pathway A2 impacts for the People and Jobs & Wealth dimensions (see [Figure 2-6](#)). However, the invited group's median ratings for Pathway A2 were negative indicating that Pathway A2c still has negative impacts, but isn't any worse than Pathway A2 for these two dimensions. Despite the invited group's dissent, median ratings across all groups were -2 for the People, Jobs & Wealth, and the Vision & Vitality dimensions and -3 for the Place dimension. Justifications across all groups for the negative median ratings included loss or change in recreation and tourism opportunities, decreasing job opportunities, a declining economy, and negative impacts on agriculture and land tenure. The invited and other groups added that there would be polarization on natural resource issues, less community vitality, decreasing agricultural jobs, loss of the fishery, and decrease in water availability. There was no clustering of positive comments related to Pathway A2c. Several justifications indicated no impact or little change (using A2 as a baseline) under implementation of this pathway, however, all of which came from the invited group.

#### **2.20.5.6 Comparison of Pathway A3 to A1**

The median group ratings for Pathway A1 shifted toward the *beneficially affected* end of the impact rating scale for all dimensions under the implementation of A3. Median group ratings for the four dimensions ranged from positive 3 to 5 for A3 across all groups (see [Figure 2-5](#)). The invited group median differed from the other group medians by as many as 3 points for the Place dimension and as little as 0.5 points for the Vision & Vitality dimension. A review of specific comments makes it clear that the perceived positive benefits resulting under this pathway implementation are a direct result of the recovered fishery. This generally holds true for all four dimensions.

##### ***People***

Individual ratings ranged from -3 to 5 across all forum participants with a median rating across all groups of 3. Justifications across all groups included a strong sense of community spirit and pride, growth in recreation and tourism opportunities, and strong and recovered fisheries. Negative comments from the invited group included an increase in the cost of utilities and the perception that businesses would suffer. Overall, comments that clustered were positive in nature regarding this dimension.

##### ***Jobs & Wealth***

Individual responses ranged from -5 to 5 across all forum participants, with a median across all groups of 4. Justifications provided by all groups for this positive median rating included growth in the resource tourism and amenity recreation industry and a strong, growing economy. The invited or other groups added increasing habitat restoration jobs, increasing construction related jobs, increasing high-tech related jobs, increasing utility costs, a strong sense of place, increased fishing and maintenance of the fishery, a stable economy, increasing property values, and population growth.

## **Place**

For the Place dimension of Boise, individual responses ranged from -3 to 5 across all forum participants, with a median across all groups of 3. Justifications from across all groups included a strong sense of place, heritage, morale, and community, and pride in and commitment to community. The invited or other groups added a good, healthy environment, positive impacts associated with fish recovery, increase in fishing, good quality of life, good community character, and a positive increase in recreation opportunities.

## **Vision & Vitality**

For the Vision & Vitality dimension, individual responses ranged from -5 to 5 across all forum participants, with a median across all groups of 5. Justifications occurring across all groups included a new, optimistic vision of the future and positive impacts on vision and vitality with more fish. The invited or other groups added a perception of future strong leadership, increase in community cohesiveness, community control of outside forces, and increasing positive community characteristics related to fish recovery.

## **2.20.6 Minimizing Adverse Impacts**

### **Pathway A1**

Suggestions to minimize the negative impacts to the community of Boise included the following: pulling the funding on salmon recovery funds ("stop wasting money"); subsidizing state fisherman to fish out of state; subsidizing the guide/fishing industry; restoring habitat for resident fish; increasing funding to educate people on the reasons for extinction ("not let it happen"); restoring irrigation water and reducing power rates; creating fish exhibition shows; building anadromous fish museums in communities; providing federal money to aid irrigation practices (*i.e.*, alternate methods); encouraging individuals and government/city officials to exhibit self-discipline in water management skills; creating a smooth path for fish to travel, fertilizing streams that depend on fish nutrients for anadromous-fish dependent species; paying tribes for violated treaty rights; fixing problems with the elk population; stopping barging; and creating other recreational venues.

### **Pathway A2**

Suggestions to minimize negative impacts under Pathway A2 were the same as Pathway A1 with some additional suggestions. These included: providing federal money for water conservation; compensating or subsidizing the people affected by recreation decreases; and, creating better timing for releases of flood waters.

### **Pathway A3**

Suggestions to minimize the negative impacts for Pathway A3 included: building better roads/highways; buying out farmers; requiring water conservation; mitigating impacts of flood plain risk; mitigating recreation fisheries; investing the money saved from previous barging expenditures to help farmers near Lewiston, and providing money to subsidize other forms of transportation and energy conservation to offset power costs.

## 2.21 Cascade, Idaho, Community Assessment

### 2.21.1 Summary of Key Findings about Cascade

Cascade, a rural community of slightly over 1,000 residents, is located in the central western highlands of Idaho, 85 miles north of Boise. In the 1940s, Cascade Reservoir was constructed. Up until the 1970s, the town was a center for lumber production and the mining of ore, and the railroad provided Cascade with transportation for shipping commodities. Cascade has long served as a grazing and livestock area, along with some agriculture and lumbering. Along with producing crops such as potatoes, timothy, clover, and peas, dairy farming has recently emerged as a major industry. Increasing numbers of retired people began moving to the area and purchasing land in the 1970s, at the same time that the community experienced a reinvestment in the town's lumber mill. Cascade is the seat of Valley County, and Cascade's major employer in 1995 was federal, state and local government (including the school district), with over 45 percent of the town's jobs in that sector. Cascade remains economically focused on its natural resource base (timber, agriculture, dairy farming, and mining) and is currently experiencing growth in its retirement population and tourism industry.

Participants in the forum at Cascade depicted a town in 1999 whose current situation, in terms of *People, Place, and Vision & Vitality*, varied considerably by individual participant ratings but overall was very positive. Participants were concerned over the prevalence of an aging population, with an influx of retirees and out-migration of youth. Nonetheless, comments on the People and Vision & Vitality dimensions indicated a cohesive town with strong leadership and civic organizations and a continued "good community spirit in Cascade." The town's human-built and natural environment contributed to a "first-class attitude," and a high rating for the Place dimension. Residents were very positive about community revitalization efforts, with one participant commenting that "Main Street looks beautiful and inviting." Participants rated these dimensions at the moderate to positive, *as good as it can be* end of the rating scale. In contrast, the town's economy was rated the lowest of the four dimensions, oriented towards the *as bad as it could be* end of the scale. An "excessive poverty level," with high unemployment and low-wage jobs, characterized the town's economic situation. Participants were concerned with perceived excessive Federal regulations, "wolves, grizzlies, salmon," with one participant mentioning that "the future looks worse than present due to federal involvement such as timber harvest and flow augmentation."

Participants were guardedly optimistic about Cascade's future under Pathway A1 (the existing situation on the Lower Snake River continued on into 2020), with ratings of its impacts ranging from the middle of the rating scale ("no change") to the scale's positive, "beneficially affected" end. Community members generally saw the continuation of a growing, aging population, and a growing recreation-based economy. Major concerns continued to be the poor state of the forest industry, as well as excessive federal regulations.

Participants perceived little impact on the People dimension under Pathway A2 (major system modifications) compared to A1, while both the Place and Vision & Vitality dimensions were slightly beneficially affected, and the Jobs & Wealth dimension moderately adversely affected. Negative aspects of community life were attributed to a continued aging population and heavy government restrictions, with "endangered species [affecting] people coming into the area...and the logging industry." Meanwhile, water reductions and utility cost increases under A2 were perceived to negatively affect both recreation opportunities on Lake Cascade and in the community in general. Ratings and justifications for A2b (major system modifications with the elimination of flow augmentation to 0 million acre-feet) were more positive for each of the dimensions than they were for A2. Positive justifications included "more water in Cascade Lake will possibly improve water quality, the fishery, and also extend the recreation season," and "no drawdown will boost the investment and therefore the vision and vitality." In sharp contrast, participants were very concerned about their community's future under Pathway A2c (major system modifications with an increase in flow augmentation to 1.4 million acre-feet), with ratings of its impact in 2020 at the extreme negative, *adversely affected* end of the scale. Participants characterized a community extremely adversely affected by the loss of water to Lake Cascade. This was perceived across all dimensions: people will move out "because the heart of the lake is gone," jobs and wealth will decrease because "recreation will not happen on our lake," the natural beauty of the lake will "turn to a mudhole and general attitudes would cause a downward trend." Under A2c, one participant noted that "it is hard to imagine how the community will retain its vision and vitality unless there is some economic leg other than recreation and tourism."

Participants were optimistic about their community's future under A3 (dam breaching and natural river drawdown), with ratings of its impact in 2020 clustered at the positive, beneficial end of the impact rating scale. A key theme emerging from the assessment of this pathway was the positive impact on the community associated with fish recovery: participants mentioned how the population, particularly in terms of youth, would increase due to jobs in "salmon sport-fishing as well as increasing jobs on Lake Cascade." A second key theme pertained to decreased government regulations, as it "would increase logging without Federal regulation on salmon recovery."

Participants offered a diversity of suggestions for minimizing negative impacts of various pathways to Cascade. These included providing grants or money to improve transportation to Valley County, or to increase light industry in the community. They also suggested that the logging industry could improve the community's economy if more roads to the backcountry were opened. To mitigate water losses, participants suggested lake dredging and the extension of boat ramps. In terms of mitigation of regional impacts, forum members suggested the elimination of natural resource restrictions on private lands.

Cascade is a community in transition from a predominantly natural-resource based economy to a more diversified economy as well as populace. These changes are reflected in the town's diverging perspectives regarding the positive and negative impacts of the pathways on their town in 2020. The invited group generally perceived the community to be better off under Pathway A3, with median ratings falling on the positive end of the rating scale, while the other group perceived the community to be the same or slightly worse off under A3. In contrast, participants in general were guardedly optimistic about Cascade's future if the existing situation on the Lower Snake River continued on into the future (Pathway A1).

### **2.21.2 Interactive Community Forum Participants**

Fifteen community members provided perspectives on the history, the 1999 situation and Pathways A1, A2, A2b, A2c, and A3 for Cascade, ID. These forum participants sat at two facilitated groups (see methodology), working in interactive small groups (hereafter, "groups"). The overall diversity index rating for participants was 0.71 (on a scale from 0 to 1.0), indicating that 10 of 14 pre-identified community roles were present at the forum (see methodology). Of the total number of participants completing the sign-in questionnaire, 19 percent were retired. The remaining 81 percent were each employed in one of the following occupations: county commissioner, agriculture worker, librarian, forestry technician/mayor, forester, self-employed, homemaker, recreation director, postmaster, inn-keeper, school superintendent, Department of Fish and Game worker, and County planning and zoning worker.

### **2.21.3 Community Background**

Cascade is located in the central western highlands of Idaho, 85 miles north of Boise. The population of this community is just over 1,000. The town of Cascade was founded in 1912. In the 1940s, Cascade Reservoir was constructed. Up until the 1970s, the town was a center for lumber production and the mining of ore, and the railroad provided Cascade with a major mode of transportation. Cascade has long served as a grazing and livestock area with some agriculture and lumbering. Along with producing crops such as potatoes, timothy, clover, and peas, dairy farming also has recently emerged as a significant industry. Increasing numbers of retired people began moving to the area and purchasing land in the 1970s, at the same time that the community experienced a reinvestment in the town's lumber mill. Cascade is the seat of Valley County, and Cascade's major employer in 1995 was federal, state and local government (including the school district), with over 45 percent of the town's jobs in that sector. The importance of education was recognized in 1980 with the building of a new school. Concerns over environmental protection arose in the early 1980s, when Cascade began considering the negative environmental impacts of timber and mining. Currently, the population is made up of year-round workers, service, business people, along with a seasonal population. Between 1987 and 1997, farm acreage in Valley County decreased from over 75 thousand acres to a little over 60 thousand acres. The town is focused on continuing to revitalize Main Street and creating a tour train that would run throughout the area of Cascade.

## 2.21.4. Community Assessment of 1999 Situation

### 2.21.4.1 1999 Situation: Community Dimensions and Rating Scale

The following "current community situation" rating scale was used by participants from Cascade to rate the current (1999) situation of the following four dimensions: 1) **People** -- Social Make-up; 2) **Jobs and Wealth** -- Economy; 3) **Place** -- Character; and 4) **Vision and Vitality** -- Organization and Leadership Capacity. Following a presentation of descriptive information about their community and a community interactive timeline they developed (see above), forum participants were asked to rate the extent to which their community situation was good or bad on a 10-point scale for each of the four dimensions and to write justifications for each of their numerical ratings.

In 1999, the situation in my community is as **bad** 1 2 3 4 5 6 7 8 9 10 as it could be

In 1999, the situation in my community is as **good** as it could be

### 2.21.4.2 1999 Situation: Ratings

As [Figure 2-7](#) presents, the median ratings on the current situation rating scale for the two groups participating in the forum ranged from a 4 on the Jobs & Wealth dimension, to an 8 on the Place and Vision & Vitality dimensions. The People dimension, with a median rating of 6.5, fell in between this range. Specifically, the two facilitated groups perceived the Place and Vision & Vitality dimensions as most oriented towards the *as good as it could be* end of the scale. The Jobs & Wealth dimension was significantly lower towards the *as bad as it could be* end of the scale under the current situation.

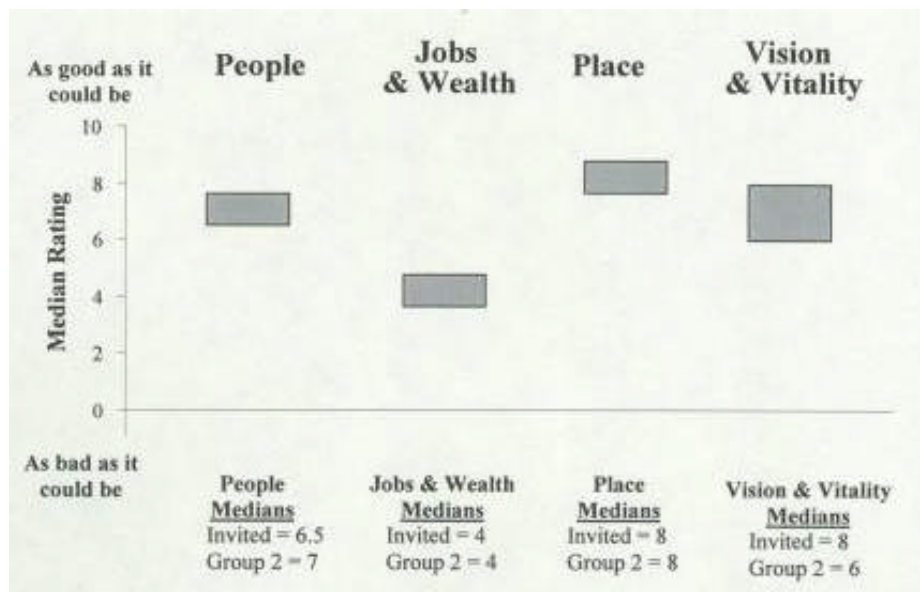


Figure 2-7. Median scale ratings for the current (1999) situation in Cascade, Idaho, by community dimension, across groups

In the case of Cascade's individual community dimensions, the difference between the invited group's median score and that of the other facilitated group ranged from 0 to 2 rating points on the current (1999) rating scale. Median group ratings for the People, Jobs & Wealth and Place dimensions clustered around the invited group, while the Vision & Vitality dimension exhibited less clustering. The clustering of some group medians demonstrates that both facilitated groups perceived at least three dimensions of their community similarly, independently arriving at parallel conclusions about their ratings of the current state of Cascade.

#### **2.21.4.3 1999 Situation: Ratings Justifications**

[Table 2-5](#) presents the clustering of justifications for both facilitated groups. Justifications noted across both the invited and the other group are categorized as 'All Groups.' Justifications noted by only the invited group are categorized as 'Invited Group.' Finally, justifications noted by only the other group are categorized as 'Other Group.'

##### ***People***

The People dimension had an overall median rating of 6.5, clustered around the invited group, with individual responses ranging from 4 to 7 across all forum participants. As presented in [Table 2-5](#), key factors mentioned across both groups to justify their ratings included a perceived stable, albeit aging, population, with an increasing amount of retirees moving into the community. The importance of the school was also emphasized across both groups. Negative attributes tended to be related to a perceived poor economy: lack of jobs for youth, resulting in the outmigration of youth, as well as the loss of industries. A declining forest industry also concerned forum participants ("public assistance is increasing...will get worse as timber decreases"). The invited group added that home ownership is high and community values are stable, although families are becoming less stable.

##### ***Jobs & Wealth***

The Jobs & Wealth dimension was most oriented towards the *as bad as it could be* end of the scale, with a median rating of 4 clustered around the invited group. Individual responses ranged from 3 to 5 across all forum participants. Negative comments that lowered the rating included low economic diversity, with low paying jobs and high unemployment. High poverty and government assistance, compounded by money leaving the community ("most of our money is spent in Boise"), were also mentioned by both groups as negative attributes of current situation. The invited group noted the lack of middle-income jobs, but it was divided in its other perceptions of Jobs & Wealth in Cascade: some comments pertained to high taxes and cost of living, while others described low taxes and low cost of living.

##### ***Place***

The Place dimension was one of the highest rated dimensions, with an overall median rating of 8, clustered around the invited group. Individual responses ranged from 6 to 9 across all forum participants. Clustered justifications indicate that good social services and medical facilities, a revitalized appearance of the community's built environment ("Main Street looks beautiful and inviting"), and safety were all positive reasons for the



high rating. In addition, participants described characteristics of the natural environment, such as attractive scenery, good air and water quality, and good parks and open spaces, as contributing to "a first-class community attitude" in Cascade. A salient negative characteristic of the Place dimension related to traffic congestion and poor roads.

### ***Vision & Vitality***

The Vision & Vitality dimension was also one of the highest rated dimensions. Although both groups perceived this dimension as oriented towards the *as good as can be* end of the rating scale, the invited group's median rating of 8 was higher than the other group's median rating of 6. Individual responses ranged from 4 to 10 across all forum participants. Clustered justifications included the perceived cohesiveness of the community, the friendly people, and strong leadership and civic organizations. A lack of community control of outside influences detracted from the rating, ("preparing for the future is difficult when control is limited"), with the invited group adding that the community does not cope well with change.

<b>Table 2-5            Rating Justifications for the Current (1999) Situation            In Cascade, Idaho,            By Community Dimension and Type of Group</b>			
<b>Dimension</b>	<b>Replication Across All Groups</b>	<b>Invited Group</b>	<b>Other Groups</b>
<b>People</b>			
Positive	Stable population (43)	Good prevalent values (61)	Supportive of community activities and involved (241)
	Strong schools/education (81)	Community values are stable (63)	Attractive community (411)
	Increasing people own homes/many own homes (151)	Children and education are high priority (66)	
	Strong sense of spirit and pride in community (211)	Stable school enrollment (73)	
Negative	Lack of opportunities for young people (11)	Families are becoming less stable (102)	
	Loss of industries and lack of job opportunities (492)	Lose families (107)	
	Unstable/poor/decreasing economy (542)		

Other	Aging population (2)	Increasing/high population (41)	
	Increasing number of retirees (21)	Customs and lifestyles (general) (59)	
	Increasing/high public assistance (112)	Unstable enrollment (74)	
		Home ownership (general) (159)	
<b>Jobs and Wealth</b>			
Positive		High paying jobs (30)	
		Low cost of living (78)	
		Low utility costs (79)	
		Lower taxes (80)	
		Good retirement area, retirement community (217)	
Negative	Poor job opportunities (3)	Negative impacts associated with public sector jobs (45)	Seasonal employment (35)
	Low paying jobs (31)	High cost of living (72)	
	High poverty (183)	Increasing/higher taxes (74)	
	Increasing/high government assistance (184)	Lack of middle income jobs and families (189)	
	Money leaves (51)		
	Low economic diversity (122)		
	High unemployment (191)		
Other	High number of public sector jobs (47)	New people moving in change wealth, make-up (9)	
	High property values (198)	High commuting (66)	

Place			
Positive	Improving business appearances/revitalization (535)	Good/improving community appearance (511)	
	Good social services, same access to services (561)	Good public safety services (562)	
	Good medical facilities (564)	Good schools (563)	
	Good parks and open spaces, public lands (667)	Good people (832)	
	Strong sense of place/heritage/morale and community (670)		
	Pride in/commitment to community (671)		
	Family-oriented, small town with pleasant atmosphere (681)		
	Attractive scenery (771)		
	Good air and water quality (780)		
	Safe and crime free (902)		
Negative	People shop elsewhere due to lack of businesses/not spending money here (522)	Traffic congestion/increased traffic (603)	
	Poor roads, highways, and community infrastructure (623)		

Vision and Vitality			
Positive	Strong, active civic organizational capacity (11)	Strong, high level of community participation (work together) (561)	
	Active, strong leadership (121)	Planning and plans exist, good base for the future (403)	
	Friendly, sociable community (305)	Strong/increasing community vision and vitality (601)	
	Strong, cohesive community (341)	Strong, good local government (461)	
		Adequate/increasingly well-managed city budget (481)	
Negative	Insufficient/decreasing tax base/fiscal resources (202)	Do not cope well with or resist change (362)	
	Lack of community control of outside forces (economics/regulations) (442)	Future planning uncertain (409)	
		Limited budget (482)	
Other		Reduced, pessimistic vision of the future (384)	

## 2.21.5 Comparison of Salmon Recovery Pathways A1 to A3

### 2.21.5.1 Community Dimension Impact Rating Scale

Forum participants were asked to assess how their community would be impacted in the year 2020 by implementation of the salmon recovery pathways proposed by the U.S. Army Corps of Engineers to return juvenile salmon to the Lower Snake River. Pathway A1 involves maintenance of the existing Lower Snake River System, A2 involves major modifications to the existing Lower Snake River System, and A3 involves natural river drawdown, or dam breaching. Supplementing Pathway A2, A2b involves the elimination of flow augmentation (from the current 427,000 acre-feet to 0 acre-feet), while A2c involves increasing flow augmentation (by 1 million acre-feet) into the Snake River system.

A second rating scale was used by forum participants to indicate the situation for each of the four community dimensions (*People, Jobs & Wealth, Place, and Vision & Vitality*), in terms of how adversely or beneficially they felt their community would be impacted in the year 2020. In thinking about the future, participants were asked to consider all of the normal changes that are likely to occur in a community over time, along with specific changes they would expect to result from adding a pathway. To provide a basis for thinking about their community's future situation, forum participants received information from Corps and NMFS' studies specific to their community for each of the proposed pathways. Information provided to participants included salmon recovery probabilities, physical changes, and economic changes. (For more information on the information presented and their sources, see [Appendix A](#)) Community members then gave an initial rating of the impacts on their community in the year 2020 for each dimension. After a facilitated group discussion of how and why their community would be affected or not affected, participants rated the community dimensions and listed their justifications.

To ground the rating scale in reality, forum participants were instructed to use their community's 1999 situation, which they had just rated and described for each dimension, as the mid-point (0) of the scale from which to determine the magnitude of adverse (negative) or beneficial (positive) effects to their community in the year 2020 for each dimension. To rate Pathways A2b and A2c, participants were instructed to use their rating for Pathway A2 as the mid-point of the scale for each dimension. In each case, the zero, or mid-point, represents the "no impact" or "no change" situation. Participants were specifically instructed to focus on adverse and beneficial impacts only on their community and not on the entire region.

My community  
will be the  
same as it  
was in 1999

My community will  
be **adversely** affected  
and much **worse** in 2020

-5 -4 -3 -2 -1 0 1 2 3 4 5

My community will  
be **beneficially** affected  
and be much **better** in 2020

### 2.21.5.2 Summary of Findings on Pathways A1 to A3

[Figure 2-8](#) illustrates that, across both facilitated groups, forum participants generally perceived the community situation would be the same or slightly better in the year 2020 for each of the dimensions under Pathway A1. Median ratings across both groups for A1 ranged from a high of 0.5 in the Jobs & Wealth, Place and Vision & Vitality dimensions to a low of 0 (no change) in the People dimension. Under Pathway A2, participants perceived the community would be the same as under A1 in all dimensions but the Jobs & Wealth dimension, which would be slightly worse off, with a median rating of -1. Under Pathway A3, groups medians were clustered towards the positive end of the scale for all four dimensions, with median ratings ranging from 1 in the People dimension to 2.5 in the Jobs & Wealth dimension. Median ratings for both the Place and Vision & Vitality dimensions fell in between this range, with a score of 2.

Under Pathways A1 and A2, the degree of clustering among both groups remained relatively constant for the People, Jobs & Wealth, and Place dimensions, ranging from 0.5 to 1. Only the Jobs & Wealth dimension under A2 deviated from this range, with a difference of 2 rating points between group medians. Overall, this suggests that both groups independently arrived at similar conclusions regarding the impacts of Pathways A1 and A2 on these four dimensions of Cascade in 2020. In the case of Pathway A3, median ratings exhibited less clustering for all dimensions but People, and differed by 2 to 3.5 rating points. Additionally, median ratings for each group under A3 fell on opposite ends of the rating scale, with the invited group perceiving Cascade to be better off under A3 compared to A1, and the other group perceiving Cascade to be worse off under A3.

In the case of Pathways A2b and A2c, participants perceived A2b as beneficially affecting Cascade for all dimensions compared with A2 (see [Figure 2-9](#)). The People, Jobs & Wealth and Place dimensions received median ratings of 2, while Vision & Vitality had a median rating of 1.5. In contrast, Pathway A2c was perceived extremely negative across all dimensions, and most oriented towards the *as bad as can be* end of the rating scale, receiving overall median ratings of -4.5 to -5 in.

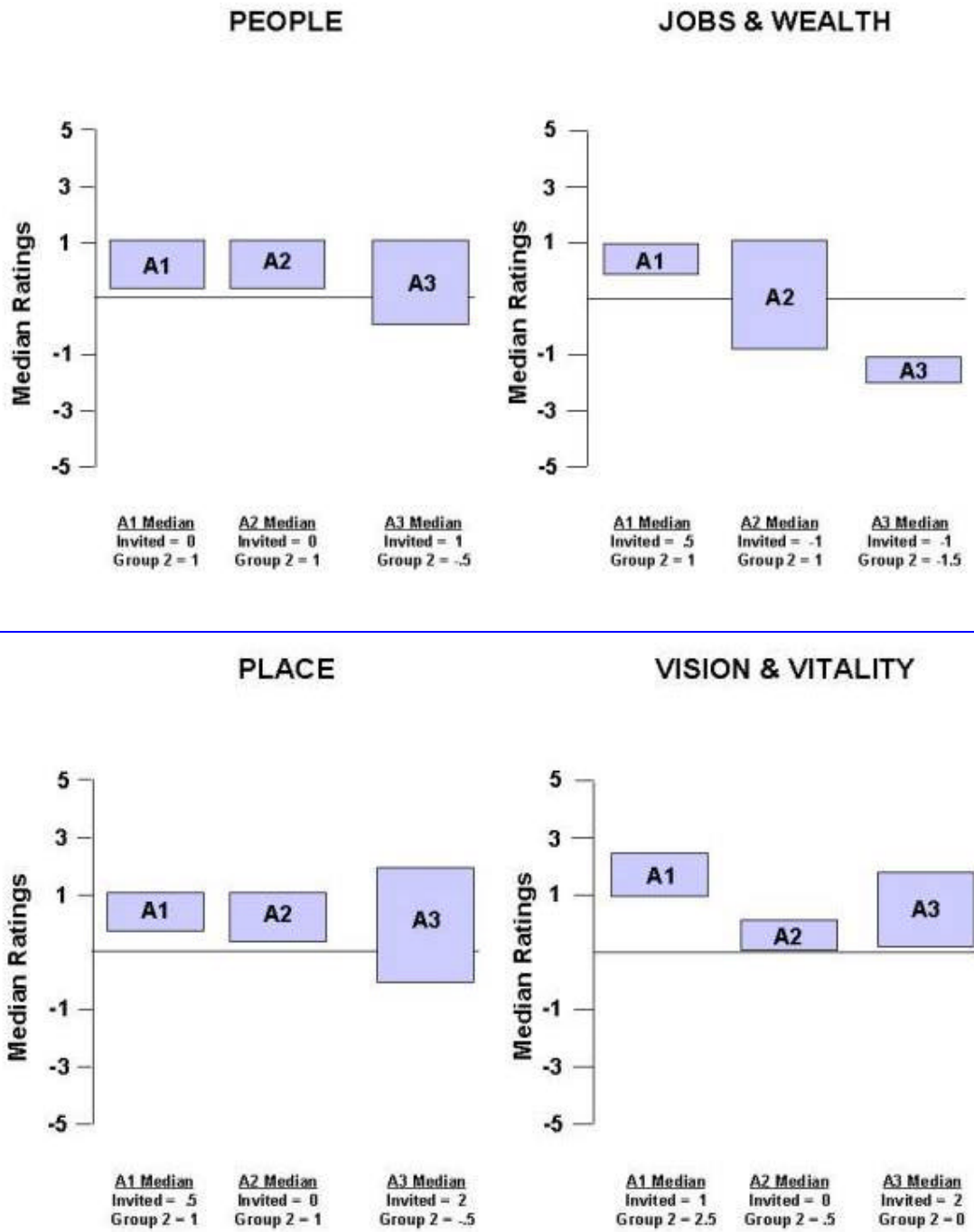


Figure 2-8. Median scale ratings of Pathways A1, A2, and A3, for Cascade, Idaho, by community dimension, across groups

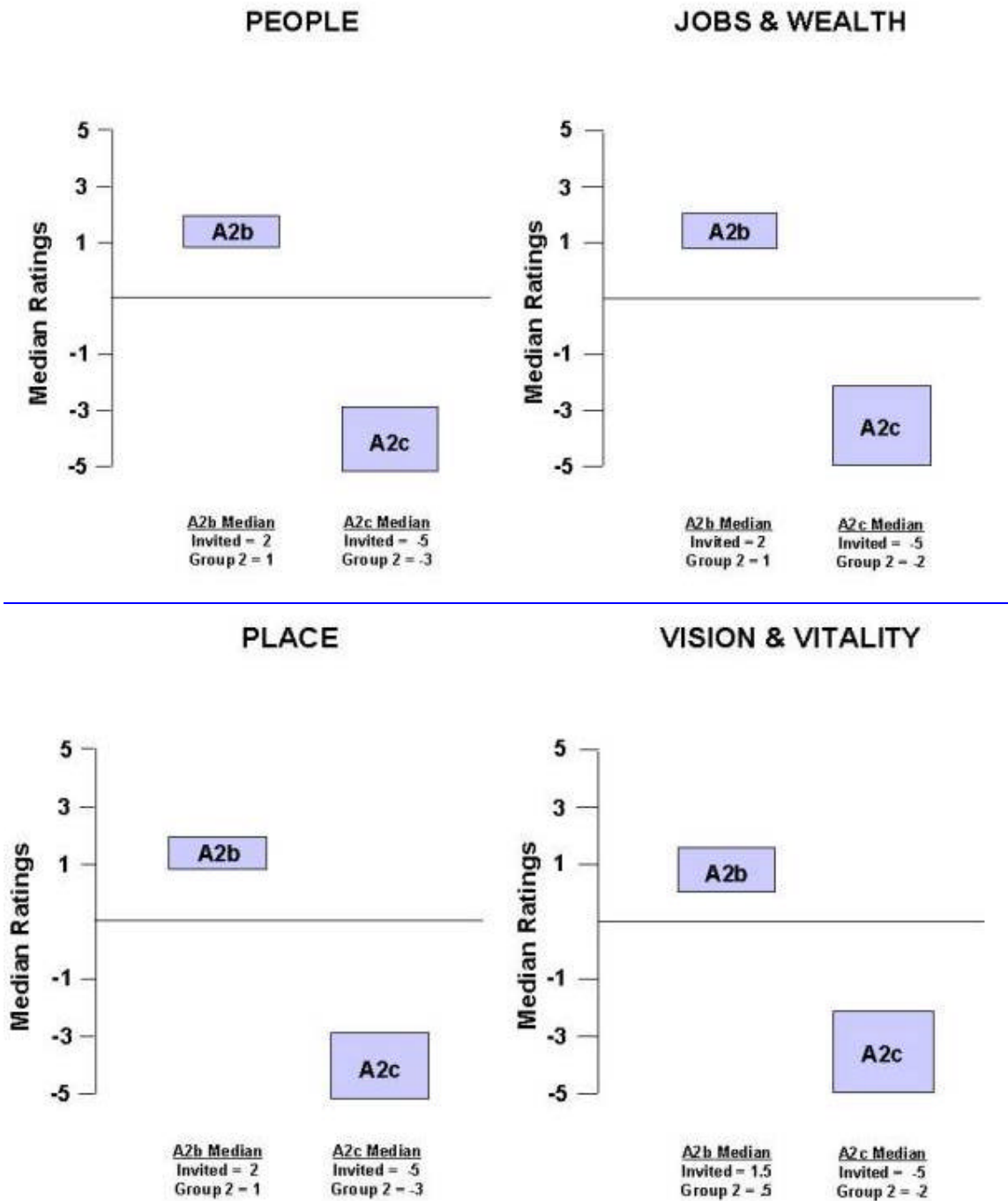


Figure 2-9. Median scale ratings of Pathways A2b and A2c, for Cascade, Idaho, by community dimension, across groups



[Figure 2-9](#) shows that under Pathway A2b, median ratings clustered across both groups for all four dimensions: the invited group's median rating of 1.5 contrasted with the other group's median rating of 0.5. Under A2c, median ratings across the two groups did not cluster for any of the four dimensions, with the invited group's ratings much lower than that of the other group. This suggests that participants were divided in their perceptions of community impacts under A2c compared to A2: although both groups agreed the community would be worse off under A2c, the magnitude of adversity ranged across groups and dimensions from -2 to -5. The only anomaly in median ratings appears in the People dimension, which has a 2.5 median rating from the other group, while the invited group rated it a 4.5. This indicates disagreement in terms of perceived effects to People in Cascade under A2c.

### **2.21.5.3 Rating Justifications Across Pathways A1, A2, A2b, A2c and A3**

In the analysis of A1, the "no action" pathway, a process similar to that for the 1999 current situation was followed to examine participants' perceptions of likely future changes to the community in 2020. The premise for the scenario was that the river system would remain unchanged but other social, economic, and cultural trends would continue on their current trajectory, as perceived by forum participants. Both numerical scores and the reasons and changes underlying them were examined. Pathway A1 was treated as the base-case, and the results for this pathway provided the basis for assessing the impact of both A2 ("major modification") and A3 ("natural river drawdown, or dam breaching"): A2 and A3 were analyzed to identify changes of clustered numerical ratings and qualitative justifications from the baseline forecasts under A1. Similarly, Pathway A2 was treated as a base-case for analyzing Pathways A2b (major system modifications with elimination of flow augmentation to 0 acre-feet) and A2c (major system modifications with increase to 1.4 million acre-feet flow augmentation), to determine the perceived impacts of flow augmentation to Cascade in 2020 according to forum participants.

### **2.21.5.4 Pathway A1**

#### ***People***

Under A1 for the People dimension, the overall group median was 0, clustered around the invited group, with individual responses across all forum participants ranging from -2 to 2. As presented in [Table 2-6](#), in addition to the perception that no change would occur under A1 compared with the current situation, characteristics such as an increasing, aging population and increasing amounts of retirees were mentioned across both groups. Population growth described as being both positive ("new ideas, new people") and negative ("more new people with less ties to the community").

### ***Jobs & Wealth***

In the case of the Jobs & Wealth dimension, the group median was 0.5, clustered around the invited group, with individual responses ranging from -3 to 2. Both groups mentioned increasing job opportunities ("destination resort would increase the job market"), while federal regulations would continue to constrain economic growth. The invited group disagreed about the impacts to Jobs & Wealth under A1, with comments related to both increases and decreases in recreation-related business and community economic wealth ("recreation will become a big industry...recognition of the need for a diverse economy is a real step forward and essential for this community's fiscal health"). Concern over the poor state of the forest industry was also mentioned to negatively affect the community.

### ***Place***

The Place dimension had a median rating of 0.5, clustered around the invited group, with individual responses ranging from -1 to 3. Justifications included the perception that no changes from the current situation would occur in Cascade, with air and water quality remaining good, while government regulations would continue to reduce local community control. Additionally, the invited group perceived general community improvements ("in roads") and increased recreation opportunities to occur, although the group also mentioned a loss of environmental diversity in the community ("size of farmland will decrease with more subdivisions" and "less fishing of salmon").

### ***Vision & Vitality***

The Vision & Vitality dimension received a median rating of 0.5, clustered around the invited group, with individual responses ranging from -3 to 3 across both groups. Although both groups perceived Cascade to remain the same under A1, they were optimistic about the future ("social organizations will continue to strengthen"). In addition, both groups focused on the continued lack of community control due to federal regulations. The invited group also mentioned that the community does not cope well with change, and population increases may negatively impact community characteristics.

**Table 2-6  
Comparison of Rating Justifications For Pathways A1, A2, and A3  
For Cascade, Idaho,  
By Community Dimension and Type of Group**

<b>Year 2020 Rating Justifications</b>	<b>Pathway 1 Existing Condition</b>	<b>Pathway 2 System Modification</b>	<b>Pathway 2b 0 Flow Augmentation</b>	<b>Pathway 2c 1.427 Flow Augmentation</b>	<b>Pathway 3 Drawdown</b>
<b>People</b>					
Across All Groups	Aging population (2)	Aging population (2)	Increasing/high population (41)	Decreasing/low population (42)	Increasing/high population (41)
	Increasing number of retirees (21)	Increasing/high population (41)	People changing for better/positive change (311)		No change in people/little/no impact (313)
	Increasing/high population (41)	Decreasing/low population (42)	No change in people/little/no impact (313)		Strong/improving/recovered fisheries (461)
	Heavily regulated by government/intervention (255)	Heavily regulated by government/intervention (255)	Growth in recreation and tourism opportunities (443)		
	No change in people/little/no impact (313)	No change in people/little/no impact (313)			
	Current trends will continue/little/no impact (325)				
Invited Groups	Population age diversity (4)	Stable population (43)	Stable population (43)	Decreasing school enrollment (72)	Younger population (3)
	No change in age structure (6)	Stable school enrollment (73)	Good customs and lifestyles/change for the better (51)	Decreasing/low public assistance (111)	Opportunities for youth exist (12)
	Lack of opportunities for young people (11)	Stable families (103)	Poor customs and lifestyles/change for the worse (52)	Low/decreasing home/property values (161)	Stable families (103)
	Stable population (43)	Diversity (general) (309)	Stable school enrollment (73)	Decrease in water availability (604)	Families (general) (109)
	Community values are stable (63)	Current trends will continue/little/no impact (325)	Increasing people own homes/many own homes (151)		Ethnic diversity is high/increasing (301)

Invited Groups	People (general) (205)	Loss/change in recreation and tourism opportunities (442)	Diversity (general) (309)		People changing for better/positive change (311)
	Strong/increasing quality of life (209)	Decrease in water availability	Attractive community (411)		Growth in recreation and tourism opportunities (443)
	Diversity (general) (309)		Loss/change in recreation and tourism opportunities (442)		Increase industries/good job opportunities (491)
	People changing for better/positive change (311)		Decrease in water availability (604)		
	People will change (314)				
Other Groups	Stability of community (general) (323)			Loss/change in recreation and tourism opportunities (442)	
	Loss of industries and lack of job opportunities (492)			Decrease in water quality (607)	
<b>Jobs and Wealth</b>					
Across All Groups	Increasing job opportunities (general) (10)	Same/no change (245)	Increasing job opportunities (general) (10)	Decreasing job opportunities (general) (18)	Resource tourism and amenity recreation growth (126)
	Economy will adapt (170)	Constrained by government regulations (951)	Resource tourism and amenity recreation growth (126)	Negative economic impacts with loss of water (90)	
	Constrained by government regulations (951)		Strong/growing economy (157)	Decreased economic base (124)	
				Loss of recreation and tourism-related business (134)	

Invited Groups	Decreasing job opportunities (general) (18)	Increasing jobs at dams (14)	Decreasing recreation-related jobs (19)	Decreasing recreation-related jobs (19)	Increasing job opportunities (general) (10)
	Decreased economic base (124)	Decreasing recreation-related jobs (19)	Increased tourist and recreation-related jobs (38)	Loss of fishery (138)	Increasing jobs at dams (14)
	Resource tourism and amenity recreation growth (126)	Negative impact to jobs from declining fish populations (25)	Increasing local investment (57)	Decreasing wealth (181)	Less government regulation (34)
	Increased fishing/maintenance of fishery and fish (129)	Increasing utility costs (73)	Increased business (130)	Less hunting and fishing (229)	Increased tourist and recreation-related jobs (38)
	Loss of recreation and tourism-related business (134)	Decreased economic base (124)	Stable economic base (139)	Declining environment (233)	Increasing local investment (57)
	Stable economic base (139)	Loss of recreation and tourism-related business (134)	Constrained by government regulations (951)		Increasing transportation costs (75)
	No effect on economy (168)	Decreasing wealth (181)			Rely on river transportation system (112)
	Increasing wealth (180)	Improved highways (225)			Expanding economic base (125)
	Forest industry in poor shape (235)	Forest industry in poor shape (235)			Increased fishing/maintenance of fishery and fish (129)
	Will be better (55)				Increased business (130)
Other Groups	Money leaves (51)	Money leaves (51)	Money leaves (51)		
	Expanding economic base (125)	Expanding economic base (125)			
		Increased fishing/maintenance of fishery and fish (129)			

Place					
Across All Groups	Changing rural character (686)	Maintain status quo, no change (841)	Good/improving community appearance (511)	Poor/loss of recreation and tourism opportunities (666)	Increased need for public services (569)
	Good air and water quality (780)		Decreasing store vacancies/new shops coming in (530)		Good roads, highways and community infrastructure (620)
	Maintain status quo, no change (841)		Community growth and improvement (general) (721)		Community growth and improvement (general) (721)
	Increased government regulations and decreased local control (886)				Increasing population (821)
					Maintain status quo (841)
Invited Groups	Negative impact of reduction in water on springs/recharging / reservoirs (619)	Increase in recreation opportunities is good (661)	Poor/decreasing social services (570)	Struggling businesses and vacant storefronts (520)	Good/improving community appearance (511)
	Increase in recreation opportunities is good (661)	Poor/loss of recreation and tourism opportunities (666)	Good roads, highways, and community infrastructure (620)	Poor schools (573)	Decreasing store vacancies/new shops coming in (530)
	Positive aspects of being a retirement community (692)	Positive aspects of being a retirement community (692)	Increase in recreation opportunities is good (661)	Importance of water to community (618)	Pride in/commitment to community (671)
	Loss of environmental diversity and environmental balance (778)	Close-knit community with many activities/cohesive (700)	Increase in tourism (663)	Decline in sense of place and community pride (672)	Community improvements are dependent on economy (753)
	New people in the community (826)	Community growth and improvement (general) (721)	Increase in fishing (813)	Positive aspects of being a retirement community (692)	Good air and water quality (780)

Invited Groups	Community improvements, general (845)	Loss of environmental beauty, rivers, scenery (777)		Decreasing population (823)	Positive impacts associated with fish recovery (808)
		Decreasing population (823)		Ruin of community, complete negative community change (844)	Good quality of life (901)
		No negative changes, little impact (849)			
		Decreasing crime (909)			
Other Groups	Good/improving community appearance (511)	Increasing population (821)		Loss of environmental beauty, rivers, scenery (777)	
	Good roads, highways, and community infrastructure (620)				
	Attractive scenery (771)				
	Increasing population (821)				
<b>Vision and Vitality</b>					
Across All Groups	New, optimistic visions of future (385)	Lack of community control of outside forces (economics/regulations) (442)	Lack of community control of outside forces (economics/regulations) (442)	Negative economic opportunities (582)	Strong/increasing community vision and vitality (601)
	Civic organization improvement (15)	Mistrust of and too much Federal government (466)		Decreasing/lack of community vision and vitality (602)	
	Lack of community control of outside forces (442)				
	No change (673)				

	Static/stable leadership (144)	Adequate, stable civic organizational capacity (13)	Civic organization improvement (15)	Civic organization decline (population decline/financial stress) (14)	Strong, active civic organizational capacity (11)
	Tax base/fiscal resources (200)	New, optimistic visions of the future (385)	Good/increasing tax base/fiscal resources (201)	Not prepared for the future (382)	Support for bonds and levies (181)
	Successful at getting and using grants (241)	Strong/increasing community vision and vitality (601)	New, optimistic visions of the future (385)	Negative/decreasing community characteristics (542)	Good/increasing tax base/fiscal resources (201)
	Lack of grants (242)	No change (673)	Strong, high level of community participation (work together) (561)	Negative impacts on agriculture and land tenure (544)	Friendly, sociable community (305)
Invited Groups	Do not cope well with or resist change (362)	Positive impacts on vision and vitality with more fish (681)	Strong/increasing community vision and vitality (601)	Positive economic opportunities (581)	Strong, cohesive community (341)
	Growing and more active government (465)	Negative impact on parks and recreation facilities (832)	Positive impacts on vision and vitality related to water (604)	Outmigration of population (892)	Strong, high level of community participation (work together) (561)
	Mistrust of and too much Federal government (466)				Positive economic opportunities (581)
	Negative/decreasing community characteristics (542)				Increased population and related improvements (891)
	General community characteristics (549)				Better community characteristics (901)
	Positive impacts on vision and vitality with more fish (681)				
	Negative impact on parks and recreation facilities (832)				



Other Groups	Impacts of changing demographics (886)	High/increasing taxes (204)		Leadership decline (124)	
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### 2.21.5.5 Comparison of Pathway A1 to A2

Under the implementation of A2, clustered median group ratings did not change from A1 to A2 for the People dimension, while median ratings for the Place and Vision & Vitality dimensions decreased slightly. The Jobs & Wealth dimension changed the most, with a decrease of 1.5 rating points ([Figure 2-8](#)). In general, forum participants perceived that Cascade would experience little change under A2 for the People, Place and Vision & Vitality dimensions, with median ratings of 0 across these dimensions, while the community would be slightly worse off in the Jobs & Wealth dimension, with a median rating of -1. In addition, median ratings across groups clustered around the invited group for the People, Place and Vision & Vitality dimensions. In contrast, median ratings for the Jobs & Wealth dimension ranged from -1 to 1, with the median for the invited group indicating the community would be negatively affected by A2 and the other group indicating Cascade's situation would be improved.

#### 2.21.5.5.1 Comparison of Pathway A2 to A2b and A2c

Under the implementation of A2b (major system modifications with elimination of flow augmentation to 0 acre-feet), overall group median ratings in comparison to A2 ranged from 1.5 in the Vision & Vitality dimension to 2 in the People, Jobs & Wealth, and Place dimensions (see [Figure 2-9](#)). Median group ratings clustered around the invited group for all dimensions. In general, clustered median ratings reflect the perception among both groups that the community would be better off under A2b compared to A2. For the People dimension, improvements in the population and a growth in recreation and tourism opportunities ("increased levels in lake...fishing and boating") justified both groups' ratings. In terms of the Jobs & Wealth dimension, both groups mentioned that recreation opportunities would increase and the economy would grow ("more water in Cascade Lake will possibly improve water quality, the fishery, and also extend the recreation season"). However, one participant commented how river-related needs ("ranching, rafting, kayaking") may be adversely affected under A2b. Both groups agreed that the Place dimension would improve due to improving community appearances, new shops coming in, and general community growth. The invited group added justifications such as improved roads and increased recreation and fishing

("people more hopeful and rely of lake staying full for recreation and fishing") as positive attributes of Place under A2b. Finally, for the Vision & Vitality dimension, both groups focused on a continued lack of community control due to Federal regulations as a justification for their rating, while other positive attributes mentioned under A2 would remain unchanged. The invited group added a variety of positive characteristics of Vision & Vitality under A2b, such as high levels of community participation and an optimistic vision for the future ("no drawdown will boost the investment and therefore the vision and vitality").

Under the implementation of A2c (major system modifications with increase in flow augmentation to 1.4 million acre-feet), the participants generally perceived negative impacts across all four dimensions, with median group ratings shifted toward the "adversely affected" end of the impact rating scale for all dimensions (see [Figure 2-9](#)). In terms of the invited group, median group ratings for all four dimensions ranged from -4.5 to -5, the lowest possible rating. None of the median ratings for the dimensions clustered across the two groups, but ranged from -2 to -5. This lack of clustering indicates that, although both groups perceived the state of their community to be worse off under A2c, they differed in the magnitude of adversity, with the invited group being slightly more negative. Justifications across both groups for the negative People rating included decreases in the local population ("people will move away because the heart of the lake is gone"), while the invited group added that decreases would also occur in school enrollment, property values and water availability ("people need water -- so do fish, but I like people better"). For the Jobs & Wealth dimension, characteristics consistently mentioned across both groups were the negative economic impacts associated with water reductions, loss of recreation-related business ("recreation will not happen on our lake...jobs and wealth depend largely on water"), and decreased job opportunities. For the Place dimension, clustered justifications indicated the loss of recreation and tourism opportunities ("Lake Cascade would be 'Ranch Cascade'"). In addition, the invited group added negative attributes, such as struggling businesses and a declining sense of place ("the lake would become a mudhole and general attitudes would cause a downward trend"), associated with A2c. Finally, in terms of the Vision & Vitality dimension under A2c, salient justifications included a decreased vision and vitality ("a lot of the vitality comes from the lake") and a weaker economy ("it is hard to imagine how the community will retain its vision and vitality unless there is some economic leg other than recreation and tourism").

#### **2.21.5.6 Comparison of Pathway A1 to A3**

Under the implementation of A3, the median group ratings for A1 shifted toward the *beneficially affected* end of the impact rating scale for all dimensions: median ratings loosely clustered around 0.5 for A1 increased to 2 for A3 ([Figure 2-8](#)). This was the highest rated dimension. Specifically, median group ratings ranged from 1 in the People dimension to 2.5 in the Jobs & Wealth dimension, with the Place and Vision and Vitality dimensions each having a median rating of 2. A3 also had the greatest range of median

ratings across both groups, differing by 1.5 rating points in the People, Jobs & Wealth, and Place dimensions, and by 2 rating points in the Vision & Vitality dimension. The invited group generally perceived the community to be better off under A3, with median ratings falling on the positive end of the rating scale, while the other group perceived the community to be the same or slightly worse off under A3. This indicates that there were diverging perspectives regarding the impact of A3 on Cascade in 2020 in terms of its good and bad attributes.

### ***People***

Individual ratings of A3 ranged from -3 to 5, with the median rating for the invited group of 1 more positive than the other group's median rating of -0.5. Despite this range, [Table 2-6](#) suggests a shift in salient justifications under the implementation of A3, with both groups mentioning that little change would occur, although an improved fishery would positively affect the community ("more people due to increased salmon population"). The invited group justified the higher rating with comments pertaining to improved opportunities for youth, and consequent increases in the number of youths in the community.

### ***Jobs & Wealth***

Individual responses ranged from -3 to 5 across both groups. The groups' median ratings clustered around -1, indicating agreement in terms of good and bad attributes of A3. Both groups noted an increase in resource tourism and amenity recreation ("salmon sport fishing as well as increasing jobs on Lake Cascade"). In addition, the invited group's high rating was justified by a perception of increased jobs and local investments, as well as decreased government regulations ("would increase logging without federal regulation on salmon recovery"). In contrast, the increased cost of transporting logs and wood chips was noted to negatively affect the community under A3.

### ***Place***

Individual responses ranged from -3 to 5 across both groups, with the invited group's median rating of 2 significantly more positive than the other group's median rating of -0.5. To justify their ratings, both groups perceived little change to occur, with some community growth, improved roads and infrastructure ("more wealth and jobs leads to improvements in buildings") and an increasing population beneficially affecting the community. The invited group also considered an increased pride in the community, improved air and water quality, and an improving community appearance, in their assessment of A3.

### ***Vision and Vitality***

For the Vision & Vitality dimension, individual responses ranged from -3 to 0, with the invited group's median rating of 2 higher than the other group's median rating of 0, indicating a perception of beneficial impacts under A3. The only salient justification mentioned across both groups pertained to an increase in Cascade's vision and vitality ("the vision of the community could once again focus on tourism and becoming a destination resort"). The invited group offered other positive characteristics, such as a cohesive community, increased population, and additional economic opportunities, as justifications for the high rating.

### **2.21.6 Minimizing Adverse Impacts**

Participants offered a number of suggestions for minimizing negative impacts to Cascade. These included the provision of grants or money for improving transportation to Valley County or for increasing light industry in the community. They also suggested that the logging industry could improve the community's economy if more roads to the backcountry were opened. To mitigate water losses, participants suggested lake dredging and the extension of boat ramps. In terms of mitigation of regional impacts, forum members suggested the elimination of natural resource restrictions on private lands.

## **2.22 Firth, Idaho, Community Assessment**

### **2.22.1 Summary of Key Findings About Firth**

Firth is a community of over 400 people on the Snake River in eastern Idaho, halfway between Pocatello and Blackfoot. In the mid-1960s, Interstate 15 was built, contributing to a decline in retail business that continued into the late 1980s. The 1976 flooding of the Snake River devastated the Firth community. The 1980s brought about a change in the economy, with many farmers finding themselves replaced by larger, corporate farming operations. From 1987 to 1997, farm acreages in Bingham County decreased from almost 1,300,000 acres to 700,000 acres in production. In 1998, school enrollment exceeded 1,007 students. Historically, irrigated agriculture and related jobs have been a keystone of the region's economy, with agriculture-related employment in 1995 representing approximately 30 percent of total jobs in Firth, and the food processing industry about 45 percent of the town's employment. The population of Firth peaked at approximately 400 people in 1980, and has not significantly increased since. Changes in the area's agriculture, and specifically that industry's decreasing labor requirements, have resulted in a relatively stable population during the town's history.

Participants in the forum at Firth depicted a town in 1999 whose current situation varied considerably, as indicated by individual participant ratings of its People, Place, and Vision & Vitality dimensions on the current situation rating scale. Yet the town tends to be oriented towards the *as good as it can be* end of that scale in terms of these dimensions, with median ratings across groups clustered around 7. The people of Firth are perceived as having good prevalent values, a good community to raise a family, and strong schools, yet they struggle with inadequate job opportunities due to the loss of industry. Positively perceived Place characteristics included a good or improving

community appearance, good social services, close proximity to outdoor recreation opportunities, attractive scenery, good air and water quality, and a safe, crime-free community. The town's character also is negatively affected by the need for an improving community appearance, struggling businesses and vacant storefronts, lack of monetary reinvestment, a decrease in the number of farms, and increasing farm size. In terms of Firth's Vision & Vitality, positive justifications mentioned across both groups included strong, active civic organizational capacity, numerous social activities, and a strong cohesive community. No negative justifications were mentioned across both groups. The invited group, however, mentioned that "without outside intervention, Firth would struggle." With a median rating of 4 across both groups, Jobs & Wealth was the one dimension oriented towards the *as bad as it can be* end of the scale. This was reflected in justifications given for other dimensions. Indicative of the low median rating, there were no positive justifications clustered across both groups. Both groups perceived Firth as an agricultural town dependent on food processing and characterized by poor job opportunities, low paying jobs, a lack of monetary reinvestment, a shrinking agricultural base, and a high level of poverty.

Participants were generally optimistic about Firth's future under Pathway A1 (the existing situation on the Lower Snake River continued on into 2020), with ratings of its effects generally being on the positive, *beneficially affected* end of the scale for all four dimensions. Residents generally saw improvement and growth on all dimensions including job opportunities and increasing agriculture, with the only concerns including a "continued decline of fish populations and associated recreation" (Place dimension) and a decreasing quality of life (Vision & Vitality dimension). In general, ratings and justifications reflected slightly negative impacts under Pathway A2 (major system modification), due to increased costs of implementation with little benefit to fish or people. A consistent theme was that implementation of Pathway A2 would have little or no impact on the Firth community, especially for the People and Place dimensions.

Participants perceived the implementation of Pathway A2b (major system modification with elimination of flow augmentation to 0 acre-feet) as either slightly negative or having little or no impact on Firth. Negative ratings and justification focused on low or decreased income with increased poverty, decrease in water rentals, declining fish populations, and loss of jobs related to canals and the recreation industry. There were very few comments across groups that focused on the increased availability of water to the Firth community. In contrast, there was little doubt that Pathway A2c (major system modification with increase in flow augmentation to 1.4 million acre-feet) was forecasted to have disastrous impacts on the Firth community. Participants perceived that the loss of additional Snake River water would result in a loss of an agriculturally based economy, decreasing job opportunities, decreasing property values, declining community character, and negative economic opportunities.

Participants at the Firth forum were also very concerned about their community's future under Pathway A3 (dam-breaching and natural river drawdown), with ratings of its effects in 2020 clustered at the extreme negative, *adversely affected* end of the scale. Major concerns included increase in utility costs, transportation costs and taxes, decreased irrigation, loss of power, decreasing job opportunities, continued constraint

by government regulation and lack of local control, and a decline in economy. Positive comments, which commonly came from the invited group, focused on the benefits of strong and improving salmon fisheries, including an increasing quality of life, growth in the resource tourism and amenity recreation industry, and a strong or increasing vision and vitality for the community of Firth.

Suggestions from forum participants for lessening the adverse impacts of the pathways on Firth included that the Snake River water be left alone, and that the U.S. Army Corps of Engineers find alternative approaches to fish recovery that would minimize the negative impacts to their community. Overall, the situation and perceptions of the community of Firth are not unlike those of other agricultural towns in the region. Given that agriculture has long been the keystone of the town's economy, it is not unexpected that the community's assessment of its situation reflected a stronger concern for the future of their community's agricultural base, and for the fate of that industry throughout the region, than support for efforts to recover salmon whose effectiveness is uncertain and that are perceived to have major economic and social consequences.

### **2.22.2 Interactive Community Forum Participants**

Fifteen community members provided perspectives on the history, 1999 situation and Pathways A1, A2, and A3 for Firth, ID. These forum participants sat at two facilitated groups (see methodology), working in interactive small groups (hereafter, "groups"). The overall diversity index rating for participants was 0.64 (on a scale from 0 to 1.0), which indicates that 9 of 14 pre-identified community roles were present at the forum (see methodology). Of the total number of participants completing the sign-in questionnaire, 33 percent were in the agriculture industry, 13 percent in water management, and 13 percent were retired. The remaining 41 percent were employed in one the following occupations: maintenance, mechanic, purchasing manager, teacher, restaurant owner, and surgical technologist.

### **2.22.3 Community Background**

Firth, a small farming town of over 400 people, is located in southeastern Idaho about 11 miles northeast of Blackfoot. The town of Firth was incorporated as a village in 1934. In the mid-1960s interstate highway I-15 was built, routing traffic that once passed through town around it and causing a decline in its business community that continued on until the late 1980s. In 1976, the flooding of the Snake River devastated the town of Firth. The 1980s brought additional change in the local economy as many small family farmers found themselves replaced by large farming operations. From 1987 through 1997, the acreage in farms in Bingham County decreased from almost 1.3 million acres to 700 thousand. Nonetheless, the economy of Firth, which traditionally has been an agricultural one devoted to the growing and processing of sugar beets, grain, potatoes, clover seed and livestock, continues to depend heavily on agriculture. The town's major employer in 1995 was food processing, with over 45 percent of all jobs in that sector, and agriculture was the second largest employer, with 30 percent of Firth's total employment. The population of Firth peaked at around 400 people in 1980 and has remained at this level for the past 20 years, experiencing little to no growth.

## 2.22.4 Community Assessment of 1999 Situation

### 2.22.4.1 1999 Situation: Community Dimensions and Rating Scale

The following "current community situation" rating scale was used by participants from Firth to rate the current (1999) situation of the following four dimensions: 1) **People** -- Social Make-up; 2) **Jobs & Wealth** -- Economy; 3) **Place** -- Character; and 4) **Vision & Vitality** -- Organization and Leadership Capacity. Following a presentation of descriptive information about their community and a community timeline they developed (see above), forum participants were asked to rate the extent to which their community situation was good or bad on a 10-point scale for each of the four dimensions and to write justifications for each of their numerical ratings.

In 1999, the situation in my community is as **bad** 1 2 3 4 5 6 7 8 9 10 In 1999, the situation in my community is as **good** as it could be as it could be

### 2.22.4.2 1999 Situation: Ratings

As [Figure 2-10](#) presents, the median ratings on the current situation rating scale for the two groups at the forum ranged from a minimum of 4 on the Jobs & Wealth dimension, to a maximum of 7 on the People and Vision & Vitality dimensions. Across both groups, the People, Place, and Vision & Vitality dimensions were perceived to be most oriented to the as good as it could be end of the scale. Alternatively, the Jobs & Wealth dimension was perceived to be most oriented towards the as bad as it could be end of the scale, with an overall median rating of 4.

In the case of Firth's individual community dimensions, the difference between the invited group's median score and that of the other facilitated group ranged from 0 to 1 rating points on the current (1999) situation rating scale. This median clustering across all four dimensions indicates that both facilitated groups perceived these community dimensions similarly.

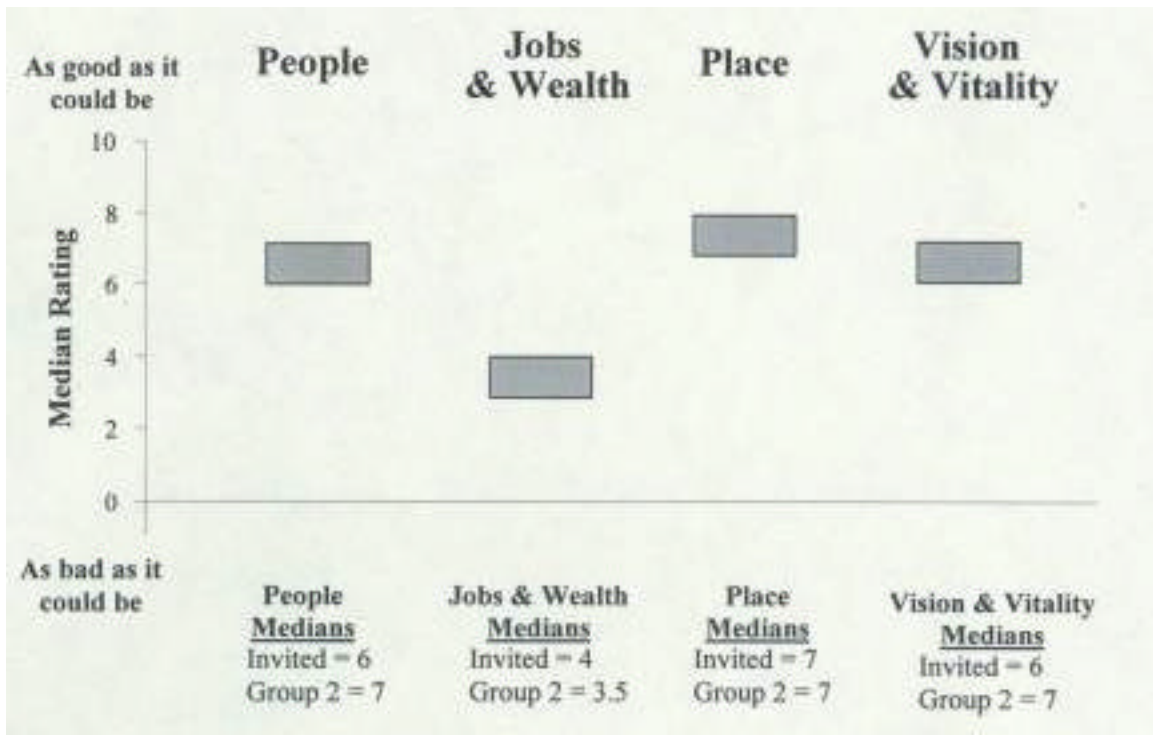


Figure 2-10. Median scale ratings of the current (1999) situation in Firth, Idaho, by community dimension, across groups

### 2.22.4.3 1999 Situation: Rating Justifications

[Table 2-7](#) presents the clustering of justifications for the two facilitated groups. Justifications noted across the invited group and other groups are categorized as 'All Groups.' Justifications noted by only the invited group are categorized as 'Invited Group.' Finally, justifications noted by groups other than the invited one are categorized as 'Other Groups.'

#### **People**

The People dimension was one of the highest rated dimensions, with an overall median rating of 7. Individual ratings ranged from 5 to 9 across both groups. [Table 2-7](#) presents the clustering of justifications across both groups that illustrate why the People dimension was rated toward the good end of the scale. Key factors mentioned across both groups included the perception of Firth as being a good community to live and raise a family, having good prevalent values, strong schools, and good people. The invited group and other groups added that residents have good customs and lifestyles, a strong sense of community, and are active and involved in community activities. A negative characteristic identified across both groups, which may have decreased participants' ratings, was a loss of industries and lack of job opportunities. The invited group added that there is a lack of opportunities for young people, less community vitality, and a decrease in the agriculturally-based economy.



### ***Jobs & Wealth***

The Jobs and Wealth dimension was the one most oriented towards the *as bad as it could be* end of the scale with a median rating of 4 across all forum participants and individual responses ranging from 2 to 7 across both groups. Indicative of the low median rating, there were no positive justifications clustered across both groups, yet good job opportunities, low utility costs, and the positive aspects of commuting were some positive justifications provided by the invited group. Both groups perceive Firth as an agriculture and food processing dependent town with poor job opportunities, low paying jobs, a lack of monetary reinvestment, a shrinking agricultural base, and a high level of poverty (see [Table 2-7](#)).

### ***Place***

The Place dimension received a median rating of 7 across both groups. Individual's responses ranged from 5 to 8 across the two groups. Negative comments that may have detracted from median ratings were the need for an improving community appearance, struggling businesses and vacant storefronts, lack of monetary reinvestment, a decrease in the number of farms and increasing farm size.

### ***Vision & Vitality***

The Vision and Vitality dimension received an overall median rating of 6.5. Individual responses ranged from 5 to 8 across all participants. Positive justifications mentioned across both groups included strong, active civic organizational capacity, strong, active civic leadership, numerous social activities, a strong cohesive community, good planning for the future, an adequate or increasing well-managed city budget, and a high level of community participation. The invited and other group added strong and active political leadership, support for bonds and levies, success at getting and using grants, new optimistic visions for the future, and good or improving schools. There were no negative justifications mentioned across both groups. The invited group, however, mentioned that "without outside intervention, Firth would struggle" (see [Table 2-7](#)).

**Table 2-7  
Rating Justifications for the Current (1999) Situation  
In Firth, Idaho,  
By Community Dimension and Type of Group**

<b>Dimension</b>	<b>Replication Across All Groups</b>	<b>Invited Group</b>	<b>Other Groups</b>
<b>People</b>			
Positive	Good prevalent values (61)	Good customs and lifestyles/change for the better (51)	Strong sense of community among residents (203)
	Strong schools/education (81)	Increasing school enrollment (71)	Supportive of community activities and involved (241)
	Stable families (103)	Increasing people own homes/many own homes (151)	
	Good, friendly, helpful people (201)	Small town charm/rural lifestyle (421)	
	Good community to live and raise family (424)		
Negative	Loss of industries and lack of job opportunities (492)	Lack of opportunities for young people (11)	
		Less community vitality (232)	
		Decrease/loss of agricultural-based economy (503)	
Other	Increasing/high population (41)	Families (general) (119)	Stable population (43)
	No change in people/little/no impact (313)	Public assistance (general) (119)	
		Home ownership (general) (159)	
		Jobs/industry (general) (495)	
		Agriculture-dependent economy (504)	
		Value of agriculture (509)	
<b>Jobs and Wealth</b>			
Positive		Good job opportunities (2)	
		Positive aspects of commuting (63)	
		Low utility costs (79)	
Negative	Poor job opportunities (3)	Some poverty/level of low income families (186)	
	Low paying jobs (31)		
	Money leaves (51)		
	Shrinking agriculture, mining, and timber base (135)		
	High poverty (183)		

Other	High number of public sector jobs (47)	High commuting (66)	
	Agricultural/food processing-based economy (143)	High property values (198)	
<b>Place</b>			
Positive	Good/improving community appearance (511)	Good parks and open spaces, public lands (667)	
	Good/social services, same access to services (561)	Strong sense of place/heritage/morale and community (670)	
	Close proximity to outdoor recreation opportunities (662)	Family-oriented, small town with pleasant atmosphere (681)	
	Attractive scenery (771)	Close-knit community with many activities/cohesive (700)	
	Good air and water quality (780)	Quiet, peaceful community (781)	
	Safe and crime free (902)	Small, rural population good (831)	
Negative	Appearance needs improvement (516)	Poor/declining community appearance (513)	
	Struggling businesses and vacant storefronts (520)	Poor downtown/business appearance (524)	
	People shop elsewhere due to lack of businesses/not spending money here (522)		
	Decreased number of farms and increased farm size, absentee owners, corporate farms (653)		
Other	Importance of river for recreation (674)		
<b>Vision and Vitality</b>			
Positive	Strong, active civic organizational capacity (11)	Strong, active astute political leadership (81)	Improving/good schools (811)
	Strong, active civic leadership (41)	Support for bonds and levies (181)	
	Active, strong leadership (121)	Successful at getting and using grants (241)	
	Numerous, varied, good, or improving social activities (301)	New, optimistic visions of the future (385)	
	Friendly, sociable community (305)		
	Strong, cohesive community (341)		
	Planning and plans exist, good base for the future (403)		
	Adequate/increasing, well-managed city budget (481)		

Positive	Positive/increasing community characteristics (541)		
	Strong, high level of community participation (work together) (561)		
Negative		Dependencies (445)	
Other		No change in vision and vitality (603)	

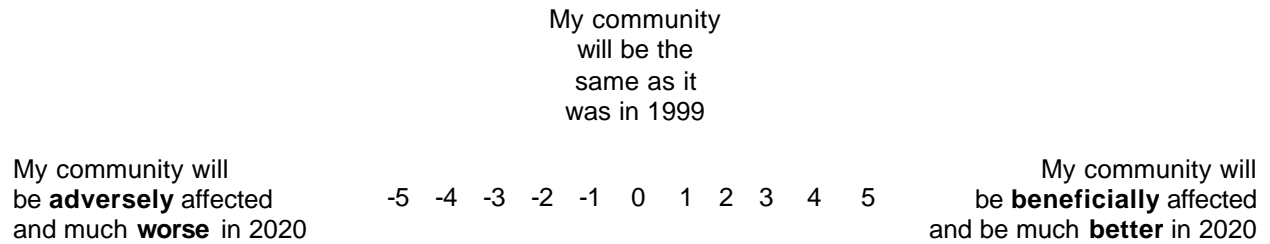
## 2.22.5 Comparison of Salmon Recovery Pathways A1, A2, A3

### 2.22.5.1 Community Dimension Impact Rating Scale

Forum participants were asked to assess how their community would be impacted in the year Corps of Engineers to return juvenile salmon to the Lower Snake River. Pathway A1 was to maintain the existing Lower Snake River System, A2 was to make major modifications to the existing Lower Snake River System, and A3 was natural river drawdown or dam breaching.

A second rating scale was used by forum participants to indicate the situation for each of the four community dimensions (*People, Jobs & Wealth, Place, and Vision & Vitality*) in terms of how adversely or beneficially they felt their community would be impacted in the year 2020. In thinking about the future, participants were asked to consider all of the normal changes that are likely to occur in their community over time, along with specific changes they would expect to result from an pathway. To provide a basis for thinking about their community's future situation, forum participants received information from Corps and NMFS' studies specific to their community for each pathway. Information provided to participants included salmon recovery probabilities, physical changes, and economic changes. (For more information on the information presented and their sources, see [Appendix A](#).) Community members then gave an initial rating of the impacts on their community in the year 2020 for each dimension. After a facilitated group discussion of how and why their community would be affected or not affected, participants re-rated the community dimensions and listed their justifications.

To ground the rating scale in reality, forum participants were instructed to use their community's 1999 situation, which they had just rated and described for each dimension, as the mid-point (0) of the scale from which to determine the magnitude of adverse (negative) or beneficial (positive) effects to their community. Participants were specifically instructed to focus on adverse and beneficial impacts only on their community and not on the entire region.



### 2.22.5.2 Summary of Findings on Pathways A1, A2, A3

[Figure 2-11](#) illustrates that, across the two facilitated groups, forum participants generally perceived that the situation for their community would be better and beneficially affected in the year 2020 when considering the Jobs & Wealth, Place, and Vision & Vitality dimensions under Pathway A1 implementation. In terms of the People dimension, however, there was a 3 point deviation in group medians. The invited group generally felt that Pathway A1 would impact the people of Firth in a beneficial manner. The other group, however, generally felt that Pathway A1 would have no impact on the people of Firth. The range of group medians across both groups for Pathway A1 ranged from a high of 3 for the People and Place dimensions to a low of 0 for the People dimensions. For Pathway A2, community participants generally perceived that their community would be beneficially affected for the Jobs & Wealth and Vision and Vitality dimensions. For the People and Place dimensions, however, group 2 felt that Pathway A2 would not impact the Firth community whereas the invited group felt that Firth would be beneficially affected. In the case of A3, group medians were clustered at the *adversely affected* end of the scale for all dimensions, with group medians ranging from a minimum of -3 and a maximum of -1.

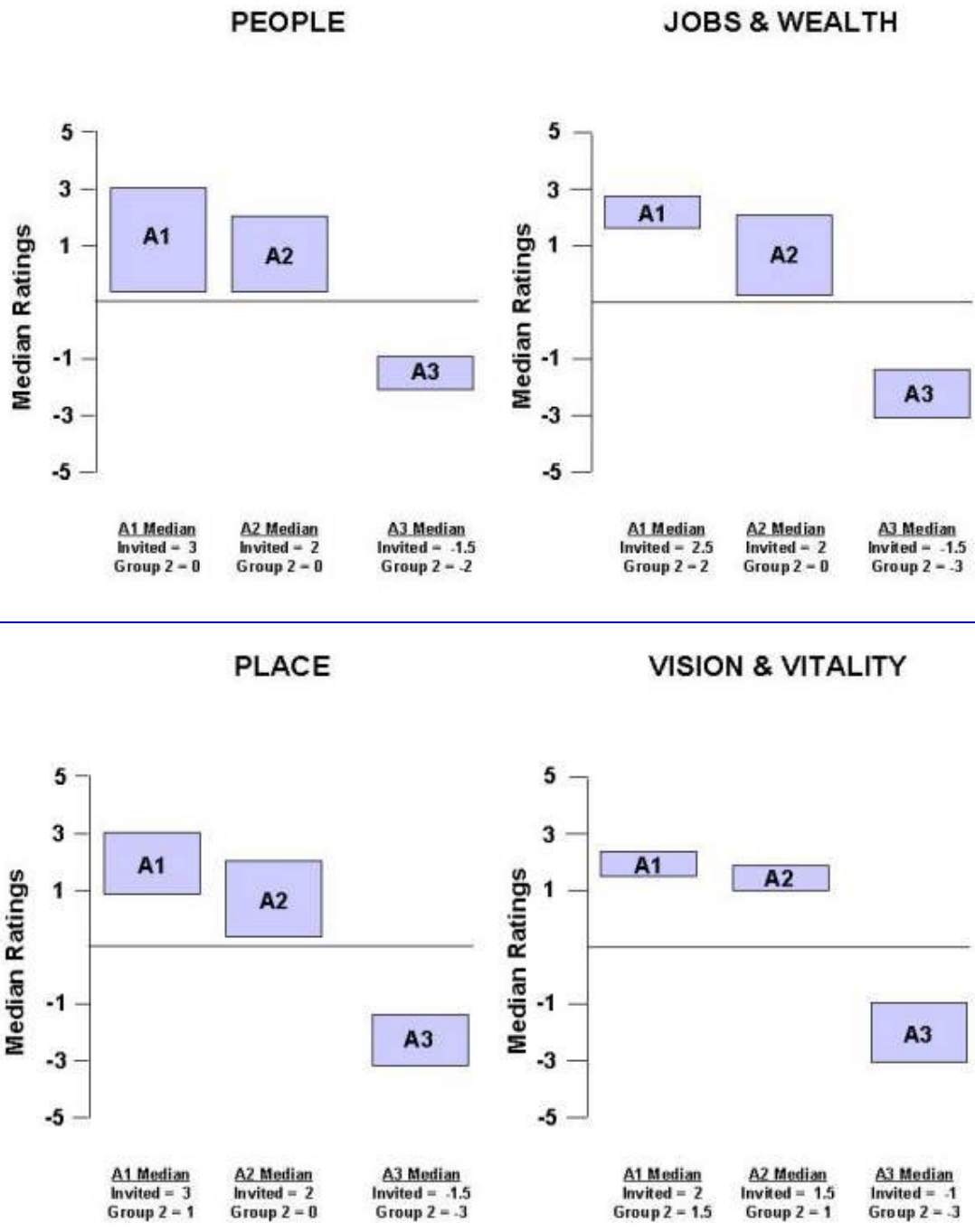


Figure 2-11. Median scale ratings of Pathways A1, A2, and A3, in Firth, Idaho, by community dimension, across groups

Under Pathways A1, A2, and A3, group medians deviated by no more than 2 rating scale points across all dimensions with the one exception of the People dimension under Pathway A1 where the group 2 median differed from the invited group median by 3 rating scale points. This median rating consistency suggests relative agreement across both groups concerning the impacts of these three pathways on the community of Firth across all four dimensions. Participants perceived that Pathways A1 and A2 would either impact Firth beneficially or not at all. In contrast, participants perceived that Pathway A3 would adversely impact the community of Firth.

### **2.22.5.3 Rating Justifications Across Pathways A1, A2 and A3**

In the analysis of A1, the "no action" pathway, a process similar to that for the 1999 current situation was followed to examine participants' perceptions of likely future changes to the community in 2020. The premise for the scenario was that the river system would remain unchanged but other social, economic, and cultural trends would continue on their current trajectory, as perceived by forum participants. Both numerical scores and the reasons and changes underlying them were examined. Pathway A1 was treated as the base-case, and the results for this pathway provided the basis for assessing the impact of both A2 ("major modification") and A3 ("natural river drawdown and dam breaching"): A2 and A3 were analyzed to identify changes of clustered numerical ratings and qualitative justifications from the baseline forecasts under A1.

### **2.22.5.4 Pathway A1**

#### ***People***

In the case of the People Dimension for A1, group medians ranged from 1 to 3, with an invited-group median rating score of 3 and individual responses across all forum participants ranging from -1 to 5. As presented in [Table 2-8](#), justifications mentioned across both groups were that Firth would experience an increase or high population and that people would change for the better. The invited and other group added that customs and lifestyle would change for the better, there would be increasing school enrollment, and that recreation and tourism would be an important benefit to Firth. Group 2 also mentioned that current trends would continue suggesting little change to the People dimension under this pathway. Negative justifications that may have lowered ratings included declining fisheries that would continue to be listed and a poor or decreasing quality of life.

#### ***Jobs & Wealth***

For the Jobs & Wealth dimension, median ratings ranged from a 2 to 2.5 across both groups with an invited group median of 2.5. Individual responses ranged from -1 to 5 across all forum participants. The justification mentioned across both groups was increasing job opportunities. The invited and other group added low utility costs, fairly priced housing, more water for irrigation, a reliance on the river transportation system, an expanding economic base, growth in resource tourism and amenity recreation, high property values, and an increase in agriculture (see [Table 2-8](#)).

**Place**

For the Place dimension, median ratings ranged from a 1 to 3 across both groups with an invited group median of 3. Individual responses ranged from -1 to 5 across all forum participants. As seen in [Table 2-8](#), the justification given across both groups was the expectation of community improvements. The invited and other groups added the expectation of good community services, good roads and community infrastructure, stability of farms and agriculture, strong sense of place and heritage, attractive scenery, and close proximity to outdoor recreation opportunities. Group 2 added that there would be community changes independent of waterway operations. A negative comment from the invited group that may have decreased the median rating was that the loss of the salmon fishery would result in a loss of recreation opportunities.

**Vision & Vitality**

For the Vision & Vitality dimension, median ratings ranged from a 1.5 to 2 across both groups with an invited group median of 2. Individual responses ranged from -1 to 5 across all forum participants. Among justifications given in [Table 2-8](#) for their positive ratings, both groups perceived there to be leadership improvement, an increase in community cohesiveness, an increase in positive community characteristics, or no change at all. The invited table added the expectation of strong, active civic leadership, a good or increasing tax base, new optimistic visions for the future, and positive economic opportunities. Negative comments from the invited group that may have lowered the median rating included negative or decreasing community characteristics as well as a decreasing quality of life.

<b>Table 2-8</b> <b>Comparison of Rating Justifications For Pathways A1, A2, and A3</b> <b>For Firth, Idaho,</b> <b>By Community Dimension and Type of Group</b>					
<b>Year 2020 Rating Justifications</b>	<b>Pathway 1 Existing Condition</b>	<b>Pathway 2 System Modification</b>	<b>Pathway 2b 0 Flow Augmentation</b>	<b>Pathway 2c 1.427 Flow Augmentation</b>	<b>Pathway 3 Drawdown</b>
<b>People</b>					
Across All Groups	Increasing/high population (41)	Increasing/high population (41)	Low/decreased income and wages with increased poverty (534)	Negative impacts (general) (322)	Increased utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)
	Growth (general) (49)	Increased utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)	Decrease in water rentals (609)	Decrease/loss of agricultural-based economy (503)	
	People changing for better/positive change (311)				



Invited Groups	Good customs and lifestyles/change for the better (51)	Growth (general) (49)	Growth (general) (49)	Decreasing school enrollment (72)	Strong/increasing quality of life (209)
	Increasing school enrollment (71)	Stable customs and lifestyles (53)	Negative impacts (general) (322)	Increasing/high public assistance (112)	Heavily regulated by government/intervention (255)
	Poor/decreasing quality of life (208)	Increasing school enrollment (71)	Current trends will continue/little/no impacts (325)	Decreasing people own homes/few people own homes (152)	No change in people/little/no impact (313)
	Change (general) (318)	Property ownership (general) (165)	Strong/improving/recovered fisheries (461)	Declining fish populations/listed (462)	Strong/improving/recovered fisheries (461)
	Family-oriented community (426)	High/increasing cost of living (455)	Declining fish populations/listed (462)	Greater draw from aquifer/depletion (602)	Declining fish populations/listed (462)
	Recreation and tourism is important (positive) (441)	Declining fish populations (462)		Decrease in water availability (604)	Fish recovery is good/important (463)
	Strong/improving/recovered fisheries (461)		Negative in low water years (606)		
	Declining fish populations/listed (462)				
	Continued use of river (481)				
	Cheaper/better power (485)				
Stable economy (543)					
Other Groups	Current trends will continue/little/no impact (325)	No change in people, little/no impact (313)	Increasing/high population (41)	Decreasing/low population (42)	Negative impacts (general) (322)
		Current trends will continue/little/no impact (325)	No change in people/little/no impact (313)		Loss of industries and lack of job opportunities (492)
					Decrease in water availability (604)
<b>Jobs and Wealth</b>					
Across All Groups	Increasing job opportunities (general) (10)	Increasing job opportunities (general) (10)		Decreasing job opportunities (general) (18)	Decreasing job opportunities (general) (18)
		Same/no change (245)		Bad for irrigated farming (no water in dry years) (69)	Increasing utility costs (73)
				Shrinking agriculture, mining, and timber base (135)	
				Decreasing property values (202)	

Invited Groups	Low utility costs (79)	Expanding economic base (125)	Loss of canal jobs and money (111)	High commuting (66)	Resource tourism and recreation growth (126)
	Housing fairly priced (83)	Stable economy (155)	Loss of recreation/tourism related business (134)	Increasing unemployment (195)	Stable economy (155)
	Need irrigation/irrigation-dependent farming (106)	Strong/growing economy (157)	Same/no change (245)	Pathway 2 does not benefit fish or people (246)	Constrained by government regulations (951)
	Increase in irrigation/more water for irrigation (107)	Decreasing poverty (188)		Bad for community (956)	
	Rely on river transportation system (112)	Increasing property values (201)			
	Expanding economic base (125)	Pathway 2 does not benefit fish or people (246)			
	Resource tourism and amenity recreation growth (126)				
	High property values (198)				
Other Groups	Increase in agriculture (105)	Increase in agriculture (105)	Increasing job opportunities (general) (10)	Decreased economic base (124)	
			Increase in irrigation/more water for irrigation (107)		
<b>Place</b>					
Across All Groups	Community improvements, general (845)	Maintain status quo, no change (841)	Maintain status quo, no change (841)	Community character is poor/declining (577)	
				Decline in farming (654)	
				Irrigation wells drying up, dryland farming only (655)	

	Good social services, same access to services (561)	Good social services, same access to services (561)	Loss of tourism (664)	Decreased opportunities parks and open spaces (668)	No money for community improvements (567)
	Good roads, highways, and community infrastructure (620)	Good irrigation systems and wells, maintenance of irrigation systems (657)	Decreased wildlife and fish (802)	Decline in sense of place and community pride (672)	Increase power rate (594)
	Stability of agriculture and farms (652)	Good parks and open spaces, public lands (667)	No negative changes, little impact (849)	Loss of fish results in a loss of recreation (679)	Decline in farming (654)
	Close proximity to outdoor recreation opportunities (662)	Pride in/commitment to community (671)	Negative impact (general) (850)	Decreased income/increased poverty (751)	Community decline and worsening (722)
	Strong sense of place/heritage/mo role and community (670)	Strong values (676)	Good, health environment and great outdoors (775)	Decreased fish and wildlife (802)	
Invited Groups	Pride in/commitment to community (671)	Community growth and improvement (general) (721)	Decreased wildlife and fish (802)	Increased government regulations and decreased local control (886)	
	Loss of fish results in a loss of recreation (679)	Decreased wildlife and fish (802)			
	Community growth and improvement (general) (721)	Safe and crime free (902)			
	Attractive scenery (771)	Costs more than Pathway #1 with no benefits (923)			
	Good, healthy environment and great outdoors (775)				
	Safe and crime free (902)				
	Other community changes independent of waterway operations (842)			No money for community improvements (567)	Poor/declining community appearance (513)
				Struggling businesses and vacant storefronts (520)	

Vision and Vitality					
Across All Groups	Leadership improvement (125)	No change (673)	No change (673)	People are adaptable (505)	Lack of community control of outside forces (economics/regulations) (442)
	Increased community cohesiveness (345)			Negative economic opportunities (582)	Mistrust of and too much Federal government (466)
	Positive/increasing community characteristics (541)				Economic factors decreasing vision and vitality (583)
	No change (673)				
	Strong, active civic leadership (41)	No effect on leadership (129)	Negative/decreasing community characteristics (542)	Positive/increasing community characteristics (541)	Less commitment to community (504)
	Good/increasing tax base/fiscal resources (201)	Good/increasing tax base/fiscal resources (201)	Negative economic opportunities (582)	Negative/decreasing community characteristics (542)	Strong/increasing community vision and vitality (601)
	New, optimistic visions of the future (385)	Increasing government expenditures (282)		Negative impacts on agriculture and land tenure (544)	Fish-related uncertainty (665)
Invited Groups	Negative/decreasing community characteristics (542)	Strong cohesive community (341)		Negative impacts on vision and vitality with less fish (682)	Impacts related to increased utility rates (750)
	Positive economic opportunities (581)	Planning and plans exist, good base for the future (403)		Emotional comments (911)	
	Decreasing quality of life (842)	Positive economic opportunities (581)			
	Emotional comments (911)	Positive community infrastructure (801)			
		Increased population and related improvements (891)			
Other Groups		Civic organization improvement (15)	Civic organization improvement (15)	Insufficient/decreasing tax base/fiscal resources (202)	Insufficient/decreasing tax base/fiscal resources (202)

### **2.22.5.5 Comparison of Pathway A1 to A2**

In general, the community perceived that under Pathway A2, Firth would be beneficially affected in the Jobs & Wealth and Vision & Vision & Vitality dimensions. Under the People and Place dimensions, however, the group 2 median indicates that Firth would not be affected by this pathway. In contrast, the invited group medians for these same two dimension indicated the perception that Firth will be beneficially affect under Pathway A2 implementation. These results are generally consistent with the median ratings for Pathway A1. Justifications mentioned across groups lending to these median ratings included the expectation of a high or increasing population, increasing job opportunities, and no change or maintaining the status quo. Justifications added by the invited and other group included the expectation of stable customs and lifestyles, and expanding economic base, community growth and improvement, and a good or increasing tax base. Negative justifications that may have decreased median ratings included declining fish populations, no benefit to fish or people, and increasing cost with no benefits.

#### **2.22.5.5.1 Comparison of Pathway A2 to A2b and A2c**

Under the implementation of Pathway A2b (major system modifications with elimination of flow augmentation to 0 acre-feet), the invited group medians across all dimensions indicate that Firth would be negatively affected, whereas group 2 medians indicate that Firth would be benefited slightly (People and Jobs & Wealth) or not impacted at all (Place and Vision & Vitality) (see [Figure 2-12](#)). Individual ratings ranged from -2 to 5 for the People and Jobs & Wealth dimensions, -2 to 4 for the Place dimension, and -2 to 3 for the Vision & Vitality dimension. Justifications mentioned across groups for the People dimension included low or decreasing income with increasing poverty and a decrease in water rentals. There was no clustering of justifications mentioned across groups for the Jobs & Wealth dimension illustrating a difference of perception concerning the impacts of Pathway A2b on this dimension. Where the invited group felt that there would be a loss of canal jobs and recreation and tourism related business, group 2 felt there would be increasing job opportunities and an increase in water for irrigation and thus an increase in irrigation. The rating justification given across groups for both the Place and Vision & Vitality dimensions was no change or maintenance of the status quo. The invited group added loss of tourism, decreased wildlife and fish, general negative impacts, decreasing community characteristics, and negative economic opportunities under Pathway A2b implementation. In contrast, group 2 added civic organization improvement for Vision & Vitality under this pathway.

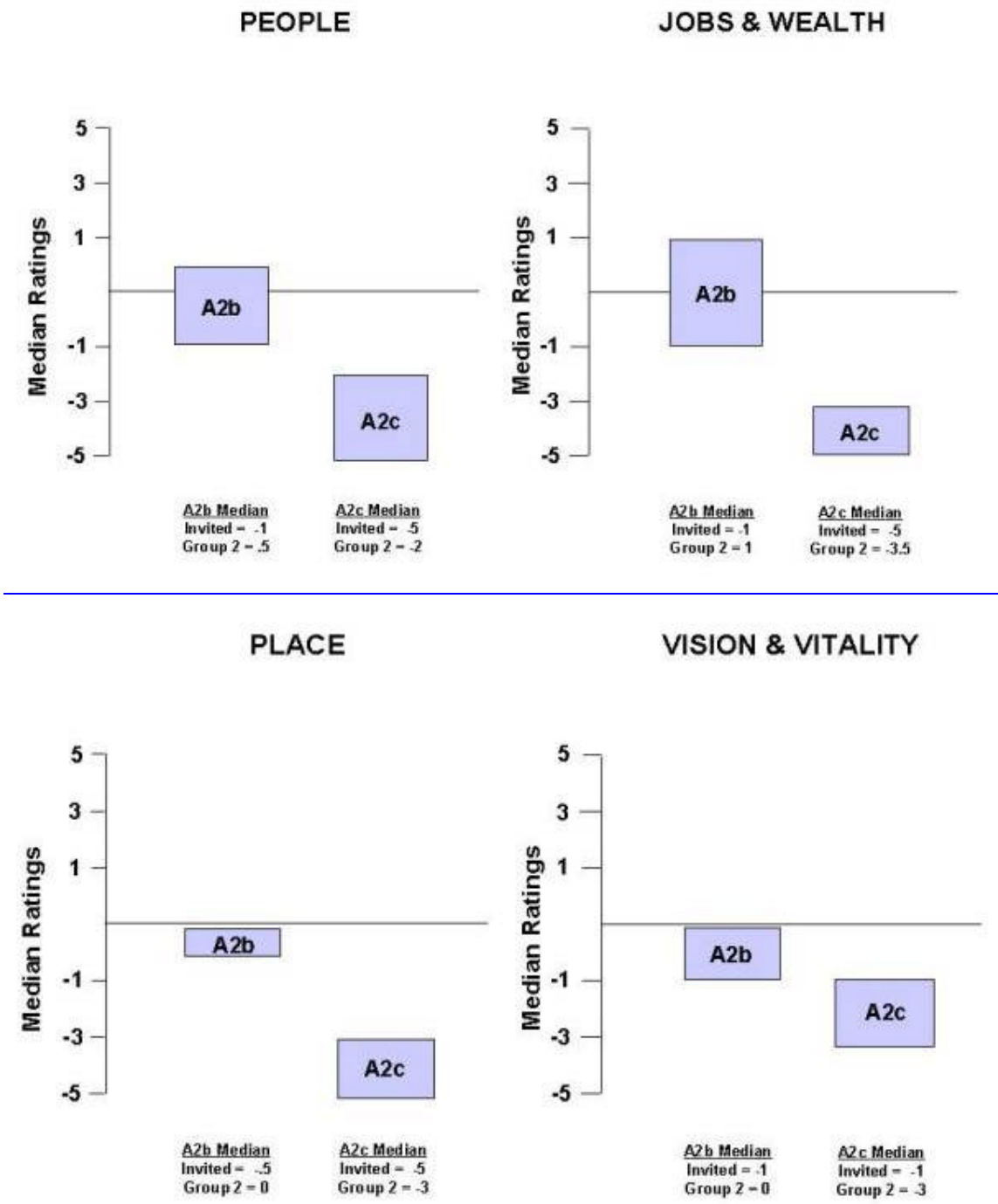


Figure 2-12. Median sale ratings of Pathways A2b and A2c, for Firth, Idaho, by community dimension, across groups

Although group medians differed by no more than 2 rating scale points, the fact that they traveled from the negative to the positive dimensions of the rating scale indicate a real difference in perception concerning the impacts associated with Pathway A2b between the invited group and group 2.

Under the implementation of Pathway A2c (major system modifications with increase in flow augmentation to 1.4 million acre-feet), the community generally perceived negative impacts across all four dimensions. Median ratings across both groups were -4 for the People, Jobs & Wealth, and Place dimensions, and -2 for the Vision & Vitality dimension (see [Figure 2-12](#)). Group 2 medians deviated from the invited group median by as many as 4 rating scale points for the Vision & Vitality dimension and as few as 1.5 rating scale points for the Jobs & Wealth dimension. Despite this variation, group medians indicate that Firth would be negatively affected under implementation of Pathway A2c. Participant disagreement is illustrated by the relative difference in degree to which the community will be negatively affected. Negative justifications given across both groups included a decrease or loss of the agricultural based economy, a decrease in job opportunities, negative impacts to irrigated farming during dry years, decreasing property values, poor or declining community character, dry irrigation wells, and negative economic opportunities. On the positive end of the spectrum, however, it was mentioned across both groups that people are adaptable suggesting the ability to deal with at least some of the impacts associated with this pathway. The invited and other groups added decreasing school enrollment, declining and listed salmon fisheries, aquifer depletion, decreasing population, increasing unemployment, a lack of benefits to fish or people, a loss of recreation due to a loss of fish, a decreasing tax base, an increase in poverty, and negative community characteristics. Despite the relatively wide variation in group medians for two out of the four dimensions, there is a consistent theme of negative impacts to the Firth community under Pathway A2c implementation. These negative impacts tend to cluster around the perception that not only would the loss of additional irrigation water devastate the agriculturally based economy and lifestyle, it would do nothing to improve the plight of endangered salmon on the lower Snake River.

#### **2.22.5.6 Comparison of Pathway A3 to A1**

The median group ratings for A1 shifted toward the *adversely affected* end of the impact rating scale for all dimensions under the implementation of A3. Median ratings for the four dimensions, which loosely clustered around positive 2 for A1, were -2 for Pathway A3 (see [Figure 2-11](#)). Further, the clustering of median ratings around the invited groups median score indicates a similarity in perceived impacts adversely effecting Firth in each of the four dimensions.

##### ***People***

Individual ratings ranged from -5 to 3 across all forum participants with a median rating across all groups of positive -2. Justifications across all groups included increased utility costs, transportation costs and taxes, and decreased irrigation and loss of power. The invited and other groups added continued heavy regulation by the government, declining fish populations, loss of industries and lack of job opportunities, and a

decrease in water availability. Positive justifications, which may have raised the generally negative ratings, included a strong or increasing quality of life, a strong and improving fishery, and the perception that fish recovery is important. Other justifications included the perception that the people of Firth would not be affected by implementation of this pathway (see [Table 2-8](#)).

### ***Jobs & Wealth***

Individual responses ranged from -5 to 0 across all forum participants with a median rating across groups of -2. Justifications provided by all groups for this negative median rating included decreasing job opportunities and increasing utility costs. The invited group added the expectation of an increase in resource tourism and amenity recreation, a stable economy, and continued constraint by government regulations (see [Table 2-8](#)).

### ***Place***

For the Place dimension of Firth, individual responses ranged from -4 to 0 across all forum participants with a median rating across groups of -2. There was no clustering of justifications across both groups. The invited and other groups added the expectation of no money for community improvements, an increase in power rates, a decline in farming, community decline, decreased fish and wildlife, increased government regulation and decreased local control, a poor or declining community appearance, and struggling businesses and vacant store fronts (see [Table 2-8](#)).

### ***Vision & Vitality***

For the Vision & Vitality dimension, individual responses ranged from -4 to 0 across all forum participants with an across group median rating of -2. Justifications occurring across all groups included lack of community control of outside forces, mistrust of and too much federal government, and economic factors decreasing vision and vitality. The invited and other groups added less commitment to community, fish related uncertainty ("no guarantees fish will return"), impacts related to increased utility rates, and insufficient or decreasing tax base/fiscal resources. A positive justification from the invited group that may have increased ratings was the expectation of a strong or increasing community vision and vitality (see [Table 2-8](#)).

## **2.22.6 Minimizing Adverse Impacts**

The community of Firth suggested that Snake River water be left alone. Community participants suggested that the U.S. Army Corps of Engineers find other pathways for fish recovery that would minimize the negative impacts to their community.

## **2.23 Hagerman and Bliss, Idaho, Community Assessment**

### **2.23.1 Summary of Key Findings about Hagerman and Bliss**

The discussion in this section of the report focuses on the town of Hagerman, Idaho, given that most (19) of the 21 participants at the forum held jointly for the towns of Hagerman and Bliss, Idaho, were residents of the town of Hagerman. Only two residents of Bliss were participants in the forum.



Hagerman is a town of over 800 people that is located in south central Idaho on the Snake River, 38 miles northeast of Twin Falls and 100 miles southeast of Boise. Bliss is a small community of about 200 people located just off I-80, several miles north of Hagerman. Although residents of Bliss were contacted and invited to the forum, few people expressed any interest in the issue of salmon recovery, and only two residents of the town actually attended the forum. Consequently, this discussion focuses solely on Hagerman. The town of Hagerman has experienced a growth of almost 300 people over the past several decades, an increase of over 50 percent. The economy of Hagerman is predominantly comprised of two sectors: government, which includes the local school district and provides over 30 percent of the town's jobs, and agriculture and agricultural services, which provides another 30 percent of employment in Hagerman. The town relies on and is known for the area's abundant supply of great trout and trout fishing.

Participants in the forum at Hagerman depicted a town in 1999 whose current situation, in terms of Jobs & Wealth, Place, and Vision & Vitality, varied considerably by individual participant ratings on the current situation rating scale. Yet median rating scores of these dimensions tended to be oriented towards the *as bad as it could be* end of that scale, with median ratings across groups clustered around 5. The People dimension was rated at the *as good as it could be* end of the scale, with a median rating across groups of 7. The people of Hagerman were perceived as good, friendly and helpful with good prevalent values, and good, friendly, helpful people. Negative justifications on this dimension included the instability of families, a loss of industries and lack of job opportunities, ethnic segregation, suffering businesses, low wages with increased poverty, and a poor community appearance. In terms of Jobs & Wealth -- one of three dimensions rated at the low end of the current situation rating scale -- both groups of forum participants perceived Hagerman as a community with a high level of commuting, income stratification ("great disparity between upper and lower levels of wealth"), poor job opportunities with low wages. The invited group added that there are no new industries or business coming in, decreasing local investment ("it's tough to compete with big, corporate chains"), increasing taxes, and a low level of wealth. The Place dimension was also oriented towards the lower, negative end of the scale. Negative justifications that influenced these median ratings were the decrease in number of farms and increased farm size, a poor downtown appearance, people shop elsewhere, and a poor or declining community appearance. In addition, the invited group added a reduction in farming due to water loss, a lack of transportation, greater aquifer depletion, a decline in sense of place and community pride, and an increase in drug use and crime as negative justifications for their ratings. Finally, in terms of Vision & Vitality, participants also perceived a negatively oriented dimension with a median rating across groups of 5. Negative justifications mentioned across groups included an insufficient or decreasing tax base, fiscal resources, and lack of political leadership. The invited and other group added that politics are dominated by special interests and one party, decreasing community characteristics related to water, an inability to cope with change, and lack of community involvement in community affairs as negative justifications for their ratings.

Participants generally perceived little or no impact to Hagerman under Pathway A1 (the existing situation on the Lower Snake River continued on into 2020), with median ratings across both groups generally being 0, except for the Jobs & Wealth dimension, which was rated as a -0.5. Group 2 medians differed from the invited group medians by no more than 1 rating scale point. Justifications given for these ratings were generally negative, with several reflecting the perception of little or no change. An aging population, increasing number of retirees, decreasing job opportunities, negative impacts due to flow augmentation, and community changes independent of waterway operations also were common justification across groups. Generally, ratings and justifications reflected slightly negative impacts under implementation of Pathway A2, due to continued flow augmentation and the negative impacts to people, economy, and place resulting from a lack of water for irrigated agriculture. There was also a consistent theme of little or no impacts under Pathway A2, with a continuation of current trends.

Participants perceived the implementation of Pathway A2b (major system modifications with elimination of flow augmentation to 0 acre-feet) as having little or no impact on Hagerman when using Pathway A2 as a rating baseline. Positive justifications focused on the increased availability of water to the Hagerman community and the positive impacts to irrigated agriculture that this would have in dry years. In contrast, there was little doubt that Pathway A2c was perceived to have major impacts on Hagerman. Participants perceived that the loss of additional Snake River water would result in a loss of an agriculturally based economy, decreasing job opportunities, decreasing property values, declining community character, and negative economic opportunities.

Participants at the Hagerman forum were also concerned about their community's future under Pathway A3 (dam breaching and natural river drawdown), with median ratings of its effects in 2020 indicating either minimal impacts or adverse ones. Major concerns included increases in utility costs, transportation costs and taxes, decreased irrigation, loss of power, decreasing job opportunities, and a decline in economy. Positive comments, which commonly came from the invited group, focused on a good community attitude, people changing for the better, and growth in the resource recreation and tourism industry with associated increases in jobs. Overall, the situation and perceptions of the community of Hagerman are not unlike those of other agricultural towns in the region. Given that agriculture has long been a keystone of the town's economy, it is not unexpected that the community's assessment of its situation reflected a stronger concern for the future of their community's agricultural base, and for the fate of that industry throughout the region, than support for efforts to recover salmon whose effectiveness is uncertain and that are perceived to have major economic and social consequences.

### **2.23.2 Interactive Community Forum Participants**

Twenty-one community members provided perspectives on the history, 1999 situation and Pathways A1, A2, and A3 for Hagerman and Bliss, Idaho. These forum participants sat at two facilitated groups (see methodology), working in interactive small groups (hereafter, "groups"). The overall diversity index rating for participants was 0.78 (on a scale from 0 to 1.0), which indicates that 11 of 14 pre-identified community roles were

present at the forum (see methodology). Of the total number of participants completing the sign-in questionnaire, 14 percent were in the agriculture industry, 14 percent were retired, and 10 percent were either in real estate or homemakers. The remaining 52 percent were employed in one of the following occupations: mayor, sex therapist, caretaker, aquaculture, nurse, engineer, logger, and historical society. Given that only two participants were from Bliss, they were asked to join a table with participants from Hagerman. The two facilitated tables were instructed to focus on the Hagerman-Bliss area in assessing perceived impacts of salmon recovery. Although at times it was clear that differences existed in the current situation for the two communities, they were more alike than different in their perceptions of these likely impacts.

The discussion in the rest of this section of the report focuses on the town of Hagerman, Idaho, given that nearly all of the participants at the forum held jointly for the towns of Hagerman and Bliss were residents of the town of Hagerman.

### **2.23.3 Community Background**

Hagerman is a town of over 800 people that is located in south central Idaho on the Snake River, 38 miles northeast of Twin Falls and 100 miles southeast of Boise. Bliss is a small hamlet of about 200 people located just off I-80, several miles north of Hagerman. Although residents of Bliss were contacted and invited to the forum, few people expressed any interest in the issue of salmon recovery, and only two residents of the town actually attended the forum. Consequently, this discussion focuses solely on Hagerman.

The town of Hagerman was established in 1892. Hagerman was originally the site of a stage coach stop along the Oregon Trail. The development of hydro-power in the region occurred with the establishment of Idaho Power Company facilities in the early 1900s. In 1930, the Federal fish hatchery was built, and in 1948 a state fish hatchery was established. After World War II, recreation became important to the area; and the golf course at Clear Lakes was improved. New industries arrived in the 1940s and 1950s with the growth of a pottery industry and the construction of Bowler Cottage. At about this time, the famous architect Frank Lloyd Wright designed a studio for artist Archie Boyd Theater, and this studio, which was placed on the National Register of Historic Places in 1984, became a popular attraction in the Hagerman Valley. The Hagerman Valley Historical Society was established in 1981. The 1980s brought two other new industries to Hagerman, Rose Creek Winery and vineyard and Flint's Greenhouse of Idaho, which supplies live plants to many of the large grocery stores and retail shops throughout the western U.S. In 1984, the sewer system was installed for future growth. In 1998 a bond levy for the high school was passed. The town has experienced a growth of almost 300 people over the past several decades, an increase of over 50 percent. The two major sectors of Hagerman's economy are agriculture (including agricultural services), which provides 30 percent of the town's employment, and Federal, state and local government (including the school district), which provides over 30 percent of the jobs in Hagerman. The town relies on and is known for its abundant supply of great trout fishing. Thousand Springs is located to the southeast of the town, with Bell Rapids Farming Project located above the Snake River to the west.

## 2.23.4 Community Assessment of 1999 Situation

### 2.23.4.1 1999 Situation: Community Dimensions and Rating Scale

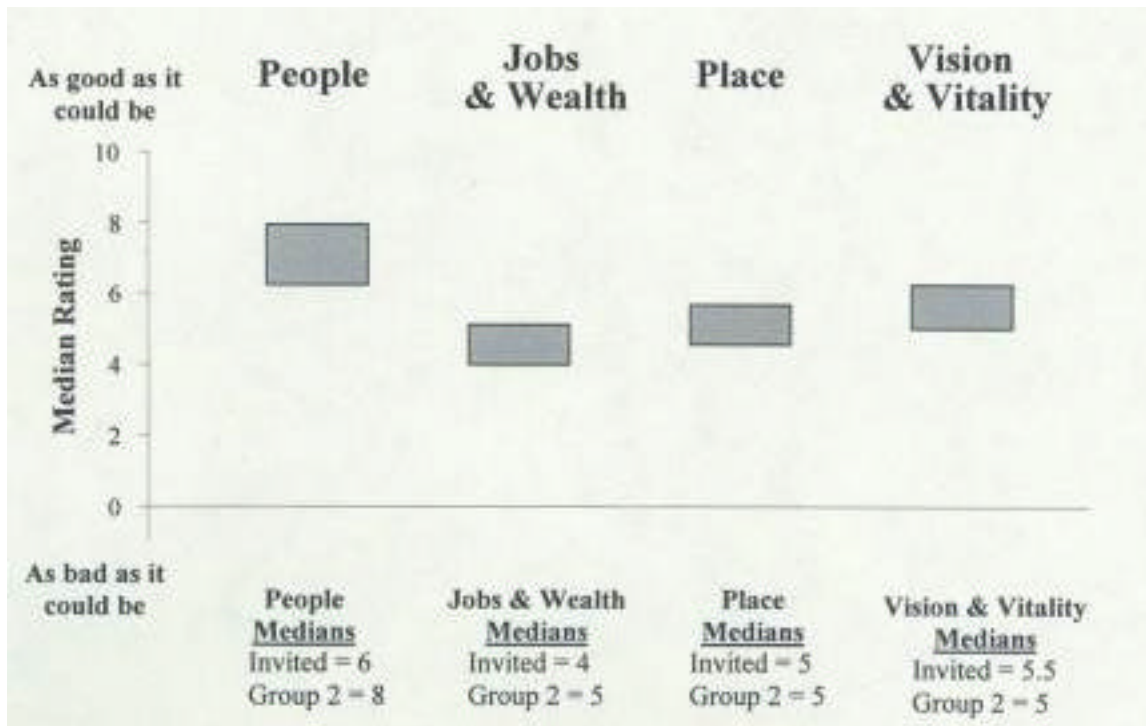
The following "current community situation" rating scale was used by participants from Hagerman to rate the current (1999) situation of the following four dimensions: 1) **People** -- Social Make-up; 2) **Jobs & Wealth** -- Economy; 3) **Place** -- Character; and 4) **Vision & Vitality** -- Organization and Leadership Capacity. Following a presentation of descriptive information about their community and a community timeline they developed (see above), forum participants were asked to rate the extent to which their community situation was good or bad on a 10-point scale for each of the four dimensions and to write justifications for each of their numerical ratings.

In 1999, the situation in my community is as **bad** as it could be      1   2   3   4   5   6   7   8   9   10      In 1999, the situation in my community is as **good** as it could be

### 2.23.4.2 1999 Situation: Ratings

As [Figure 2-13](#) presents, the median ratings on the current situation rating scale for the two groups at the forum ranged from a minimum of 4 on the Jobs & Wealth dimension, to a maximum of 8 on the People dimensions. Across both groups, the People dimension was perceived to be most oriented to the *as good as it could be* end of the scale with an overall median rating of 7. Alternatively, the Jobs & Wealth, Place, and Vision & Vitality dimensions were perceived to be neither great nor terrible, with overall median ratings of 5 in the middle of the scale.

In the case of Hagerman's individual community dimensions, the difference between the invited group's median score and that of the other facilitated group ranged from 0 to 2 rating points on the current (1999) situation rating scale. This clustering across all four dimensions indicates that both facilitated groups perceived these community dimensions in much the same way, except perhaps in the case of the People dimension.



**Figure 2-13. Median scale ratings of the current (1999) situation in Hagerman, Idaho, by community dimension, across groups**

#### 2.23.4.3 1999 Situation: Rating Justifications

Table 2-9 presents the clustering of justifications for the two facilitated groups. Justifications noted across the invited group and other groups are categorized as 'All Groups.' Justifications noted by only the invited group are categorized as 'Invited Group.' Finally, justifications noted by groups other than the invited one are categorized as 'Other Groups.'

##### **People**

The People dimension was the highest rated dimension, with an overall median rating of 7. Individual ratings ranged from 4 to 9 across both groups. [Table 2-9](#) presents the clustering of justifications across both groups illustrating that the situation for the People dimension was rated toward the *good as it could be* end of the scale. Key factors mentioned across both groups included the perception that Hagerman has good prevalent values and good, friendly, helpful people. The invited and other groups added strong schools, good extended families, a good community to live and raise a family, a willingness to support schools, and supportive of community activities as positive characteristics. Negative justifications mentioned included the instability of families, a loss of industries and lack of job opportunities, ethnic segregation, suffering businesses, low wages with increased poverty, and a poor community appearance.

### ***Jobs & Wealth***

The Jobs and Wealth dimension was one of three dimensions for which median ratings were in the middle of the scale, with group median ratings of 4 and 5, and individual responses ranging from 3 to 6 across both groups. Indicative of these ratings, there were no positive justifications clustered across both groups, yet high property values, good retirement community, stable job opportunities, and a stable economy were some positive justifications provided by the invited group or the other group. Both groups perceived Hagerman as a community with a high level of commuting, income stratification ("great disparity between upper and lower levels of wealth"), and poor job opportunities with low wages. The invited group added that there are no new industries or business coming in, decreasing local investment ("it's tough to compete with big, corporate chains"), increasing taxes, and a low level of wealth (see [Table 2-9](#)).

### ***Place***

The Place dimension received a median rating of 5 across both groups. Individuals' responses ranged from 1 to 8 across the two groups. Positive justifications mentioned across both groups included a good or improving community appearance, low traffic congestion, good air and water quality, safe and crime free community, a strong sense of place and heritage, good schools, and good parks and open spaces. The invited group added the perception of decreasing store vacancies, good climate, and a close proximity to outdoor recreation activities including access to the Snake River. Negative comments that may have detracted from median ratings were the decreased number of farms and increased farm size, a poor downtown appearance, people shop elsewhere, and a poor or declining community appearance. As negative justifications for their ratings, the invited group added a reduction in farming due to water loss, a lack of transportation, greater aquifer depletion, a decline in sense of place and community pride, and an increase in drug use and crime.

### ***Vision & Vitality***

The Vision and Vitality dimension received a group median rating of 5. Individual responses ranged from 3 to 7 across all participants. Positive justifications mentioned across both groups included strong, active civic organizational capacity, numerous and varied social activities, and a friendly sociable community. The invited and other group added strong political leadership, good community services, support for bonds and levies, and improving and good schools as positive justifications for their ratings. Negative justifications mentioned across groups included an insufficient or decreasing tax base and fiscal resources and lack of political leadership. The invited or other group added that politics are dominated by special interests and one party, decreasing community characteristics related to water, an inability to cope with change, and lack of community involvement in community affairs as negative justifications for their ratings (see [Table 2-9](#)).

**Table 2-9  
Rating Justifications for the Current (1999) Situation  
In Hagerman, Idaho,  
By Community Dimension and Type of Group**

Dimension	Replication Across All Groups	Invited Group	Other Groups
<b>People</b>			
Positive	Good prevalent values (61)	Good extended families (101)	Supportive of community activities and involved (241)
	Good, friendly, helpful people (201)	Strong schools/education (81)	
	Stability of community (general) (323)	Willingness to support schools/education (91)	
		Good community to live and raise a family (424)	
Negative		Families are becoming less stable (102)	
		Loss of industries and lack of job opportunities (492)	
		Businesses suffer (512)	
		Low/decreased income and wages with increased poverty (534)	
		Poor community appearance (412)	
		Ethnic/class segregation (308)	
		No change in people/little/no impact (313)	
Other	Aging population (2)	People will change (314)	
	Growth (general) (49)	Change (general) (318)	
	Customs and lifestyles (general) (59)	Age structure (1)	
		Increasing number of retirees (21)	
		Increasing/high population (41)	
		Decreasing/low population (42)	
		Prevalent values (general) (69)	
		Bedroom community/commuters (422)	

<b>Jobs and Wealth</b>			
Positive		Good retirement area, retirement community (217)	Stable job opportunities/employment (8)
			Stable economy (155)
Negative	Poor job opportunities (3)	Decreasing local investment (58)	
	Low paying jobs (31)	Increasing/higher taxes (74)	
	Money leaves (51)	Declining/limited business and shops (136)	
	High commuting (66)	No new industries/businesses (140)	
	Income stratification within the community (179)	Fixed income, retirement income (152)	
	Some poverty/level of low-income families (186)		
Other		Government-based economy (145)	
		Commuting (general) (61)	
		High property values (198)	
		Agricultural/food processing-based economy (143)	
		Low wealth (177)	
<b>Place</b>			
Positive	Good/improving community appearance (511)	Good climate (772)	
	Good parks and open spaces, public lands (667)	Decreasing store vacancies/new shops coming in (530)	
	Strong sense of place/heritage/morale and community (670)	Close proximity to outdoor recreation opportunities (662)	
	Good air and water quality (780)		
	Safe and crime free (902)		
	Good schools (563)		
	Low traffic congestion (599)		
Negative	Decreased number of farms and increased farm size, absentee owners, corporate farms (653)	Reduction in agriculture due to water loss (643)	
	Poor/declining community appearance (513)	Decline in sense of place and community pride (672)	
	Struggling businesses and vacant storefronts (520)	Decline in farming (654)	
	People shop elsewhere due to lack of businesses/not spending money here (522)	Increasing crime and drug use/less safety (903)	



Negative	Poor downtown/business appearance (524)	Greater use of aquifer/depletion of water due to demand (617)	
	Poor air and water quality (782)	Appearance needs improvement (516)	
		Lack of public transportation/needs improvements (608)	
		Poor/decreasing social services (570)	
Other		Importance of river for recreation (674)	
		Continued river development (766)	
		Changing community character (578)	
		Increasing population (821)	
		Roads, highways, general (625)	
<b>Vision and Vitality</b>			
Positive	Strong, active civic organizational capacity (11)	Strong, active civic leadership (41)	Improving/good schools (811)
	Friendly, sociable community (305)	Positive/increasing community characteristics (541)	
	Strong, cohesive community (341)	Strong, high level of community participation (work together) (561)	
	Numerous, varied, good, or improving social activities (301)	Good community services (861)	
		Strong, active, astute political leadership (81)	
		Confident, caring leaders (141)	
		Support for bonds and levies (181)	
Negative	Poor, lack of political leadership (82)	Politics dominated by special interests/one party system (84)	Diminished civic organizational capacity (12)
	Insufficient/decreasing tax base/fiscal resources (202)	Do not cope well with or resist change (362)	
		Not prepared for the future (382)	
		Overwhelmed, poor leaders (142)	
		Negative/decreasing community characteristics related to water (308)	

Negative	Lack of community involvement in community affairs (562)		
	Limited resources and conflict in leadership (146)		
	Negative impacts on agriculture and land tenure (544)		
Other	Impacts of changing demographics (886)	Static/stable leadership (144)	
		Civic organizations (general) (10)	
		Economic base will change (726)	

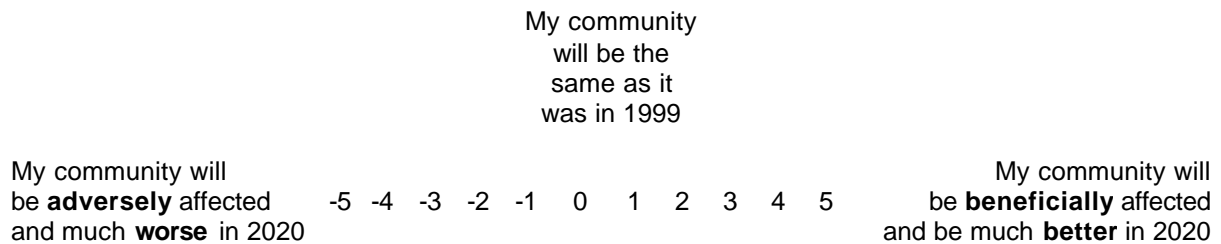
## 2.23.5 Comparison of Salmon Recovery Pathways A1 to A3

### 2.23.5.1 Community Dimension Impact Rating Scale

Forum participants were asked to assess how their community would be impacted in the year 2020 by implementation of the three salmon recovery pathways proposed by the U.S. Army Corps of Engineers to return juvenile salmon to the Lower Snake River. Pathway A1 was to maintain the existing Lower Snake River System, A2 was to make major modifications to the existing Lower Snake River System, and A3 was natural river drawdown and dam breaching. Supplementing Pathway A2, A2b involved the elimination of flow augmentation (from the current 427,000 acre-feet to 0 acre-feet), while A2c involved increasing flow augmentation (by 1 million acre-feet) into the Snake River system.

A second rating scale was used by forum participants to indicate the situation for each of the four community dimensions (*People, Jobs & Wealth, Place, and Vision & Vitality*) in terms of how adversely or beneficially they felt their community would be impacted in the year 2020. In thinking about the future, participants were asked to consider all of the normal changes that are likely to occur in their community over time, along with specific changes they would expect to result from a pathway. To provide a basis for thinking about their community's future situation, forum participants received information from Corps and NMFS' studies specific to their community for each pathway. Information provided to participants included salmon recovery probabilities, physical changes, and economic changes. (For more information on the information presented and their sources, see [Appendix A](#).) Community members then gave an initial rating of the impacts on their community in the year 2020 for each dimension. After a facilitated group discussion of how and why their community would be affected or not affected, participants re-rated the community dimensions and listed their justifications.

To ground the rating scale in reality, forum participants were instructed to use their community's 1999 situation, which they had just rated and described for each dimension, as the mid-point (0) of the scale from which to determine the magnitude of adverse (negative) or beneficial (positive) effects to their community. Participants were specifically instructed to focus on adverse and beneficial impacts only on their community and not on the entire region.



### 2.23.5.2 Summary of Findings on Pathways A1 to A3

[Figure 2-14](#) illustrates that, across the two facilitated groups, forum participants generally perceived that the situation for their community would not be affected, or only slightly negatively affected in the year 2020 when considering all four community dimensions under Pathways A1, A2, and A3. Under Pathway A1, the median rating across both groups was 0 for the People, Place, and Vision & Vitality dimensions, and -0.5 for the Jobs & Wealth dimension. Under Pathway A2, the median rating across both groups was -1 for the People, Jobs & Wealth, and Place dimensions, and 0 for the Vision & Vitality. Under Pathway A3, the median rating across both groups was -1 for the People and Jobs & Wealth dimensions, 0 for the Place dimension, and -0.5 for the Vision & Vitality dimension.

Group medians under Pathways A1, A2, and A3 deviated by no more than 1 rating scale point across all dimensions, except under Place for A2 and People for A3. This consistency in median ratings suggests relative agreement across both groups concerning the impacts of these three pathways on the community of Hagerman across all four dimensions. Participants perceived that Pathways A1, A2 and A3 would either impact Hagerman and Bliss slightly negatively or not at all.

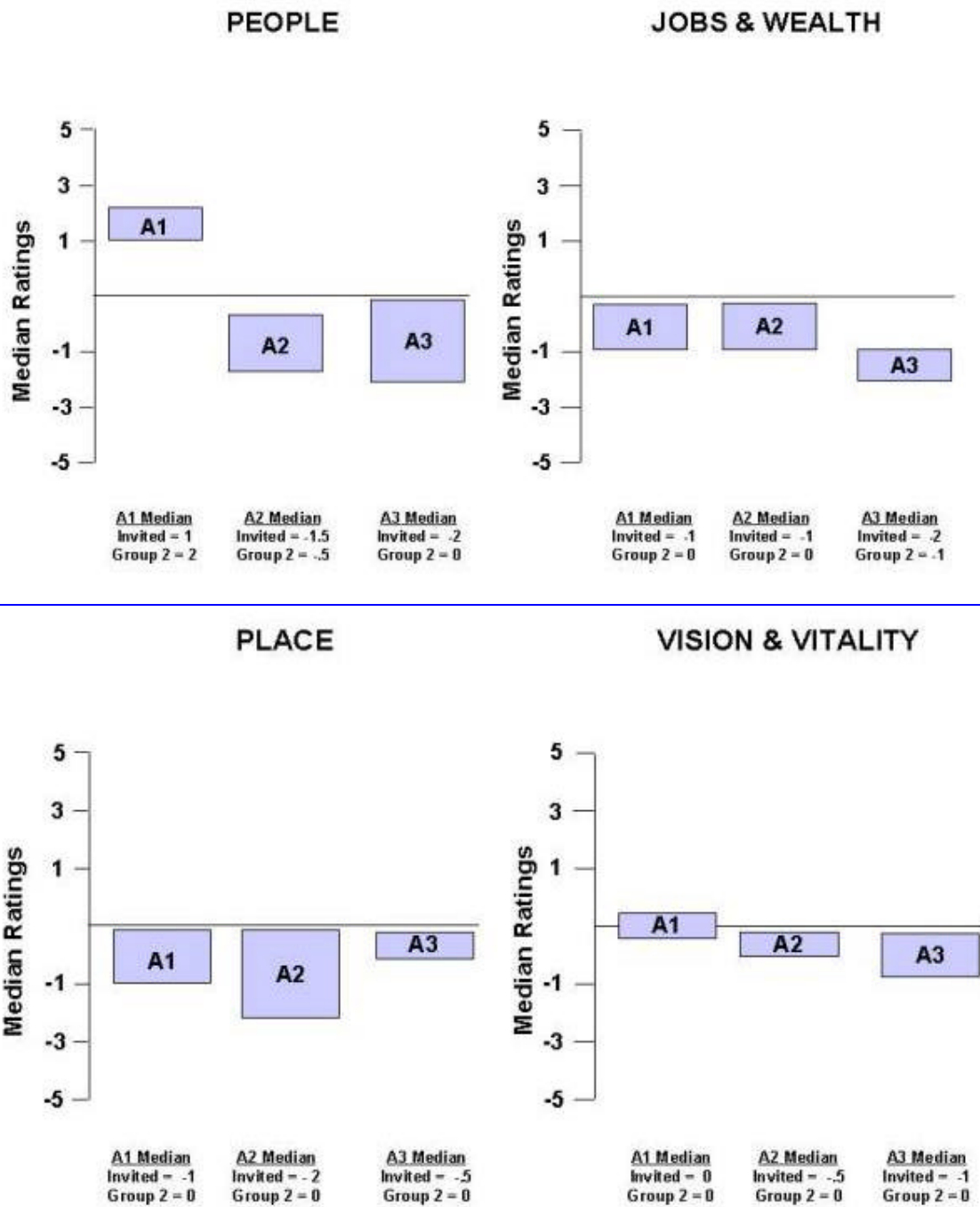


Figure 2-14. Median scale ratings of Pathways A1, A2, and A3, for Hagerman, Idaho, by community dimension, across groups

### **2.23.5.3 Rating Justifications Across Pathways A1, A2 and A3**

In the analysis of A1, the "no action" pathway, a process similar to that for the 1999 current situation was followed to examine participants' perceptions of likely future changes to the community in 2020. The premise for the scenario was that the river system would remain unchanged but other social, economic, and cultural trends would continue on their current trajectory, as perceived by forum participants. Both numerical scores and the reasons and changes underlying them were examined. Pathway A1 was treated as the base-case, and the results for this pathway provided the basis for assessing the impact of both A2 ("major modification") and A3 ("natural river drawdown and dam breaching"): A2 and A3 were analyzed to identify changes of clustered numerical ratings and qualitative justifications from the baseline forecasts under A1.

### **2.23.5.4 Pathway A1**

#### ***People***

In the case of the People Dimension under Pathway A1, median ratings across both groups were 0, no real change from the 1999 situation. Individual responses across all forum participants ranged from -5 to 3. As presented in [Table 2-10](#), justifications mentioned across both groups were that Hagerman would experience an aging population, an increasing number of retirees, a decreasing or low population, or little or no change with current trends continuing. The invited and other groups added that people would change for the worse, there would be a loss or change in recreation opportunities, declining fish populations, and a loss of industries and job opportunities. A positive comment from the invited group that may have increased ratings was that the people of the community would change for the better.

#### ***Jobs & Wealth***

For the Jobs & Wealth dimension, median ratings for A1 ranged from a -1 to 0 across both groups, with an invited group median of 0. Individual responses ranged from -5 to 1 across all forum participants. The justifications mentioned across both groups included decreasing job opportunities, and the perception of no change under Pathway A1. The invited and other group added the expectation of low paying jobs, negative impacts to farming in dry years, declining or limited shops and businesses, loss of the fishery, people leaving, and that Pathway A1 does not "benefit the community one way or another" or "fix a thing." Positive comments from the invited group that may have increased ratings included the expectation of increasing job opportunities, a strong growing economy, and a good retirement community (see [Table 2-10](#)).

**Place**

For the Place dimension, median ratings under A1 ranged from a -1 to 0 across both groups, with an invited group median of -1. Individual responses ranged from -5 to 1 across all forum participants. As [Table 2.23](#) shows, the justifications given across both groups included negative impacts associated with a reduction in water on springs and reservoirs, loss of environmental beauty, or no change at all. The invited and other groups added the expectation of declining community character, loss of tourism, loss of recreation opportunities, poor air and water quality, and changes independent of the waterway system.

**Vision & Vitality**

For the Vision & Vitality dimension, the median rating across both groups was 0 under A1. Individual responses ranged from -5 to 3 across all forum participants. Among justifications given in [Table 2-10](#) for their ratings, both groups perceived there to be no change in Vision & Vitality under Pathway A1. The invited group added both positive and negative justifications for their ratings. They expected there would be adequate and improving leadership, civic organizational capacity, positive economic opportunities, and an increasing population with associated improvements. In contrast, they also expected a lack of support for bonds and levies, negative economic opportunities, decreasing or lack of community vision and vitality, and impacts related to increased utility costs.

<b>Table 2-10</b> <b>Comparison of Rating Justifications For Pathways A1, A2, and A3</b> <b>For Hagerman, Idaho,</b> <b>By Community Dimension and Type of Group</b>					
Year 2020 Rating Justifications	Pathway 1 Existing Condition	Pathway 2 System Modification	Pathway 2b 0 Flow Augmentation	Pathway 2c 1.427 Flow Augmentation	Pathway 3 Drawdown
<b>People</b>					
Across All Groups	Aging population (2)	No change in people/little/no impact (313)	Current trends will continue/little/no impact (325)	Decreasing/low population (42)	Negative impacts (general) (322)
	Increasing number of retirees (21)	Current trends will continue/little/no impact (325)	Increased utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)	Decrease/loss of agricultural-based economy (503)	Increased utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)
	Decreasing/low population (42)	Increased utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)		Decrease in water availability (604)	

Across All Groups	No change in people/little/no impact (313)				
	Current trends will continue/little/no impact (325)				
Invited Groups	Increasing/high population (41)	Decreasing/low population (42)	Negative impacts (general) (322)	Decreasing people own homes/few people own homes (152)	Decreasing/low population (42)
	People changing for better/positive change (311)	Social fabric/relations deteriorate (199)	Do not know/no comment (people) (560)	Negative impacts (general) (322)	Low/decreasing home/property values (161)
	Strong sense of spirit and pride in community (211)	People will change (314)	More water (positive) (608)	Growth in recreation and tourism opportunities (443)	Good community attitude (221)
	Loss/change in recreation and tourism opportunities (442)	Negative impacts (general) (322)	Aquifer recharged (positive) (610)	Increase utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)	Decreasing/low tax base (527)
	Declining fish populations/listed (462)	High/increasing cost of living (455)		Low/decreased income and wages with increased poverty (534)	High/increasing taxes (528)
	Loss of industries and lack of job opportunities (492)	Water (general) (600)		Unstable/poor/decreasing economy (542)	Low/decreased income and wages with increased poverty (534)
	Decrease/loss of agricultural-based economy (503)	Decrease in water availability (604)		Good/increased economic opportunity (544)	Unstable/poor/decreasing economy (542)
	Greater draw from aquifer/depletion (602)	Decrease in water quality (607)		Do not know/no comment (people) (560)	Decrease in water availability (604)
		Unstable/poor/decreasing economy (542)		Water (general) (600)	
				Aquifer recharged (positive) (610)	
				Increase in water quality (613)	

Other Groups	People changing for worse/negative change (312)	Don't believe the science - Economics (999)	No change in people/little/no impact (313)		People changing for better/positive change (311)
			Declining fish populations/listed (462)		No change in people/little/no impact (313)
			Growth of businesses/good diverse strong economy (541)		
<b>Jobs and Wealth</b>					
Across All Groups	Decreasing job opportunities (general) (18)	Increasing utility costs (73)	Increase in irrigation/more water for irrigation (107)	Bad for irrigation farming (no water in dry years) (69)	Decreasing job opportunities (general) (18)
	Same/no change (245)/TD	Same/no change (245)	Resource tourism and recreation growth (126)	Shrinking agriculture, mining, timber base (135)	Increasing utility costs (73)
				Declining economy (162)	Increased cost of living (85)
					Increased costs of doing business (88)
					Resource tourism and amenity recreation growth (126)
					Declining economy (162)
Invited Groups	Increasing job opportunities (general) (10)	Increasing job opportunities (general) (10)	Increasing agricultural jobs (11)	Jobs becoming more service oriented (41)	Decreasing agricultural jobs (22)
	Low paying jobs (31)	Decreasing job opportunities (general) (18)	Increasing utility costs (73)	Ripple effect in community and all dimensions (93)	Increased tourist and recreation-related jobs (38)
	Bad for irrigating farming (no water in dry years) (69)	Increased pumping costs (20)	Increased fishing/maintenance of fishery and fish (129)	Loss of recreation and tourism-related business (134)	Increasing/higher taxes (74)
	Declining/limited business and shops (136)	Less water in aquifer reduces farming (110)	Strong/growing economy (157)	Decreasing property values (202)	Increasing transportation costs (75)
	Loss of fishery (138)	Decreasing wealth (181)	Same/no change (245)	Weak infrastructure and infrastructure planning (231)	Declining/limited business and shops (136)
	Strong/growing economy (157)	Pathway 2 does not benefit fish or people (246)	Do not know (248)	Uncertainty causes problems (242)	Decreasing wealth (181)



Invited Groups	Good retirement area, retirement community (217)			Do not know (248)	Decreasing poverty (187)
	People will leave (206)			Will be better (955)	Same/no change (245)
Other Groups	Will not help (958)		Increasing job opportunities (general) (10)	Increasing job opportunities (general) (10)	
<b>Place</b>					
Across All Groups	Negative impact of reduction in water on springs/recharging/reservoirs (619)	Increase power rates (594)	Positive impact of increased water on stream flows/springs (596)	Importance of water to community (618)	Increase in tourism (663)
	Loss of environmental beauty, rivers, scenery (777)	Negative impact of reduction in water on springs/recharging/reservoirs (619)	Maintain status quo, no change (841)	Economic decline/loss of economic diversity (733)	Community improvements are dependent on economy (753)
	Maintain status quo, no change (841)	Poor air and water quality (782)			No negative changes, little impact (849)
		Maintain status quo, no change (841)			
		No negative changes, little impact (849)			
Invited Groups	Community character is poor/declining (577)	Poor/loss of recreation and tourism opportunities (666)	Increased power rates (594)	Greater use of aquifer/depletion of water due to demand (617)	Struggling businesses and vacant storefronts (520)
	Loss of tourism (664)	Decline in sense of place and community pride (672)	Economic growth and stability (731)	Decline in farming (654)	No money for community improvements (567)
	Poor/loss of recreation and tourism opportunities (666)	Costs more than Pathway #1 with no benefit (923)	Good air and water quality (780)	Poor/loss of recreation and tourism opportunities (666)	Increased power rates (594)
	Poor air and water quality (782)		Community improvements, general (845)	Loss of environmental beauty, rivers, scenery (777)	Decline in farming (654)
			Mix of positive and negative impacts (847)	Increasing population (821)	Good irrigation systems and wells, maintenance of irrigation systems (657)

Invited Groups				Maintain status quo, no change (841)	Declining values and spirit, more stress (677)
				Mix of positive and negative impacts (847)	Community growth and improvement (general) (721)
				Emotional or other comments on the process (999)	Negative economic impact from increased transportation costs (741)
					Recreation/tourism not affected (834)
					Decline in property values and tax base (882)
					Ripple effect (913)
Other Groups	Other community changes independent of waterway operations (842)			Decreased wildlife and fish (802)	Maintain status quo, no change (841)
				Ruin of community, complete negative community change (844)	
<b>Vision and Vitality</b>					
Across All Groups	No change (673)	Negative impacts on vision and vitality related to water (663)	No change (673)	Negative/decreasing community characteristics related to water (308)	
		No change (673)		Negative impacts on agriculture and land tenure (544)	
		Impacts related to increased utility rates (750)		Negative economic opportunities (582)	
Invited Groups	Adequate, stable, civic organizational capacity (13)	Adequate, stable, civic organizational capacity (13)	Prepared for the future (381)	Negative/decreasing community characteristics (542)	Strong, active civic organizational capacity (11)
	Active, strong leadership (121)	Insufficient/decreasing tax base/fiscal resources (202)	Strong/increasing community vision and vitality (601)	Economic factors decreasing vision and vitality (583)	Civic organization decline (population decline/financial stress) (14)
	Leadership improvement (125)	Reduced, pessimistic visions of the future (384)	Positive impacts on vision and vitality related to water (604)	Don't know/no comment (998)	Negative/decreasing community characteristics (542)

Invited Groups	Lack of support and ability to pass bonds and levies (182)	Negative impacts on agriculture and land tenure (544)	Water-related uncertainty (666)		Negative economic opportunities (582)
	Insufficient/decreasing tax base/fiscal resources (202)	Negative economic opportunities (582)	Impacts related to increased utility rates (750)		Strong/increasing community vision and vitality (601)
	Positive economic opportunities (581)	Decreasing/lack of community vision and vitality (602)			Decreasing/lack of community vision and vitality (602)
	Negative economic opportunities (582)	Community growth (605)			Increased costs related to modifications (702)
	Decreasing/lack of community vision and vitality (602)				Increasing quality of life (841)
	Impacts related to increased utility rates (750)				Impacts of changing demographics (886)
	Increased population and related improvements (891)				
Other Groups					No change (673)

### 2.23.5.5 Comparison of Pathway A1 to A2

In general, the community perceived that under Pathway A2, Hagerman would be either negatively affected or not affected at all. The median rating across both groups was -1 for the People, Jobs & Wealth, and Place dimensions and 0 for the Vision & Vitality dimensions. The invited group medians indicate relative agreement that the community would be affected negatively. Group 2 medians, however, indicate that the community would not be affected except for the People dimension which would be affected by -0.5 rating scale points (see Figure 2-14). These results are generally consistent with the median ratings for Pathway A1 with the exception, that at times, Pathway A2 was rated slightly lower. Justifications mentioned across groups leading to these median ratings included decreased irrigation, increasing utility costs, negative impacts to vision & vitality associated with water availability, and no change or maintenance of the status quo. Justifications added only by the invited group that may have increased ratings included increasing job opportunities and adequate or stable civic organizational capacity.

### 2.23.5.5.1 Comparison of Pathway A2 to A2b and A2c

Under the implementation of Pathway A2b (major system modifications with elimination of flow augmentation to 0 acre-feet), the group medians across both groups for three out of four dimensions indicate that Hagerman and Bliss would not be affected when using Pathway A2 as a baseline indicator (see [Figure 2-14](#)). The median for the People, Place, and Vision & Vitality dimensions across groups was 0, indicating that the impacts would not be significantly different than those indicated under Pathway A2. For the Jobs & Wealth dimension, however, the median rating of positive 1 across groups indicates that participants perceive beneficial affects under this pathway. Justifications mentioned across groups for the Jobs & wealth dimension included an increase in irrigation due to the availability of more water and growth in the resource tourism and amenity recreation industry. The invited and other groups added the expectation of increasing agricultural jobs, increasing fishing opportunities, maintenance of fisheries, a strong and growing economy, or little or no change at all. Individual ratings deviated significantly across dimensions ranging from -5 to 4 indicating a wide variation in individual perceptions of potential impacts. Justifications across both groups and across all four dimensions, however, focused on the availability of more water to the community, which may have raised participants' ratings for this pathway.

Under the implementation of Pathway A2c (major system modifications with increase in flow augmentation to 1.4 million acre-feet), the community generally perceived negative impacts across all four dimensions. Median ratings across both groups were -4 for the People and Vision 7 vitality dimensions, -5 for the Jobs & Wealth dimension, and -4.5 for the Place dimension. Group 2 medians deviated from the invited group median by no more than 1 rating scale point (see [Figure 2-15](#)). Individual ratings, however, varied widely, ranging from a minimum of -5 to a maximum of 2. Despite this variation, group medians indicate that Hagerman and Bliss would be negatively affected under implementation of Pathway A2c. Negative justifications given across both groups included a decrease or loss of the agricultural based economy, a decrease in water availability, a decreasing or low population, negative impacts to farming during dry years, an emphasis on the importance of water to the community, a decrease or loss of community characteristics related to water, and economic factors decreasing vision and vitality. There was little doubt among participants that this pathway would "be negative to all phases of this community."

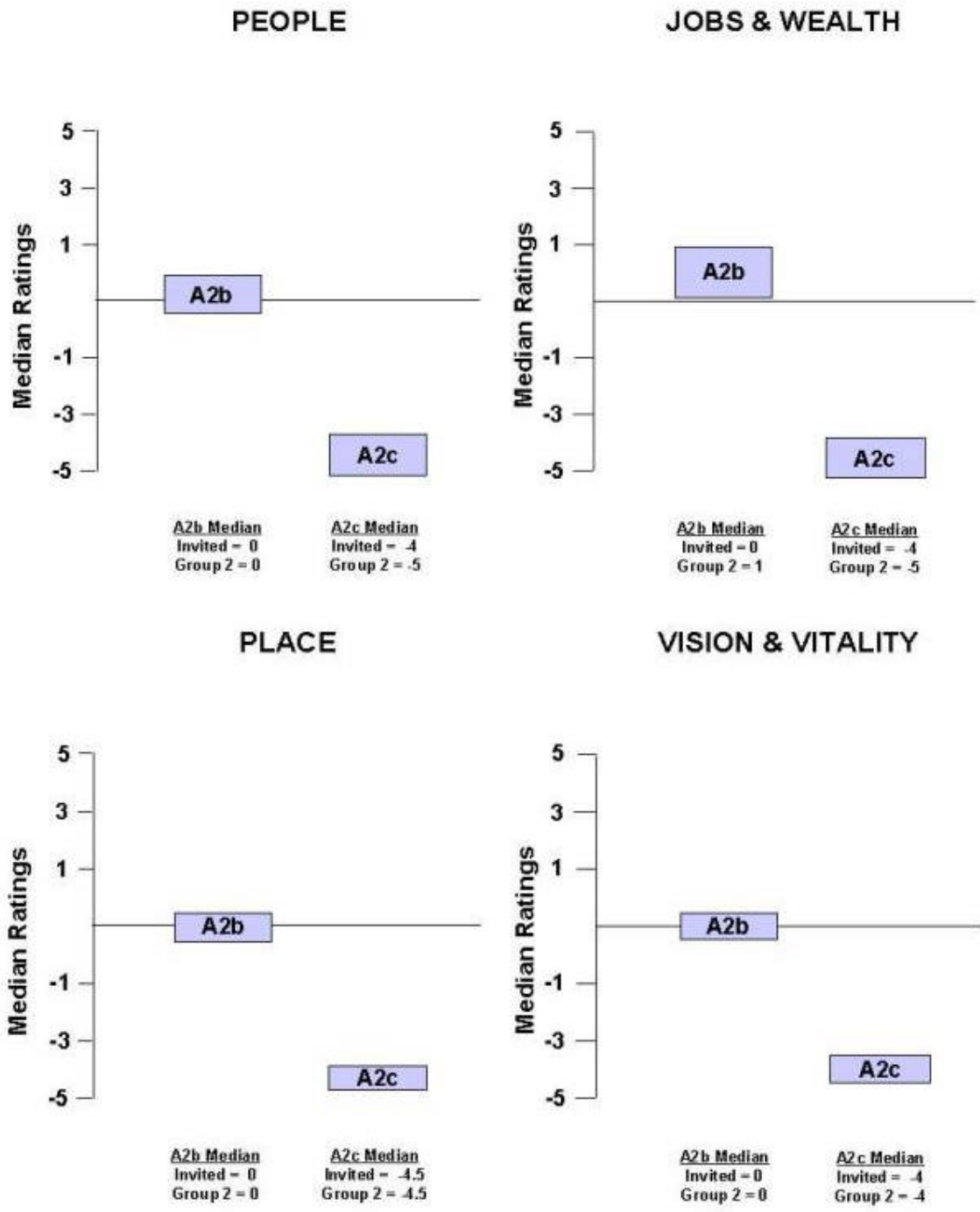


Figure 2-15. Median scale ratings by Pathways A2b and A2c, for Hagerman Idaho, by community dimension, across groups

### **2.23.5.6 Comparison of Pathway A3 to A1**

The median group ratings for A3 indicated a perception by participants that Hagerman and Bliss would either not be affected by this pathway or be affected slightly in a negative manner. The median rating for the People and Jobs & Wealth dimensions was -1. The median rating for the Place dimension was 0 and for the Vision & Vitality dimension was -0.5. Group 2 medians differed by no more than two rating scale points. Individual ratings, however, varied widely and ranged from a minimum of -5 to a maximum of 5 across all four dimensions. Group medians indicate that generally, the invited group perceived negative impacts under Pathway A3 implementation while group 2 perceived little or no impact.

#### ***People***

Individual ratings ranged from -5 to 5 across all forum participants with a median rating across all groups of positive -1. Justifications across all groups included increased utility costs, transportation costs and taxes, and decreased irrigation and loss of power. The invited and other groups added the expectation of a decreasing or low population, low or decreasing property values, a decreasing or low tax base, low or decreasing wages, increasing poverty, a decreasing economy, and a decrease in water availability. Positive justifications that may have increased participants' ratings included the expectation of a good community attitude and people changing for the better (see [Table 2-10](#)).

#### ***Jobs & Wealth***

Individual responses ranged from -5 to 5 across all forum participants with a median rating across groups of -1. Justifications provided by all groups for this negative median rating included decreasing job opportunities, increasing utility costs, increased cost of living, increased cost of doing business, and a declining economy. The invited and other groups added the expectation of decreasing agricultural jobs, increasing taxes, increasing transportation costs, declining businesses and shops, decreasing wealth, increasing poverty, or no change at all. Positive justifications included the expectation of growth in resource tourism and amenity recreation and associated jobs (see [Table 2-10](#)).

#### ***Place***

For the Place dimension of Hagerman and Bliss, individual responses ranged from -5 to 5 across all forum participants with a median rating across groups of 0. Justification across groups included an increase in tourism and the dependence of community improvements on the economy. The invited and other groups added the expectation of struggling businesses and vacant store fronts, no money for community improvements, increasing power rates, a decline in farming, good irrigation wells and systems, general community growth and improvement, or no change at all (see [Table 2-10](#)).

### ***Vision & Vitality***

For the Vision & Vitality dimension, individual responses ranged from -5 to 5 across all forum participants with an across group median rating of -0.5. Justifications occurring across all groups included negative community characteristics related to water, negative impacts on agriculture and land tenure, and negative economic activities. The invited and other groups added the expectation of civic organization decline, negative community characteristics related to water, negative economic opportunities, a lack of community vision and vitality, increased costs related to modifications, impacts of changing demographics, or no change at all. Positive justifications that may have raised participants' ratings included strong and active civic organizational capacity, strong or increasing community vision and vitality, and increasing quality of life (see [Table 2-10](#)).

### **2.23.6 Minimizing Adverse Impacts**

No suggestions for lessening the adverse impacts of the pathways were recorded for the community of Hagerman, Idaho.

## **2.24 Homedale, Idaho, Community Assessment**

### **2.24.1 Summary of Key Findings**

Homedale, a small farming community with a population of about 2,200 residents, is located on the Snake River in western Idaho, approximately 45 miles east of Boise, in the northwestern corner of Owyhee County. From the 1950s to the 1960s, farm sizes shifted from smaller (40-80 acres) to larger ones, a trend that has continued until the present. Currently, fewer farming families live in the area, and retirees are moving in, and residential development is increasing. At this same time, land production is increasing.

Participants in the forum at Homedale depicted a town in 1999 whose current situation varied considerably in its ratings of the People, Place and Vision & Vitality dimensions by individual participants, yet the median group ratings were relatively positive. Forum participants rated Homedale as an "above average community:" the people, "most of whom are active in community development," are stable and have good family values. Although the town's population is increasing and extended families are rooted in the community, Homedale is losing its younger population because of limited employment opportunities in town, and families increasingly need public assistance to make ends meet. While participants noted the prevalence of vacant storefronts and the need to better maintain downtown and residential areas, the Place dimension was considered positive in terms of excellent social services, good schools, and lack of traffic congestion. Increased farm subdivisions worry participants, who described Homedale as an agricultural community with beautiful scenery and good air and water quality. In terms of Vision & Vitality, community residents were reported to be cohesive, friendly, involved in the school, and willing to participate in a variety of social activities.

Nonetheless, long-term development plans to ensure a high quality future for Homedale are lacking. The median group rating for the Jobs & Wealth dimension was the lowest of those reported for the four dimensions, yet it was still in the mid-range of the rating scale (a 5, neither particularly good nor bad). Participants mentioned that Homedale was "a good place to live but not make a living," having few high-paying, full-time employment opportunities. Although high poverty rates, a lack of fiscal resources, and the need to commute to neighboring towns to find work were negative aspects of the economic situation, property values, taxes, and utility rates were favored more positively.

Participants were optimistic about Homedale's future under Pathway A1 (the existing situation on the Lower Snake River continued on into 2020), with ratings of its effects falling on the positive, *beneficially affected* end of the scale for all four dimensions. Participants generally forecasted improvements and growth in all dimensions ("Homedale grows where water flows"), with a main concern being future water shortages due to increased community growth ("we'll need more water for more homes, not the same as in 1999").

Participants perceived little impact under Pathway A2 (major system modifications) compared to A1 for the People and Jobs & Wealth dimensions, while ratings for both the Place and Vision & Vitality dimensions improved slightly. Improvements in all aspects of community life were deemed to be dependent on continued water availability, although increased utility rates were perceived to detract from the town's Jobs & Wealth. Ratings and justifications for A2b (major system modifications with the elimination of flow augmentation to 0 acre-feet) were much the same as for A2, though slightly higher for each of the dimensions. Positive ratings and justifications focused on increased water availability, which would help improve the area's farm economy, increase job opportunities in farming and recreation, and also help sustain current projections of community growth. In sharp contrast, participants were very concerned about their community's future under Pathway A2c (major system modifications with increase in flow augmentation to 1.4 million acre-feet), with ratings of its affects in 2020 at the extreme negative, *adversely affected*, of the scale. It was also the most consistently negatively rated pathway by the forum participants. Participants characterized a community adversely impacted by population losses, decreased farming, and the loss recreation-related income. Under A2c, "depression and hopelessness would take hold" of the community.

Participants were also very concerned about their community's future under Pathway A3 (natural river drawdown and dam breaching). Median ratings and justifications were at the negative, *adversely affected*, end of the scale for all dimensions, although individual responses varied considerably. Major concerns included increased costs of transportation, pumping, and utility costs, along with a general increased cost of living.



While recreation was perceived to be impacted under the implementation of A3, participants were divided in terms of whether the impact would be negative or positive. "More Homedale people would go salmon fishing," noted one, while another commented that the community could "advertise more honestly as a recreation paradise" -- in contrast, still another participant suggested that "...loss of water in our reservoir could change recreation," presumably, for the worse.

Participants offered several suggestions for minimizing the negative impacts to the community of Homedale. These included subsidizing power losses so that they would not be passed onto consumers, capturing more winter water for irrigation and power, and compensating farmer for the loss of irrigated land. Overall, the situation and perceptions of the community of Homedale are not unlike those of other agricultural towns in the region. Given that agriculture has long been the keystone of the town's economy, it is not unexpected that the community's assessment of its situation reflected a stronger concern for the future of their community's agricultural base, and for the fate of that industry throughout the region, than support for efforts to recover salmon whose effectiveness is uncertain and that are perceived to have major economic and social consequences.

#### **2.24.2 Interactive Community Forum Participants**

Nine community members provided perspectives on the history, 1999 situation and Pathways A1, A2, A2b, A2c, and A3 for Homedale, Idaho. These forum participants sat at one facilitated table (see methodology), working in an interactive small group (hereafter, "group"). The overall diversity index rating for participants was 0.64 (on a scale from 0 to 1.0), indicating that 9 of 14 pre-identified community roles were present at the forum (see methodology). Of the total number of participants completing the sign-in questionnaire, 44 percent were retired and 22 percent worked in the agriculture sector. The remaining two participants were employed as an insurance agent and a school superintendent.

#### **2.24.3 Community Background**

Homedale, a small farming community of about 2,200 in population, is located on the Snake River in western Idaho, approximately 45 miles east of Boise, in the northwestern corner of Owyhee County. The town of Homedale was founded in 1912 and, by the 1960s, the town's population had exceeded 1,000. From the 1950s to the 1960s, the size of farms shifted from smaller acreages (40-80 acres) to bigger ones, a trend that continues today as fewer farming families live in the area and more retirees migrate in. This period also brought an increase of Hispanic migrant farm workers into the area. The diversity of agricultural products in the area, which are all dependent on irrigation, is notable includes beets, alfalfa seeds, dairy, beef, and seed crops (of which Homedale-area farms are the highest producer in the world). Also, since the 1960s, the town has exhibited strong support for its schools and churches through such events as school

sports, the International Smorgasbord, Unity Days, and the town's annual 4th of July celebration. Another indicator of the high civic activity was the building of five ball fields in Homedale in the 1970s. In the late 1980s and early 1990s, residential development occurred in the city, with a steady increase in population. Currently residential development is increasing, with a doubling over the last 2 years. The sense is that people leave the community for a while but then return. At this same time, land in production has increased.

## 2.24.4 Community Assessment of 1999 Situation

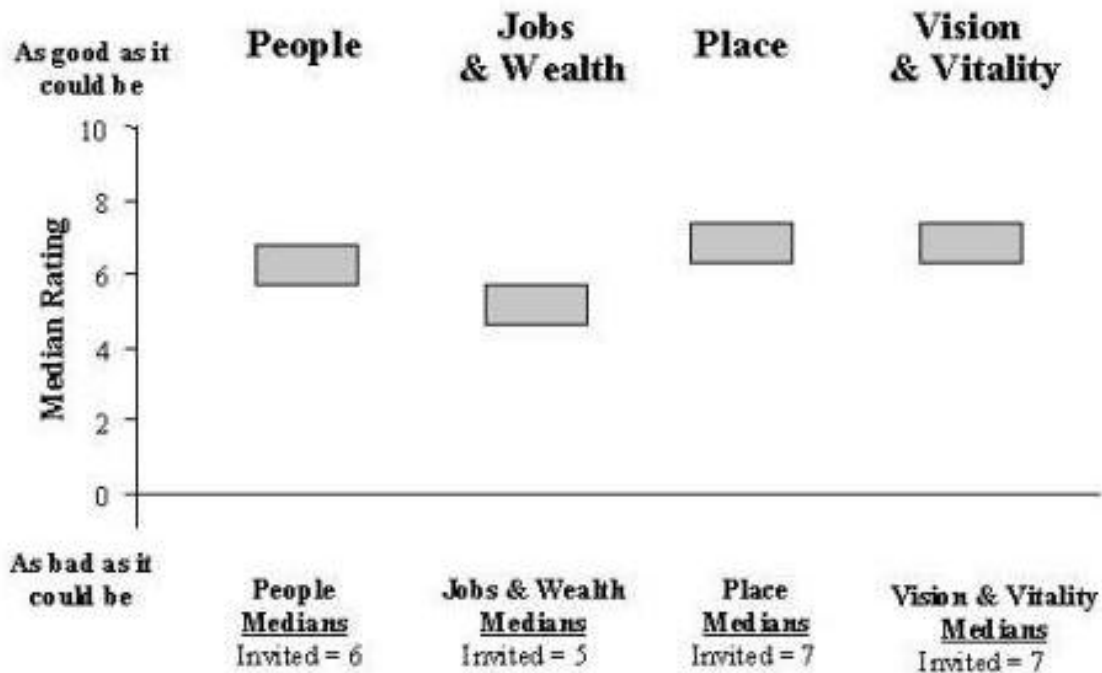
### 2.24.4.1 1999 Situation: Community Dimensions and Rating Scale

The following "current community situation" rating scale was used by participants from Homedale to rate the current (1999) situation of the following four dimensions: 1) **People** -- Social Make-up; 2) **Jobs and Wealth** -- Economy; 3) **Place** -- Character; and 4) **Vision and Vitality** -- Organization and Leadership Capacity. Following a presentation of descriptive information about their community and a community interactive timeline they developed (see above), forum participants were asked to rate the extent to which their community situation was good or bad on a 10-point scale for each of the four dimensions, and to write justifications for each of their numerical ratings.

In 1999, the situation in my community is as <b>bad</b> as it could be	1	2	3	4	5	6	7	8	9	10	In 1999, the situation in my community is as <b>good</b> as it could be
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### 2.24.4.2 1999 Situation: Ratings

As [Figure 2-16](#) presents, the median ratings on the current situation rating scale for the group participating in the forum ranged from a 5 on the Jobs & Wealth dimension to a 7 on the Place and Vision & Vitality dimensions. The Place and Vision & Vitality dimensions were perceived as being most oriented towards the *as good as it could be* end of the scale, while the Jobs & Wealth dimension was perceived as being most oriented towards the *as bad as it could be* end of the scale. The People dimension fell in between, with a median rating of 6. Due to the limited attendance at the Homedale community forum, it was possible to have only one facilitated group. As a result, there is no opportunity in this analysis to evaluate replication of ratings and justifications across groups.



**Figure 2-16. Median scale ratings for the current (1999) situation in Homedale, Idaho, by community dimension, across groups**

#### 2.24.4.3 1999 Situation: Rating Justifications

[Table 2-11](#) presents the clustering of justifications for the facilitated group, and are categorized as 'Invited Group.'

##### **People**

The People dimension received an overall median rating of 6, with individual responses ranging from 5 to 9. As presented in [Table 2-16](#), key factors mentioned to justify the high rating included the perception of Homedale as a safe place to live with good families and stable people who are supportive and involved in community activities. Increases in population and ethnic diversity were also seen as positive attributes of People in Homedale, as was the importance of the school. A poor economy, lack of job opportunities for young people and increases in public assistance were mentioned as negative attributes of Homedale ("A good place to live but not to make a living").

##### **Jobs & Wealth**

The Jobs & Wealth dimension was most oriented towards the *as bad as it could be* end of the scale, receiving the lowest overall median rating of 5. Individual responses ranged from 4 to 6. Comments which may have decreased the ratings included the perceived lack of good, high paying, and year-round employment opportunities ("there is high employment, but low paying jobs"), with compounding effects such as high poverty

and government assistance. The need to commute both short and long distances for work, and the lack of local transportation and shopping opportunities were also mentioned ("a great deal of our money is spent out of town in the larger towns that have the products needed"). Participants also noted the low cost of utilities and living, and stable/high property values as attributes of Jobs & Wealth in Homedale.

**Place**

The Place dimension was one of the highest rated dimensions, with a median group rating of 7. Individual responses ranged from 6 to 8. Justifications indicate that the great outdoor environment, air and water quality, the strong sense of place associated with a small rural community ("river, air quality, roads, open space are wonderful"), and good social services and schools were positive reasons for the high rating. Negative comments that tended to detract from the Place dimension included poor community infrastructure and the appearance of downtown ("downtown has too many empty, ugly buildings") and residential areas, as well as increased farmland subdivision.

**Vision & Vitality**

The Vision & Vitality dimension was also rated high in relation to the other dimensions, with a median rating of 7. Individual responses ranged from 5 to 8. Justifications for the rating included the presence of strong and active civic organizations, and a variety of social and school activities in which residents participate. Participants were positive about the social capital in Homedale, describing a friendly and cohesive community where people work together to get things done. They were more divided, however, in their perceptions of leadership and fiscal resources, with comments related to both strong and weak leadership and fiscal resources. Participants also noted the lack of, and need for, a long-term vision and development plan.

Table 2-11 Rating Justifications for the Current (1999) Situation In Homedale, Idaho, By Community Dimension and Type of Group			
Dimension	Replication Across All Groups	Invited Group	Other Groups
<b>People</b>			
Positive		Above average (321)	
		Stability of community (general) (323)	
		Good community to live and raise family (424)	
		Supportive of community activities and involved (241)	
		Good prevalent values (61)	
		Ethnic diversity is high/increasing (301)	
		Good extended families (101)	
		Good families (104)	

Positive	Increasing people own homes/many own homes (151)	
	Children and education are high priority (66)	
	Good, friendly, helpful people (201)	
	High tolerance (303)	
	Safe place to live with low crime (191)	
	Strong schools/education (81)	
Negative	Unstable/poor/decreasing economy (542)	
	Lack of opportunities for young people (11)	
	Ethnic/class segregation (308)	
	Increasing/high public assistance (112)	
	Social problems (general) (198)	
Other	Farms (general) (156)	
	Schools/education (general) (89)	
	Decreasing number of retirees (22)	
	Increasing/high population (41)	
	Growth (general) (49)	
	Reliance on water/importance to people (601)	
	Prevalent values (general) (69)	

Jobs and Wealth		
Positive	Good job opportunities (2)	
	Positive aspects of commuting (63)	
	Beautiful environment (218)	
	Low unemployment (192)	
	Opportunity to expand base (141)	
	Stable property values (203)	
	Good people (204)	
	Increasing services/good services (96)	
	Low cost of living (78)	
	Low utility costs (79)	
	Economically diverse (121)	
	Negative	Poor job opportunities (3)
Decreasing job opportunities (general) (18)		
Low paying jobs (31)		
Seasonal employment (35)		
Declining public sector jobs (46)/TD		
Money leaves (51)		
Low employment for youth (6)		
Declining/limited business and shops (136)		
High poverty (183)		
Increasing/high government assistance (184)		
Lack of local transportation (224)		
Other		High property values (198)
	Everything relies on water (115)	

Place		
Positive	Good social services, same access to services (561)	
	Good schools (563)	
	Low traffic congestion (599)	
	Stability of agriculture and farms (652)	
	Good parks and open spaces, public lands (667)	
	Strong sense of place/heritage/morale and community (670)	
	Proactive community planning for the future (711)	
	Attractive scenery (771)	
	Good, healthy environment and great outdoors (775)	
	Good air and water quality (780)	
	Small, rural population good (831)	
	Safe and crime free (902)	
	Negative	Struggling businesses and vacant storefronts (520)
Poor downtown/business appearance (524)		
Poor appearance of residential areas/need improvement (550)		
Poor roads, highways, and community infrastructure (623)		
Increase subdivision/farm development (636)		
Decline in farming (654)		
Need more jobs (737)		
Other	Importance of river for recreation (674)	
	Importance of water to community (618)	

Vision and Vitality		
Positive	Strong, active, astute political leadership (81)	
	Strong, active civic organizational capacity (11)	
	Good/increasing tax base/fiscal resources (201)	
	Successful at getting and using grants (241)	
	Numerous, varied, good, or improving social activities (301)	
	Interesting community (307)	
	Strong, cohesive community (341)	
	Positive impacts on vision and vitality related to water (604)	
	Affordable city expenditures (281)	
	Friendly, sociable community (305)	
	Strong, high level of community participation (work together) (561)	
Negative	Poor, lack of political leadership (82)	
	Negative community infrastructure (802)	
	Lack of planning and ability to plan for the future (404)	
	Insufficient/decreasing tax base/fiscal resources (202)	
Other	General role of bonds and levies (189)	
	General community characteristics (549)	
	Water system (803)	



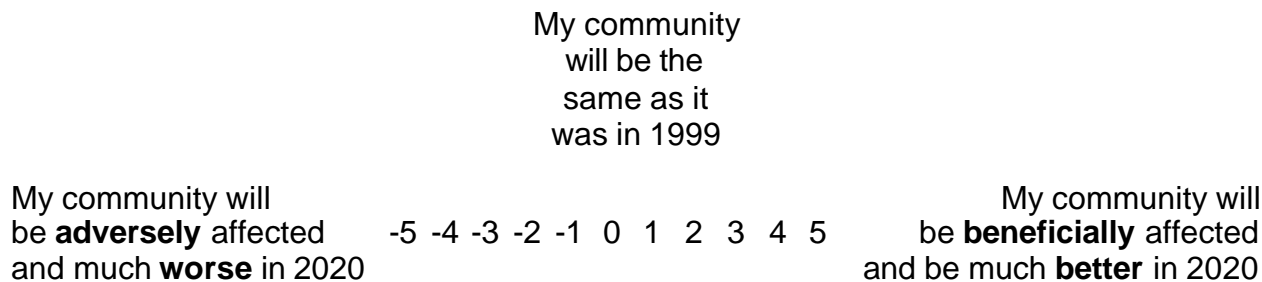
## 2.24.5 Comparison of Salmon Recovery Pathways A1 to A3

### 2.24.5.1 Community Dimension Impact Rating Scale

Forum participants were asked to assess how their community would be impacted in the year 2020 by implementation of the five salmon recovery pathways proposed by the U.S. Army Corps of Engineers to return juvenile salmon to the Lower Snake River. Pathway A1 involves maintenance of the existing Lower Snake River System, A2 involves major modifications to the existing Lower Snake River System, and A3 involves natural river drawdown, or dam breaching. Supplementing Pathway A2, A2b involves the elimination of flow augmentation (from the current 427,000 acre-feet to 0 acre-feet), while A2c involves increasing flow augmentation (by 1 million acre-feet) into the Snake River system.

A second rating scale was used by forum participants to indicate the situation for each of the four community dimensions (*People, Jobs & Wealth, Place, and Vision & Vitality*) in terms of how adversely or beneficially they felt their community would be impacted in the year 2020. In thinking about the future, participants were asked to consider all of the normal changes that are likely to occur in a community over time, along with specific changes they would expect to result from adding a pathway. To provide a basis for thinking about their community's future situation, forum participants received information from Corps and NMFS' studies specific to their community for each of the proposed pathways. Information provided to participants included salmon recovery probabilities, physical changes, and economic changes. (For more information on the information presented and their sources, see [Appendix A](#).) Community members then gave an initial rating of the impacts on their community in the year 2020 for each dimension. After a facilitated group discussion of how and why their community would be affected or not affected, participants rated the community dimensions and listed their justifications.

To ground the rating scale in reality, forum participants were instructed to use their community's 1999 situation, which they had just rated and described for each dimension, as the mid-point (0) of the scale from which to determine the magnitude of adverse (negative) or beneficial (positive) effects to their community in the year 2020 for each dimension. To rate Pathways A2b and A2c, participants were instructed to use their rating for Pathway A2 as the mid-point of the scale for each dimension. In each case, the zero or mid-point represents the "no impact" or "no change" situation. Participants were specifically instructed to focus on adverse and beneficial impacts only on their community and not on the entire region.



### 2.24.5.2 Summary of Findings on Pathways A1, A2, and A3

[Figure 2-17](#) illustrates that forum participants generally perceived the community situation would be better in the year 2020 for each of the dimensions under Pathway A1, with median group ratings of 2 for the People, Jobs & Wealth, and Place dimensions, and 1.5 for the Vision & Vitality dimension. Under Pathway A2, participants perceived the community would either stay the same or improve slightly: the People and Jobs & Wealth dimensions each received median ratings of 0 (no change), while the Place and Vision & Vitality dimensions each had median ratings of 1. Under Pathway A3, the group’s median ratings were at the negative, *adversely affected*, end of the scale for all four dimensions, ranging from -3 for the People dimension to -2 for the Jobs & Wealth dimension. Both the Place and Vision & Vitality dimensions received median ratings of -2.5. Compared to the current situation, the facilitated group perceived Homedale to be worse off under A3 in 2020, and better off under A1.

In the case of Pathways A2b and A2c, participants perceived their community situation on all four dimensions to be better under A2b in comparison to A2. The People, Place and Vision & Vitality dimensions each received median ratings of 1, while the Jobs & Wealth dimension was rated slightly higher, with a median rating of 2. Pathway A2c was perceived to be most oriented towards the negative, *adversely affected* end of the rating scale, receiving a median rating of -4.5 for the Vision & Vitality dimension and a median rating of -3 for the People, Jobs & Wealth, and Place dimensions. Compared to A2, the group perceived Homedale to be worse off under A2c and better off under A2b.

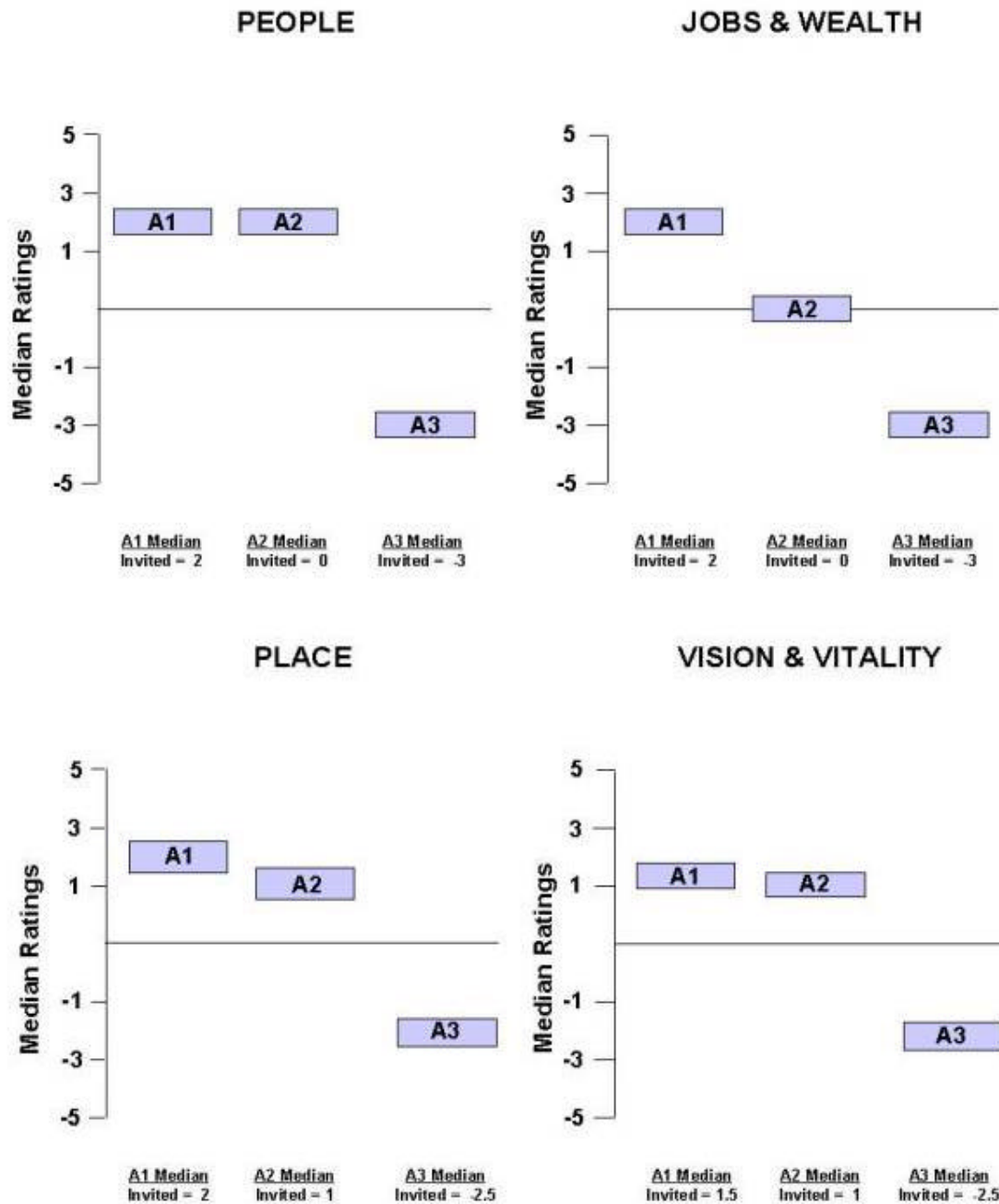


Figure 2-17. Median scale ratings of Pathways A1, A2, and A3, for Homedale, Idaho, by community dimension, across groups

### **2.24.5.3 Rating Justifications Across Pathways A1, A2, A2b, A2c, and A3**

In the analysis of A1, the "no action" pathway, a process similar to that for the 1999 current situation was followed to examine participants' perceptions of likely future changes to the community in 2020. The premise for the scenario was that the river system would remain unchanged but other social, economic, and cultural trends would continue on their current trajectory, as perceived by forum participants. Both numerical scores and the reasons and changes underlying them were examined. Pathway A1 was treated as the base-case, and the results for this pathway provided the basis for assessing the impact of both A2 ("major modification") and A3 ("natural river drawdown, or dam breaching"): A2 and A3 were analyzed to identify changes in clustered numerical ratings and qualitative justifications from the baseline forecasts under A1. Similarly, Pathway A2 was treated as a base-case for analyzing Pathways A2b (major system modifications with elimination of flow augmentation) and A2c (major system modifications with additional 1 million acre-feet flow augmentation) to determine the perceived impacts of flow augmentation to Homedale in 2020 according to forum participants.

### **2.24.5.4 Pathway A1**

#### ***People***

Under A1 for the People dimension, the median group rating was 2, with individual responses ranging from -1 to 5. As presented in [Table 2-12](#), justifications given for A1 by the group were that current (1999) trends would continue and Homedale would experience little change or impact resulting from this pathway ("I see no impacts of any importance"). Population growth and recreation would also continue, as in the current situation. The perception of continued use of water also contributed to an overall positive rating for A1 in 2020 ("Homedale grows where water flows"). However, it was also noted that, if the amount of available water remains the same while Homedale's population and industries grow, a water shortage would develop by 2020.

#### ***Jobs & Wealth***

In the case of the Jobs & Wealth dimension, the median group rating was 2, with individual responses ranging from -2 to 3. In addition to justifications that there would be no change in Jobs & Wealth in Homedale ("I see no impacts of any importance" and "same on jobs...base is low wage structure"), an expanding job market and growing economy, partly due to low utility rates, was also mentioned. Again, continued use of water under A1 contributed to an overall positive rating ("water has a large economic base to the community, keeping what we have is a plus").

**Place**

For the Place dimension, the median rating was 2, with individual responses ranging from -2 to 4. Again, justifications included a perceived 'no change' under A1 ("be the same if left like it is...with a little growth over the years"). Water availability, again, contributed to the positive rating ("water makes a community"), although the perceived shortage of water in 2020 due to normal community growth was cited as adversely affecting the Place dimension ("we'll need more water for more homes, not the same as in 1999").

**Vision & Vitality**

The group median for the Vision & Vitality dimension was 1.5, with individual responses ranging from 0 to 3. Again, comments included the perception that no change would occur in the Vision & Vitality dimension of Homedale under A1. Water availability was an important factor in rating this dimension, and the perception that "the people of this community will create new visions to meet challenges of less water availability" was mentioned. In addition, the certainty of A1, in terms of knowing things would stay the same, contributed to the positive rating.

<b>Table 2-12                      Comparison of Rating Justifications For Pathways A1, A2, and A3                      For Homedale, Idaho,                      By Community Dimension and Type of Group</b>					
<b>Year 2020 Rating Justifications</b>	<b>Pathway 1 Existing Condition</b>	<b>Pathway 2 System Modification</b>	<b>Pathway 2b 0 Flow Augmentation</b>	<b>Pathway 2c 1.427 Flow Augmentation</b>	<b>Pathway 3 Drawdown</b>
<b>People</b>					
	Increasing/high population (41)	Increasing/high population (41)	Increasing/high population (41)	Decreasing/low population (42)	Community values are stable (63)
	Stable population (43)	Stable population (43)	Population (general) (48)	No change in people/little/no impact (313)	Strong/increasing quality of life (209)
	Growth (general) (49)	People changing for better/positive change (311)	No change in people/little/no impact (313)	Poor community appearance (412)	Strong sense of spirit and pride in community (211)
Invited Groups	No change in people/little/no impact (313)	No change in people/little/no impact (313)	Current trends will continue/little/no impact (325)	Loss of industries and lack of job opportunities (492)	No change in people/little/no impact (313)
	Current trends will continue/little/no impact (325)	Current trends will continue/little/no impact (325)	Growth in recreation and tourism opportunities (443)	Decrease/loss of agricultural-based economy (503)	Negative impacts (general) (322)
	Recreation and tourism is important (positive) (441)	Power gain (486)	Change in power (general) (487)	Agriculture-dependent economy (504)	Growth in recreation and tourism opportunities (443)
	Little to no change in power costs (484)	Reliance on water/importance to people (601)	Increased/improved farm economy (506)	Water (general) (600)	High/increasing cost of living (455)

Invited Groups	Water (general) (600)	Need more water (605)	Increasing development (511)	Reliance on water/importance to people (601)	Fish recovery is good/important (463)
	Reliance on water/importance to people (601)	No change in water flow/tolerable (603)	Water (general) (600)	Decrease in water availability (604)	Environment (general) (475)
	Decrease in water availability (604)		No change in water flow is tolerable (603)		Increased utility costs, transportation costs, and taxes; and decrease irrigation and loss of power (482)
	Need more water (605)		More water (positive) (608)		Power/electricity/utilities (general) (488)
					Do not know/no comment (people) (560)

**Jobs and Wealth**

Invited Groups	Stable job opportunities/employment (8)	Increasing job opportunities (general) (10)	Increasing job opportunities (general) (10)	Decreasing job opportunities (general) (18)	Stable job opportunities/employment (8)
	Increasing job opportunities (general) (10)	Increased pumping costs (20)	Outside money spent locally (55)	Decreasing recreation-related jobs (19)	Increasing trucking and rail jobs (13)
	Low paying jobs (31)	Increasing income and wages (32)	Good for agriculture/stable agriculture (104)	Decreasing agricultural jobs (22)	Decreasing job opportunities (general) (18)
	Low utility costs (79)	Increasing utility costs (73)	Resource tourism and amenity recreation growth (126)	Decreasing income and wages (33)	Increased pumping costs (20)
	Everything relies on water (115)	Good for agriculture/stable agriculture (104)	Strong/growing economy (157)	Bad for irrigating farming (no water in dry years) (69)	Increasing utility costs (73)
	Pressure from increased water conflicts (117)	Pressure from increased water conflicts (117)	Population growth (207)	Increasing utility costs (73)	Increasing transportation costs (75)
	Stable economy (155)	Increasing wealth (180)	Same/no change (245)	Ripple effect in community and all dimensions (93)	Increased cost of living (85)
	Strong/growing economy (157)	Same/no change (245)	Will not help (958)	Loss of recreation and tourism-related business (134)	Pressure from increased water conflicts (117)
	Population growth (207)			Shrinking agriculture, mining, and timber base (135)	Resource tourism and amenity recreation growth (126)

Invited Groups	Many good jobs change community for the worse (234)			Declining/limited business and shops (136)	Declining/limited business and shops (136)
	Same/no change (245)			People will leave (206)	Same/no change (245)
				Less hunting and fishing (229)	Will not help (958)
				Bad for community (956)	
				Will not help (958)	
<b>Place</b>					
Invited Groups	Importance of water to community (618)	Increased power rates (594)	Increased power rates (594)	Poor/declining community appearance (513)	Increased power rates (594)
	Negative impact of reduction in water on springs, recharging, etc. (619)	Negative impact of reduction in water on springs, recharging, etc. (619)	Increase in irrigated land (632)	Struggling businesses and vacant storefronts (520)	Negative impact of reduction in water on springs/recharging/reservoirs (619)
	Irrigation wells drying up, dryland farming only (655)	Stability of agriculture and farms (652)	Importance of agriculture (644)	Traffic congestion/increased traffic (603)	Negative impacts on the number of farms and farm families (642)
	Increase in jobs (747)	Increase in recreation opportunities is good (661)	Improved farming and agriculture infrastructure (651)	Importance of water to community (618)	Poor/loss of recreation and tourism opportunities (666)
	Increasing population (821)	Community growth and improvement (general) (721)	Increase in recreation opportunities is good (661)	Increased subdivision/farm development (636)	Maintain status quo, no change (841)
	Maintain status quo, no change (841)	Increase in population (821)	Poor/loss of recreation and tourism opportunities (666)	Negative impacts on the number of farms and farm families (642)	Ruin of community, complete negative community change (844)
	Other community change independent of waterway operations (842)	Maintain status quo, no change (841)	Maintain status quo, no change (841)	Reduction in agriculture due to water loss (643)	

Invited Groups	No negative changes, little impact (849)	Other community changes independent of water operations (842)		Importance of agriculture (644)	
		No negative changes, little impact (849)		Decline in farming (654)	
				Increased family and leisure time (709)	
				Economic growth and stability (731)	
<b>Vision and Vitality</b>					
Invited Groups	New, optimistic visions of the future (385)	Positive/increasing community characteristics (541)	Negative/decreasing community characteristics (541)	Insufficient/decreasing tax base/fiscal resources (202)	No effect on leadership (129)
	Positive/increasing community characteristics (541)	Strong/increasing community vision and vitality (601)	Positive impacts on vision and vitality related to water (604)	Negative/decreasing community characteristics related to water (308)	Negative/decreasing community characteristics related to water (308)
	Positive/increasing community characteristics related to water (543)	Positive impacts on vision and vitality related to water (604)	Community growth (605)	Reduced, pessimistic visions of the future (384)	Reduced, pessimistic visions of the future (384)
	General community characteristics (549)	No change (673)	Negative impacts on vision and vitality related to water (663)	Lack of planning and ability to plan for the future (404)	Economic factors increasing vision and vitality (584)
	Strong/increasing community vision and vitality (601)	Positive impacts on vision and vitality with more fish (681)	No change (673)	Negative/decreasing community characteristics (542)	Decreasing/lack of community vision and vitality (602)
	Uncertainty in the future (664)	Impacts related to increased utility rates (750)	Negative impacts on vision and vitality with less fish (682)	Positive/increasing community characteristics related to water (543)	Negative impacts on vision and vitality related to water (663)
	No change (673)			Negative impacts on agriculture and land tenure (544)	No change (673)
				Decreasing/lack of community vision and vitality (602)	
				Negative impact on parks and recreation facilities (832)	



### **2.24.5.5 Comparison of Pathway A1 to A2**

Under the implementation of A2, the change between the A1 median rating and the A2 median rating was positive for both the Place and Vision & Vitality dimensions, with both receiving a median rating of 1 ([Figure 2-17](#)). The People and Jobs & Wealth dimensions were perceived to not change under A2, with both receiving median ratings of 0. In general, forum participants perceived that Homedale would be the same or better off under A2 in 2020.

[Table 2-12](#) presents justifications for the ratings given for the implementation of A2. For the People dimension, the group mentioned that little or no change would occur under A2, with the population level changing similarly to that noted under A1. The perception that people would change for the better was also mentioned. Again, the importance of water to the People dimension of Homedale was noted ("as long as we have water, no change"). The Jobs & Wealth dimension was also perceived to be the same under A2, with the presence of water contributing to the continued growth of jobs and wealth. However, an increase in utility rates was reported as a negative attribute of A2.

The Place dimension was perceived to be beneficially affected under A2. Although some participants noted that no changes would occur and that Homedale would not be impacted, other participants mentioned how "recreation, housing, and building will be able to continue to grow" and water availability would continue to support agriculture. Finally, the Vision & Vitality dimension was also perceived to be beneficially affected under A2. Along with no changes, participants also described positive impacts associated with increases in the fish population ("I think our people will feel better about themselves for doing something to help the salmon"), and continued water availability ("no change in river will keep vision good").

#### **2.24.5.5.1 Comparison of Pathway A2 to A2b and A2c**

Under the implementation of A2b (major system modifications with elimination of flow augmentation to 0 acre-feet), the group's median rating of 1 was the same as that for A2 for the People, Place and Vision & Vitality dimensions, with only the Jobs & Wealth dimension receiving a higher median rating of 2 (see [Figure 2-18](#)). This indicates that, for each of the four dimensions, the group perceived that Homedale would be as beneficially affected in 2020 under A2b as under A2, with the Jobs & Wealth dimension receiving slightly greater benefits.

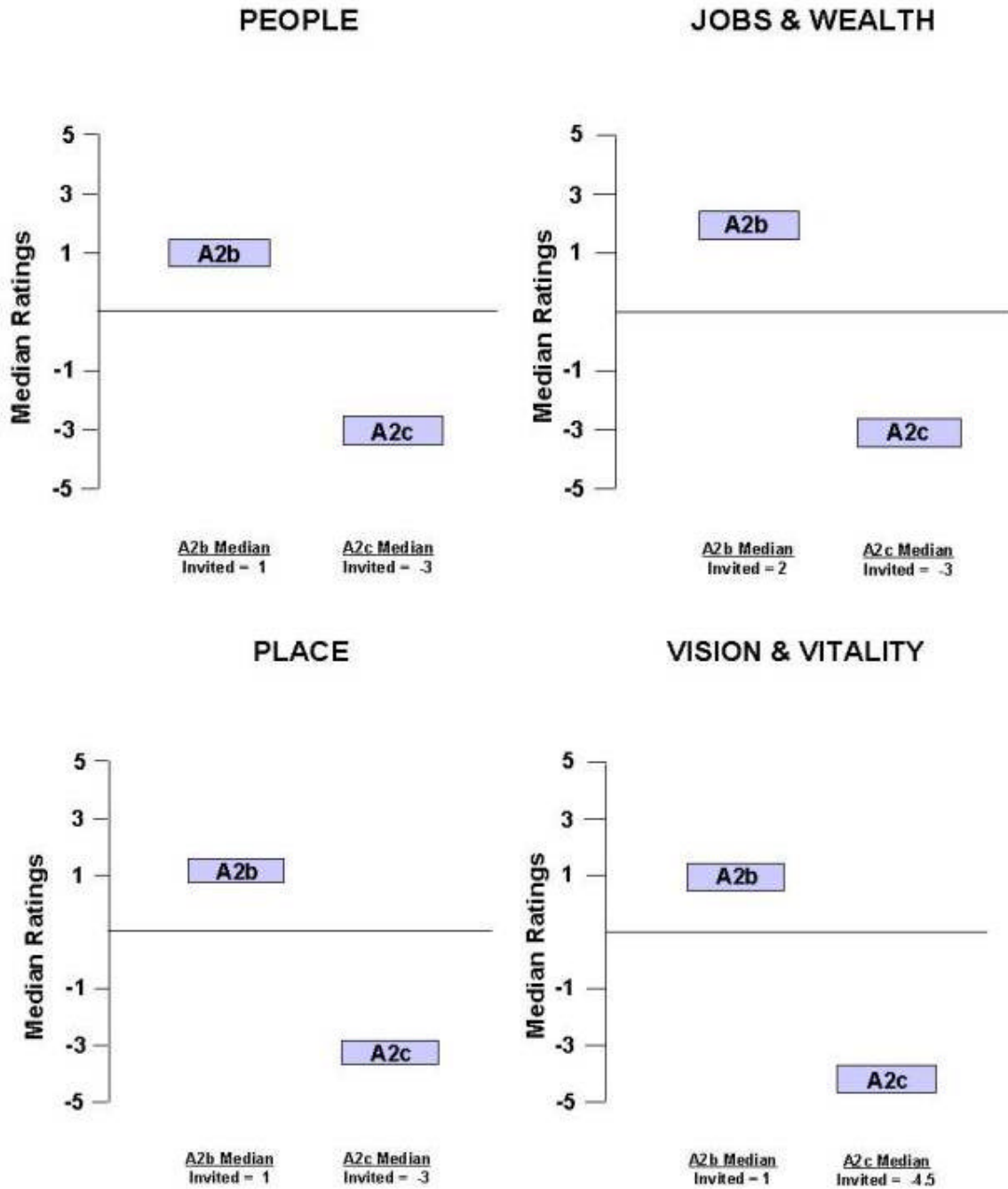


Figure 2-18. Median scale ratings of Pathways A2b and A2c, for Homedale, Idaho, by community dimension, across groups

Under the implementation of A2c (major system modifications with increase in flow augmentation to 1.4 million acre-feet), the median group rating shifted toward the *adversely affected* end of the impact rating scale for all dimensions. This pathway was rated the lowest overall. The median group ratings were -3 for the People, Jobs & Wealth, and Place dimensions, while the Vision & Vitality dimension received a slightly lower median rating of -4.5. These ratings indicate that the group perceived Homedale to be *much worse* under A2c in 2020, with the most pronounced impact in its Vision & Vitality. Justifications for the negative People rating included the perceived negative impact to the town's farm-based economy associated with reductions in water availability ("we are agriculture related and any loss would be critical" and "by drawing that much water out of the Owyhee water system the ag economy in our area would die, therefore people would be required to move out...some farm families would have to quit farming"). The greater importance of water over fish to the community was also mentioned. For the Jobs & Wealth dimension, justifications were associated with losses to the agriculture-based economy ("because we could not irrigate the land, farms would fold, people would leave"), the recreation industry ("visiting sportsmen and their dollars would be lost from our community"), and other businesses. Higher utility rates and lower job incomes were also mentioned. No positive comments were associated with this dimension. For the Place dimension, participants gave justifications of the negative rating that included a declining community appearance ("Homedale a little less beautiful...a little less green"), increased traffic congestion, and an over-demand for social services. The perceived loss of farms due to decreased irrigation would also result in lost business and increased land subdivisions. Finally, the Vision & Vitality dimension included justifications such as a reduced, more pessimistic vision of the future due to the loss of farms and water ("depression and hopelessness would take hold of the hearts of the people and vision would perish"). Loss of scenic values due to decreased irrigated land, and decreased future development, were also mentioned to negatively impact the community.

#### **2.24.5.6 Comparison of Pathway A1 to A3**

Under the implementation of A3, the median group ratings for A1 shifted toward the *adversely affected* end of the impact rating scale for all four dimensions. Median group ratings that were clustered around 2 for A1 decreased to -3 for A3 ([Figure 2-17](#)). Specifically, the median group ratings ranged from -2 in the Jobs & Wealth dimension to -3 in the People dimension, with both the Place and Vision & Vitality dimensions receiving an overall median rating of -2.5. These results indicate that the participants perceived Homedale would be worse off under A3 compared to A1.

##### ***People***

Individual ratings of the People dimension ranged from -5 to 3 under A3. With a median group rating of -3, this dimension was the lowest rated of the four dimensions for Homedale. [Table 2-12](#) shows the shift in justifications under the implementation of A3. Negative comments that decreased the rating included perceived increases in cost of living and utility rates. Several positive comments regarding increased recreation and tourism related to salmon fishing, as well as pride in free-flowing streams and the rugged outdoors, were also given.

### ***Jobs & Wealth***

Individual responses on the impacts rating scale for A3 ranged from -5 to 3 under Homedale's Jobs & Wealth dimension. With a median rating of -2, this was the highest rated dimension under A3. Justifications which resulted in lower ratings indicated that increased pumping, transportation, and utility costs, as well as a higher cost of living, would negatively impact Homedale's economy. Alternatively, increases in tourism and recreation-related businesses were perceived to positively impact the community. Participants were divided in terms of the effects of A3 on job availability, with some comments describing stable job opportunities and increases in truck and rail jobs, while other comments described a general decrease in job opportunities.

### ***Place***

Individual responses on the Place dimension ranged from -5 to 0 under A3. Justifications included the perception that the Place dimension of Homedale would not be impacted under A3, although other comments described negative impacts to farming related to utility cost increases. Recreation was also perceived to be negatively affected (breaching dams could cause loss of water in our reservoir -- could change recreation"), leading to the overall negative rating.

### ***Vision and Vitality***

For the Vision & Vitality dimension under A3, individual responses on the impact rating scale ranged from -5 to 4. Although several comments describe that Homedale would not be negatively impacted under A3, justifications affecting the lower overall rating included negative impacts to community characteristics related to water ("no water, quality of life decreases...no vision" and "we will lose our scenic wonders"). Alternatively, recreation was perceived to be positively affected under A3 ("our community could advertise more honestly as a recreation paradise").

## **2.24.6 Minimizing Adverse Impacts**

Suggestions to minimize the negative impacts to the community of Homedale included subsidizing power losses so that they are not passed onto consumers; leaving irrigation water alone to look for other ways of breaching channels around the dams; capturing more winter water for irrigation and power; and compensating the farmer completely.

## **2.25 Rupert, Idaho, Community Assessment**

### **2.25.1 Summary of Key Findings**

Rupert is a town of approximately 6,000 residents located on the Snake River Plain, in south central Idaho. It is the county seat of Minidoka County, and government and potato farming are major components of the town's economy, in addition to food processing of sugar beets, alfalfa, and dairy products. About 20 percent of all jobs in Rupert are in food manufacturing. Currently, Rupert is going through a process of community revitalization, "Renaissance Rupert."

Participants in the forum at Rupert depicted a town in 1999 whose current situation reflects these positive efforts toward revitalization. Residents expressed that they value the community's social make-up, built and natural environment. Yet they also acknowledged that their economic situation negatively affects several aspects of community life: the town is predominantly agriculture-based, and with the depressed farm economy, compounding effects included low-paying jobs and limited employment opportunities. With limited business and shopping opportunities in Rupert, much of the town's money flows elsewhere. Further, an out-migration of youth occurs due to the lack of skilled technical jobs. Consequently, the current situation for Jobs & Wealth was rated the lowest of any dimension. Participants also expressed concern about the lack of interaction and integration with migrant farm workers. Income stratification and safety and drug problems also were noted as contributing to a declining sense of community. Nonetheless, the low cost of living and cheap utilities were positive attributes of the economy mentioned by participants. In addition, comments on the People dimension indicated that Rupert was perceived to be "strengthened by a good sense of community values," with a clean...safe, local environment...stable families...and good social services." Participants in the forum rated the Place dimension the highest of the four dimensions, and they described Rupert as a "progressive" community with good hospitals and schools, beautiful clean surroundings, and plenty of outdoor recreation opportunities. When assessing the Vision & Vitality dimension, participants mentioned the ongoing process of revitalizing Rupert and, in particular, their recent successes in creating a more cohesive community, strong leadership, an improved vision, and a community more prepared for the future.

Participants were mildly optimistic about Rupert's future under Pathway A1 (the existing situation on the Lower Snake River continued on into 2020), with ratings of its affects generally being 0 (no change) for the four dimensions. Residents suggested that Rupert would continue its "natural and positive course." Some participants perceived an improvement in the economy, resulting from increases in both population and tourism, while other participants perceived that no change in the current economic situation would occur.

Participants rated community impacts associated with Pathway A2 (major system modifications) as shifting slightly toward the negative, *adversely affected* end of the rating scale for all dimensions except Vision & Vitality, which would remain at 0 (no change). Negative effects were mostly associated with increases in transportation costs and power rates, inflicting negative effects on other aspects of the community. One participant mentioned that "50 cents a household is how much on a farmer or business? Too much!" Ratings and justifications for A2b (major system modifications with the elimination of flow augmentation to 0 acre-feet) were much the same.

Participants at the Rupert forum were very concerned about their community's future under Pathway A2c (major system modifications with an increase of flow augmentation to 1 million acre-feet), with ratings of its effects in 2020 clustered at the extreme negative, *adversely affected* end of the scale. A major concern was increased power and freight rates, along with decreased water availability for irrigated farming. Further, "the uncertainty of water supplies would curtail growth and visions of a positive future" especially "during a dry year." Additionally, increased costs, coupled with adverse affects to farmlands, would "ripple through people, community and vision." As a result, this pathway was perceived to potentially "devastate our economy."

Finally, participants were also concerned about their community's future under Pathway A3 (natural river drawdown and dam breaching), with ratings of its effects in 2020 clustered at the negative, *adversely affected* end of the scale. Major concerns here were similar to those of A2c: perceived increases in transportation costs and power rates, as well as losses of irrigated farmland in an already struggling agricultural economy. Businesses would move out, followed by people and services. While the declining economy was perceived to contribute to a decline in attitude, some participants felt that "the vision will continue," and "Rupert still has vision but no money," while others perceived that "there will be no vision."

Participants at the forum offered several suggestions for minimizing some of the negative impacts associated with the pathways. Under Pathway A2, timing the flow augmentation in order to produce the best biological results was suggested, as well as the government taking fiscal responsibility for lost revenue to the community. Under Pathway A3, participants suggested that commercial fishing should be taxed to subsidize some of the revenue lost to upstream communities. Overall, the situation and perceptions of the community of Rupert are not unlike those of other agricultural towns in the region. Given that agriculture has long been the keystone of the town's economy, it is not unexpected that the community's assessment of its situation reflected a stronger concern for the future of their community's agricultural base, and for the fate of that industry throughout the region, than support for efforts to recover salmon whose effectiveness is uncertain and that are perceived to have major economic and social consequences.

### **2.25.2 Interactive Community Forum Participants**

Twenty-one community members provided perspectives on the history, 1999 situation and Pathways A1, A2, A2b, A2c, and A3 for Rupert, ID. These forum participants sat at two facilitated tables (see methodology), working in interactive small groups (hereafter, "groups"). The overall diversity index rating for participants was 0.78 (on a scale from 0 to 1.0), indicating that 11 of 14 pre-identified community roles were present at the forum (see methodology). Of the total number of participants completing the sign-in questionnaire, 29 percent were in the agriculture industry.. The remaining 71 percent were each employed in one of the following occupations: auto salesperson, homemaker, fertilizer and chemical salesperson, banker, businessperson, electric co-op manager, health care worker, mediator/consultant, attorney, administration officer, registered nurse, teacher, and Minidoka Disaster Service Coordinator.

### 2.25.3 Community Background

Rupert is a town of approximately 6,000 residents located on the Snake River Plain in south central Idaho. About 20 percent of all jobs in Rupert are in food manufacturing. The town of Rupert was founded in the 1905. In 1960 the amount of farm acreage increased, along with the consolidation and development of residential property and increase in property values. Some migrating farm workers began to stay and take up residence in the town. The total amount of business in the community began to decrease, but the businesses that remained began to increase in size. By the 1980s, a new generation of residents began to take over local businesses and land. Nonetheless, a telling comment was that, since this time, the town's main export has been its children. The town's population rose above 5,000 in 1980, and it has stayed at that level since. The major employer in Rupert is food manufacturing, with 20 percent of all the town's jobs in this sector of its economy. The town is a major food-processing center: sugar beets are processed in a sugar plant located a short distance from the town, along with alfalfa, which is processed in an alfalfa meal mill in the town. Potatoes are also a major crop. An increase in dairy farming in the area supports local creameries, and conditions also have encouraged a growth in poultry farming. Rupert also is the county seat for Minidoka County. Currently the town of Rupert is going through a process of community revitalization. In 1990 the town began the Renaissance fund-raising project for community revitalization, and a director for the project was hired.

### 2.25.4 Community Assessment of 1999 Situation

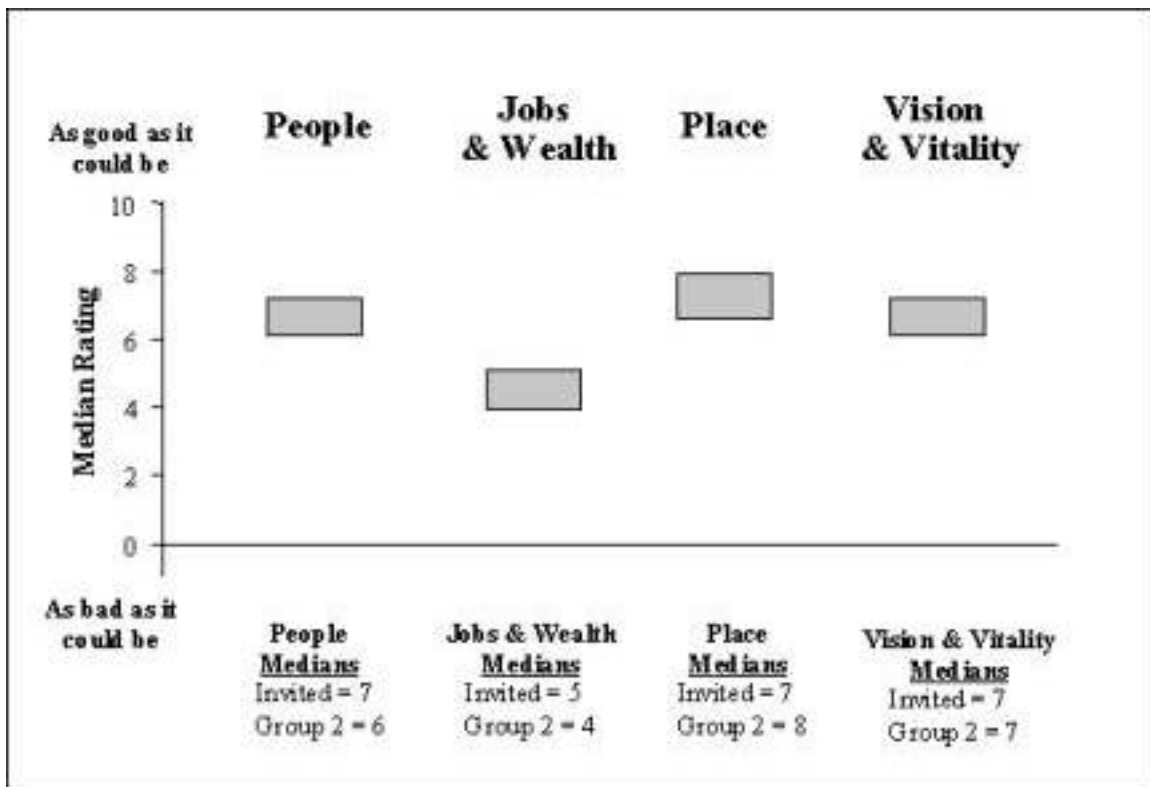
#### 2.25.4.1 1999 Situation: Community Dimensions and Rating Scale

The following "current community situation" rating scale was used by participants from Rupert to rate the current (1999) situation of the following four dimensions: 1) **People** -- Social Make-up; 2) **Jobs and Wealth** -- Economy; 3) **Place** -- Character; and 4) **Vision and Vitality** -- Organization and Leadership Capacity. Following a presentation of descriptive information about their community and a community interactive timeline they developed (see above), forum participants were asked to rate the extent to which their community situation was good or bad on a 10-point scale for each of the four dimensions and to write justifications for each of their numerical ratings.

In 1999, the situation in my community is as <b>bad</b> as it could be	1 2 3 4 5 6 7 8 9 10	In 1999, the situation in my community is as <b>good</b> as it could be
--	----------------------	---

### 2.25.4.2 1999 Situation: Ratings

As [Figure 2-19](#) presents, median ratings on the current situation rating scale for the two groups participating in the forum ranged from a 4 on the Jobs & Wealth dimension to a 7.5 on the Place dimension. The range of ratings on all dimensions were nearly the same for the two groups: group medians differed by only one point on the rating scale for the People, Jobs & Wealth, and Place dimensions and 0.5 point for the Vision & Vitality dimension. The Place dimension was perceived as being most oriented towards the *as good as it could be* end of the scale, while the Jobs & Wealth dimension was perceived as being most oriented towards the *as bad as it could be* end of the scale. The People and Vision & Vitality dimensions received overall median ratings of 6 and 7, respectively.



**Figure 2-19. Median scale ratings for the current (1999) situation in Rupert, Idaho, by community dimension, across groups**

In the case of Rupert's individual community dimensions, the difference between the invited group's median score and that of the other facilitated group ranged from 0.5 to 1 rating point on the current (1999) situation rating scale. This clustering indicates that both groups perceived the four dimensions of their community similarly, and independently reached similar conclusions about the current state of their community.



### 2.25.4.3 1999 Situation: Rating Justifications

[Table 2-13](#) presents the clustering of justifications for both facilitated groups of participants. Justifications noted across both the invited and the other group are categorized as 'All Groups.' Justifications noted by only the invited group are categorized as 'Invited Group.' Finally, justifications noted by only the other group are categorized as 'Other Group.'

#### ***People***

The People dimension received an overall median rating of 6, with individual responses ranging from 5 to 9 across both groups. As presented in [Table 2-13](#), key factors mentioned across both groups to justify its high rating included the perception of Rupert as a safe place to live with stable families who have good values. The invited group added that Rupert is a good place to retire, has good schools and community services and is socially diverse ("People have pulled together to make Rupert a better place to live"). A depressed job market and loss of industries were mentioned as negative attributes of Rupert ("too bad we do not have more job opportunities...youth are not returning because of employment opportunities"), as was the lack of shopping, eating and entertainment services.

#### ***Jobs & Wealth***

Of the four dimensions, the Jobs & Wealth dimension of Rupert's current situation was perceived most negatively. It received the lowest overall median rating of 4, with individual responses ranging from 3 to 6 across both groups. Few positive justifications were mentioned across both groups, while negative ones included the prevalence of poor job opportunities and low paying jobs, as well as money leaving the community due to a lack of businesses and shopping opportunities. Rupert's farm-based economy contributed to the negative ratings ("a lot of farming jobs -- low paying" and "low wages, agriculture area base" and "no job opportunities if not in agriculture or retail"). Income stratification was also perceived to negatively affect the community. The invited group added that, although there is low unemployment and a high number of public sector jobs, many of the other jobs are in the low-wage service sector, and the overall economic diversity of the community is low. Both groups mentioned low utility costs as a positive attribute of Rupert, and the other group also mentioned a low cost of living.

#### ***Place***

The Place dimension was the highest rated dimension, with an overall median rating of 7.5. Individual ratings ranged from 5 to 9 across the two groups. Justifications indicated that beautiful scenery, an attractive community appearance, and a safe environment, were positive reasons for the high rating. Lack of traffic congestion, along with well-maintained roads and good community infrastructure, were also noted as positive characteristics of Place in Rupert. The invited group added that community revitalization

efforts are improving the appearance of the town, with good schools, medical facilities, parks and public spaces contributing to the high rating. The other group described Rupert as located in a clean and rural environment, with plenty of outdoor recreational opportunities, as other positive justifications. Negative comments about the Place dimension included struggling businesses and vacant storefronts, with money leaving the community due to the lack of good shopping opportunities.

**Vision & Vitality**

The Vision & Vitality dimension was rated the second highest of the four, with an overall median rating of 7. Individual median ratings ranged from 1 to 9 across both groups. Justifications included the presence of strong and active civic organizations and leaders, with a high level of cohesion, friendliness, and participation among community members. The invited group added several reasons which may have resulted in lower ratings, such as ineffective local government and inadequate community cohesiveness, although they also mentioned the successful efforts recently made towards community improvements ("can see vision -- passes bonds and levies, receives grants...Rupert is preparing for the future" and "Renaissance Rupert").

<b>Table 2-13</b> <b>Rating Justifications for the Current (1999) Situation</b> <b>In Rupert, Idaho,</b> <b>By Community Dimension and Type of Group</b>			
<b>Dimension</b>	<b>Replication Across All Groups</b>	<b>Invited Group</b>	<b>Other Groups</b>
<b>People</b>			
Positive	Good prevalent values (61)	Good/increased economic opportunity (544)	Good customs and lifestyles, change for the better (51)
	Stable families (103)	Stable retirees (23)	
	Safe place to live with low crime (191)	Good place to retire (31)	
		Community values are stable (63)	
		Strong schools/education (81)	
		Strong sense of spirit and pride in community (211)	
		Supportive of community activities and involved (241)	
		Good community services (401)	
		Good community to live and raise family (424)	
		Socially diverse (306)	

Negative	Drug and alcohol problems (194)	Schools getting worse (86)	Unstable, poor, decreasing economy (542)
	Loss of industries and lack of job opportunities (492)	Decreasing school enrollment (72)	Poor/lack of economic opportunities (545)
		Lack of shopping, eating, entertainment (514)	
		Heavily regulated by government/intervention (255)	
		Lack of opportunities for young people (11)	
Other	Schools/education (general) (89)	Decreasing/low population (42)	Increasing/high population (41)
	Home ownership (general) (159)	Prevalent values (general) (69)	
	Diversity (general) (309)	Environment (general) (475)	
	Agriculture-dependent economy (504)	Land values (general) (169)	
<b>Jobs and Wealth</b>			
Positive	Low utilities (79)	Increasing services/good services (96)	Low cost of living (78)
		Low unemployment (192)	Good retirement area, retirement community (217)
Negative	Poor job opportunities (3)	Few technical jobs/high skilled jobs (5)	Declining/limited business and shops (136)
	Low paying jobs (31)	Low economic diversity (122)	Shrinking agriculture, mining, and timber base (135)
	Income stratification within the community (179)		
	Money leaves (51)		
Other	Agricultural/food processing-based economy (143)	High number of public sector jobs (47)	
<b>Place</b>			
Positive	Good/improving community appearance (511)	Improving business appearances (revitalization) (535)	Close proximity to outdoor recreation opportunities (662)
	Good social services, same access to services (561)	Good schools (563)	Strong values (676)
	Good roads, highways, and community infrastructure (620)	Good medical facilities (564)	Proactive community planning for the future (711)
	Attractive scenery (771)	Good modes of transportation (601)	Good people (832)
	Good air and water quality (780)	good parks and open spaces, public lands (667)	
	Low traffic congestion (599)	Community improvements (general) (845)	
	Safe and crime free (902)		

Negative	Struggling businesses and vacant storefronts (520)	Poor public facilities (572)	Bad peripheral growth (637)
	People shop elsewhere due to lack of businesses/not spending money here (522)	Decreased number of farms and increased farm size, absentee owners, corporate farms (653)	
	Poor schools (573)		
<b>Vision and Vitality</b>			
Positive	Strong, active civic organizational capacity (11)	Confident, caring leaders (141)	Active, strong leadership (121)
	Strong, active civic leadership (41)	Stable vision for the future (383)	Support for bonds and levies (181)
	Strong, active astute political leadership (81)	Adequate/increasing well-managed city budget (481)	Successful at getting and using grants (241)
	Friendly, sociable community (305)	Positive community infrastructure (801)	Prepared for the future (381)
	Interesting community (307)	Positive impact on parks and recreation/facilities (833)	Planning and plans exist, good base for the future (403)
	Strong, cohesive community (341)		Strong, good local government (461)
	Positive/increasing community characteristics (541)		
	Strong, high level of community participation (work together) (561)		
	Strong/increasing community vision and vitality (601)		
Negative	Do not cope well with or resist change (362)	Inadequate community cohesiveness (342)	
	Limited budget (482)	Inefficient, ineffective local government (462)	
		Negative impacts on agriculture and land tenure (544)	
		Negative economic opportunities (582)	
		Declining/poor schools (812)	
Other		General role of bonds and levies (189)	
		Grants needed/used for development (245)	
		Change is inevitable (366)	
		General budgets (489)	

**2.25.5 Comparison of Salmon Recovery Pathways A1 to A3**

**2.25.5.1 Community Dimension Impact Rating Scale**

Forum participants were asked to assess how their community would be impacted in the year 2020 by implementation of the five salmon recovery pathways proposed by the U.S. Army Corps of Engineers to return juvenile salmon to the Lower Snake River. Pathway A1 involves maintenance of the existing Lower Snake River System, A2 involves major modifications to the existing Lower Snake River System, and A3 involves natural river drawdown, or dam breaching. Supplementing Pathway A2, A2b involves the elimination of flow augmentation (from the current 427,000 acre-feet to 0 acre-feet), while A2c involves increasing flow augmentation (by 1 million acre-feet) into the Snake River system.

A second rating scale was used by forum participants to indicate the situation for each of the four community dimensions (*People, Jobs & Wealth, Place, and Vision & Vitality*) in terms of how adversely or beneficially they felt their community would be impacted in the year 2020. In thinking about the future, participants were asked to consider all of the normal changes that are likely to occur in a community over time, along with specific changes they would expect to result from adding a pathway. To provide a basis for thinking about their community's future situation, forum participants received information from Corps and NMFS' studies specific to their community for each of the proposed pathways. Information provided to participants included salmon recovery probabilities, physical changes, and economic changes. (For more information on the information presented and their sources, see [Appendix A](#).) Community members then gave an initial rating of the impacts on their community in the year 2020 for each dimension. After a facilitated group discussion of how and why their community would be affected or not affected, participants rated the community dimensions and listed their justifications.

To ground the rating scale in reality, forum participants were instructed to use their community's 1999 situation, which they had just rated and described for each dimension, as the mid-point (0) of the scale from which to determine the magnitude of adverse (negative) or beneficial (positive) effects to their community in the year 2020 for each dimension. To rate Pathways A2b and A2c, participants were instructed to use their rating for Pathway A2 as the mid-point of the scale for each dimension. In each case, the zero or mid-point represents the "no impact" or "no change" situation. Participants were specifically instructed to focus on adverse and beneficial impacts only on their community and not on the entire region.

My community  
will be the  
same as it  
was in 1999

My community will  
be **adversely** affected  
and much **worse** in 2020

-5 -4 -3 -2 -1 0 1 2 3 4 5

My community will  
be **beneficially** affected  
and be much **better** in 2020

### 2.25.5.2 Summary of Findings on Pathways A1 to A3

[Figure 2-20](#) illustrates that, across both facilitated groups, forum participants generally perceived that the community situation would be slightly better or much the same in the year 2020 for each of the dimensions under A1. Median ratings across both groups for A1 ranged from a high of 1 for the People dimension to a neutral rating of 0 for the Place, Jobs & Wealth and Vision & Vitality dimensions. Under Pathway A2, participants perceived the community would be slightly worse off in the People, Jobs & Wealth and Place dimensions, with overall median ratings of -1 for each dimension, while the Vision & Vitality dimension was given an overall median rating of 0. Finally, under Pathway A3, group's medians were clustered at the negative, *adversely affected* end of the scale for all four dimensions, with median ratings ranging from -3.5 for the Jobs & Wealth dimension to -2 for the Vision & Vitality dimension.

Under the three pathways, the degree of clustering among both groups remained relatively constant for each dimension, ranging from 0 to 1. This suggests that both groups independently arrived at similar conclusions regarding the impacts of each of the pathways on the four dimensions of Rupert in 2020. That is, compared to the current situation, both groups perceived Rupert to be worse off under A3 in 2020, and better off under A1.

In the case of Pathways A2b and A2c, participants generally perceived A2b as the same as A2 for the Jobs & Wealth, Place, and Vision & Vitality dimensions, with an overall median rating of 0, while the People dimension was rated slightly lower with an overall median rating of -0.5. Pathway A2c was rated towards the *as bad as can be* end of the rating scale, with overall median ratings of -4 for the People, Jobs & Wealth, and Place dimensions, and a median rating of -3 for the Vision & Vitality dimension. Under these two pathways, the degree of clustering among both groups remained relatively constant for each dimension, ranging from 0 to 1. Compared to A2, both groups independently perceived Rupert to be worse off under A2c and better off under A2b.

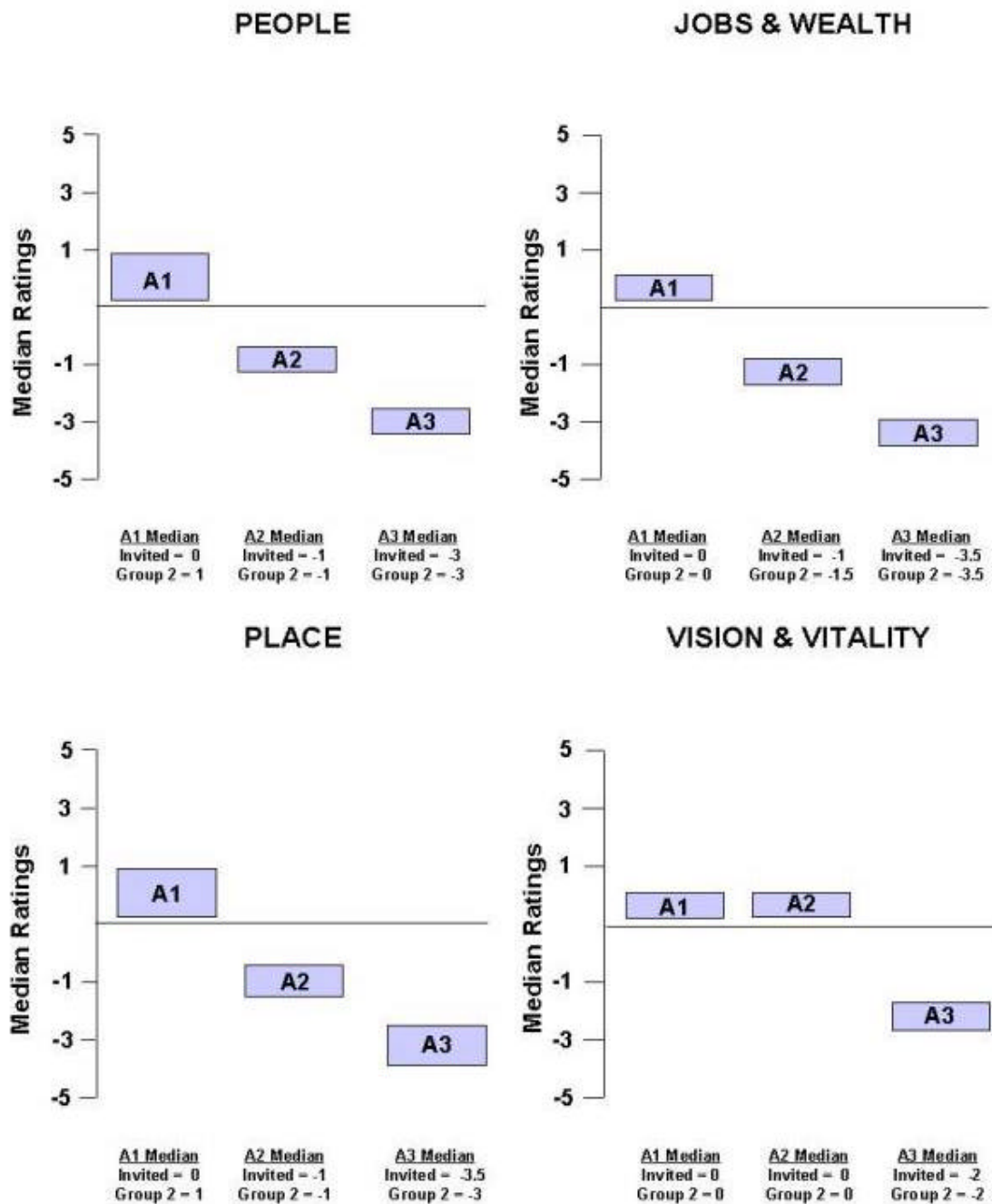


Figure 2-20. Median scale ratings of Pathways A1, A2, and A3, for Rupert, Idaho, by community dimension, across groups

### **2.25.5.3 Rating Justifications Across A1, A2, A2b, A2c and A3**

In the analysis of A1, the "no action" pathway, a process similar to that for the 1999 current situation was followed to examine participants' perceptions of likely future changes to the community in 2020. The premise for the scenario was that the river system would remain unchanged but other social, economic, and cultural trends would continue on their current trajectory, as perceived by forum participants. Both numerical scores and the reasons and changes underlying them were examined. Pathway A1 was treated as the base-case, and the results for this pathway provided the basis for assessing the impact of both A2 ("major modification") and A3 ("natural river drawdown, or dam breaching"): A2 and A3 were analyzed to identify changes of clustered numerical ratings and qualitative justifications from the baseline forecasts under A1. Similarly, Pathway A2 was treated as a base-case for analyzing Pathways A2b (major system modifications with elimination of flow augmentation) and A2c (major system modifications with additional 1 million acre-feet flow augmentation), to determine the perceived impacts of flow augmentation to Rupert in 2020 according to forum participants.

### **2.25.5.4 Pathway A1**

#### ***People***

Under A1 for the People dimension, the median group rating was 1, with individual responses across all forum participants ranging from -2 to 3. As presented in [Table 2-14](#), characteristics consistently mentioned across both groups were that current (1999) trends would continue and that Rupert would see little change or impact resulting from this pathway ("Rupert is on a natural, positive curve"). The perception of increased industrial activity and good job opportunities contributed to an overall positive rating. An increase in population related to tourism, and increased community attractiveness were also mentioned. The invited group added that characteristics such as stable families, a safe environment, and decreasing school enrollment would continue, as in the current situation.

#### ***Jobs & Wealth***

In the case of the Jobs & Wealth dimension, both group medians were 0, with individual responses ranging from -2 to 3. In addition to the justifications across both groups that there would be no change in Jobs & Wealth in Rupert in 2020 under A1, an expanding economic base was also mentioned. The other group added that there would be an increase in job opportunities, although the invited group mentioned a continued lack of high skilled and technical jobs in 2020, as in the current situation.



**Place**

For the Place dimension, both group medians were 0, with individual responses ranging from -2 to 5. Again, salient justifications included a perceived ‘no change’ under A1 ("People continue to improve a stable environment"). The invited group mentioned steady population growth, although individual comments refer to this both positively ("better economy adds stable people...river would continue to attract more and higher income to the area wanting to build on river"), and negatively ("the natural influx of people will reduce small town quality of life").

**Vision & Vitality**

Both groups had median ratings of 0 for the Vision & Vitality dimension, with individual responses ranging from -2 to 4. Again, comments across both groups included the perception that no change would occur to the Vision & Vitality dimension of Rupert under A1, and that the community would remain friendly and sociable. The invited group remarked that Rupert currently has a good vision, community revitalization will continue, and the river will continue to beneficially impact the community. The perception of Rupert residents as slow to accept change was also mentioned.

<b>Table 2-14                      Comparison of Rating Justifications For Pathways A1, A2, and A3                      For Rupert, Idaho,                      By Community Dimension and Type of Group</b>					
<b>Year 2020 Rating Justifications</b>	<b>Pathway 1 Existing Condition</b>	<b>Pathway 2 System Modification</b>	<b>Pathway 2b 0 Flow Augmentation</b>	<b>Pathway 2c 1.427 Flow Augmentation</b>	<b>Pathway 3 Drawdown</b>
<b>People</b>					
Across All Groups	Increasing/high population (41)	No change in people/little/no impact (313)	No change in people/little/no impact (313)	Negative impacts (general) (322)	Negative impacts (general) (322)
	No change in people/little/no impact (313)	Negative impacts (general) (322)	Increased utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)	Decrease in water availability (604)	Increased utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)

Across All Groups	Current trends will continue/little/no impact (325)	Increased utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)	More water (positive) (608)		
	Increased industries/good job opportunities (491)	Unstable/poor/decreasing economy (542)			
Invited Groups	Stable retirees (23)	High/increasing cost of living (455)	Increasing/high population (41)	Decreasing/low population (42)	Decreasing/low population (42)
	Prevalent values (general) (69)	Decrease/loss of agricultural-based economy (503)	Growth in recreation and tourism opportunities (443)	Decreasing school enrollment (72)	Families (general) (109)
	Decreasing school enrollment (72)	Businesses suffer (512)	Affects business (general) (516)	Power/electricity/utilities (general) (488)	Decreasing people own homes/few people own homes (152)
	Stable families (103)	Negative in low water years (606)	Flow augmentation does not work (611)	Agriculture-dependent economy (504)	No change in people/little/no impact (313)
	Safe place to live with low crime (191)			Low/decreased income and wages, with increased poverty (534)	Loss of industries and lack of job opportunities (492)
	Water (general) (600)			Unstable/poor/decreasing economy (542)	Decreased/loss of agricultural-based economy (503)
	No change in water flow is tolerable (603)			Reliance on water/importance to people (601)	Businesses suffer (512)
	Decrease in water availability (604)				Low/decreased income and wages with increased poverty (534)
	Negative in low water years (606)				

Other Groups	Stable population (43)		Negative impacts (general) (322)	Increased utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)	
	Growth (general) (49)		Current trends will continue/little/no impact (325)		
			Power gain (486)		
			Reliance on water/importance to people (601)		
<b>Jobs and Wealth</b>					
Across All Groups	Expanding economic base (125)	Decreasing job opportunities (general) (18)	Increasing job opportunities (general) (10)	Decreasing job opportunities (general) (18)	Decreasing job opportunities (general) (18)
	Same/no change (245)	Increasing utility costs (73)	Increasing utility costs (73)	Declining economy (162)	Increasing utility costs (73)
		Declining economy (162)	Increase in irrigation/more water for irrigation (107)		Ripple effect in community and all dimensions (93)
					Shrinking agriculture, mining, and timber base (135)
					Declining/limited business and shops (136)
					Declining economy (162)
Invited Groups	Few technical jobs/high skilled jobs (5)	Decreasing local investment (58)	Economic base (general) (120)	Decreasing agricultural jobs (22)	Increasing transportation costs (75)
	Increase in irrigation/more water for irrigation (107)	Pressure from increased water conflicts (117)	Resource tourism and amenity recreation growth (126)	Decreasing income and wages (33)	No new industries or businesses (140)
	Low economic diversity (122)	Declining/limited businesses and shops (136)		Loss of recreation and tourism-related business (134)	
	Government-based economy (145)			Agricultural/food processing-based economy (143)	

Invited Groups	Strong/growing economy (157)			Decreasing wealth (181)	
				Bad for community (956)	
Other Groups	Increasing job opportunities (general) (10)	Increased costs of doing business (88)			
		Same/no change (245)			
<b>Place</b>					
Across All Groups	Increased commercial and residential development/loss of open space to it (761)	Struggling businesses and vacant storefronts (520)	Maintain status quo, no change (841)	Importance of agriculture (644)	Increased power rates (594)
	Maintain status quo, no change (841)	Increased power rates (594)			Decline in farming (654)
		Economic decline/loss of economic diversity (733)			Community improvements are dependent on economy (753)
		No negative changes, little impact (849)			
Invited Groups	Increasing population (821)	Increasing store vacancies (521)	Safe and crime free (902)	Struggling businesses and vacant storefronts (520)	Struggling businesses and vacant storefronts (520)
		No money for community improvements (567)		Increased power rates (594)	No money for community improvements (567)
		Decrease in jobs (748)		Importance of water to community (618)	Poor/decreasing social services (570)
		Increasing crime and drug-use/less safety (903)		Poor/loss of recreation and tourism opportunities (666)	Negative impact from increased transportation (609)

Invited Groups				Community decline and worsening (722)	Decreased number of farms and increased farm size, absentee owners, corporate farms (653)
				Community improvements are dependent on economy (753)	Community decline and worsening (722)
				Negative impacts (general) (850)	Negative economic impact from increased transportation costs (741)
				No change except in dry years (862)	Decrease in jobs (748)
					Decreasing population (823)
Other Groups	Community improvements are dependent on economy (753)	Maintain status quo, no change (841)			Economic decline/loss of economic diversity (733)
	Community improvements, general (845)				
<b>Vision and Vitality</b>					
Across All Groups	Friendly, sociable community (305)	No change (673)	No change (673)	Negative/decreasing community characteristics (542)	Negative/decreasing community characteristics (542)
	No change (673)				Negative economic opportunities (582)
					Impacts related to increased utility rates (750)
Invited Groups	Grants needed/used for development (245)	Negative/decreasing community characteristics (542)	Impacts related to increased utility rates (750)	Negative/decreasing community characteristics (542)	People are adaptable (505)
	Do not cope well with or resist change (362)	Negative economic opportunities (582)		Negative impacts on agriculture and land tenure (308)	Economic factors decreasing vision and vitality (583)

Invited Groups	Planning and plans exist, good base for the future (403)	Economic factors increasing vision and vitality (584)		Negative economic opportunities (582)	Decreasing/lack of community vision and vitality (602)
	Positive impacts on vision and vitality related to water (604)	Community growth (605)		Negative impacts on vision and vitality related to water (604)	Increased costs related to modifications (702)
	Community growth (605)	Impacts related to increased utility rates (750)		Impacts related to increased utility rates (750)	Outmigration of population (892)
				Outmigration of population (892)	
Other Groups	Strong/increasing community vision and vitality (601)	No change in vision and vitality (603)			

### 2.25.5.5 Comparison of Pathway A1 to A2

Under the implementation of A2, median group ratings were much same as for the People, Jobs & Wealth and Place dimensions as under A1 ([Figure 2-20](#)). In general, forum participants perceived that Rupert would experience a slightly negative impact under A2, with all three dimensions receiving an overall median rating of -1. The Vision & Vitality dimension which, received a median rating of 0, did not change, signifying that no change was perceived to occur.

[Table 2-14](#) presents the salient justifications under the implementation of A2. For the People dimension, both groups mentioned that little or no change would occur under A2, although an increase in utility rates was perceived to negatively impact the community ("Higher expenses would put some out of business...would further dwindle our bottom line as farmers...would have a negative impact on any population" and "fewer people moving into area due to weaker economy -- higher rates"). The lower rating for the Jobs & Wealth dimension may have also been due to negative impacts resulting from increasing utility costs, such as decreasing job opportunities and a declining economy ("50 cents a household is how much on a farmer or business? Too much" and "Increased power rates to a depressed farm economy will cause suffering"). The Place dimension was also perceived to be negatively impacted by increased utility rates under A2, with salient justifications that included struggling businesses and vacant storefronts and a decline in economic diversity. Finally, the Vision & Vitality dimension was not perceived to change under A2, although the invited table added that increased utility rates would decrease community attitude.

### 2.25.5.5.1 Comparison of Pathway A2 to A2b and A2c

Under the implementation of A2b (major system modifications with elimination of flow augmentation to 0 acre-feet), group median ratings were 0 (the town would be the same under A2) for the Jobs & Wealth, Place, and Vision & Vitality dimensions. Only the People dimension received a slightly decreased median rating of -0.5. All median ratings were clustered around the invited group. The range of median ratings across both groups was 0 to 1. This indicates that both groups agreed on the perceived impact Pathway A2b would have on Rupert in 2020: no change compared to A2, except for a slight decrease in the People dimension.

Under the implementation of A2c (major system modifications with increase in flow augmentation to 1.4 million acre-feet), the median group ratings shifted toward the *adversely affected* end of the impact rating scale for all dimensions (see [Figure 2-21](#)), and it was the lowest rated pathway. Medians were -4 for the People, Jobs & Wealth, and Place dimensions, clustered around the invited group, while the Vision & Vitality dimension received a slightly higher overall median rating of -3. This clustering indicates that both groups independently came to similar conclusions regarding the state of their community under A2c and that the community would be *much worse* in 2020.

For the People dimension, characteristics consistently mentioned across both groups were that decreasing water availability and increased power rates would affect businesses, farmers, and the community, in general ("Taking this water from our system could be devastating to agriculture...and could change the community adversely due to the fact we are a farming community"). The invited group also noted compounding effects as decreasing population and school enrollment, and increased poverty. In terms of the Jobs & Wealth dimension, clustered justifications included the perception of a declining economy and job opportunities compared to A2 and A2b. The invited group added that the community's agricultural base and recreation/tourism-related businesses would also suffer, resulting in the loss of jobs. For the Place dimension, participants described the negative impact that a declining farming economy could have on the community in general ("If we lose our water in dry years the farmers will suffer" and "ag economy affects community"). Increased power rates and decreased tourism/recreational opportunities were again mentioned by the invited group as negatively affecting Rupert. Finally, for the Vision & Vitality dimension, a common justification was that a general deterioration in community characteristics would result. The invited group again specified that a decreasing farm economy and increasing power rates would result from Pathway A2c and negatively impact the community.

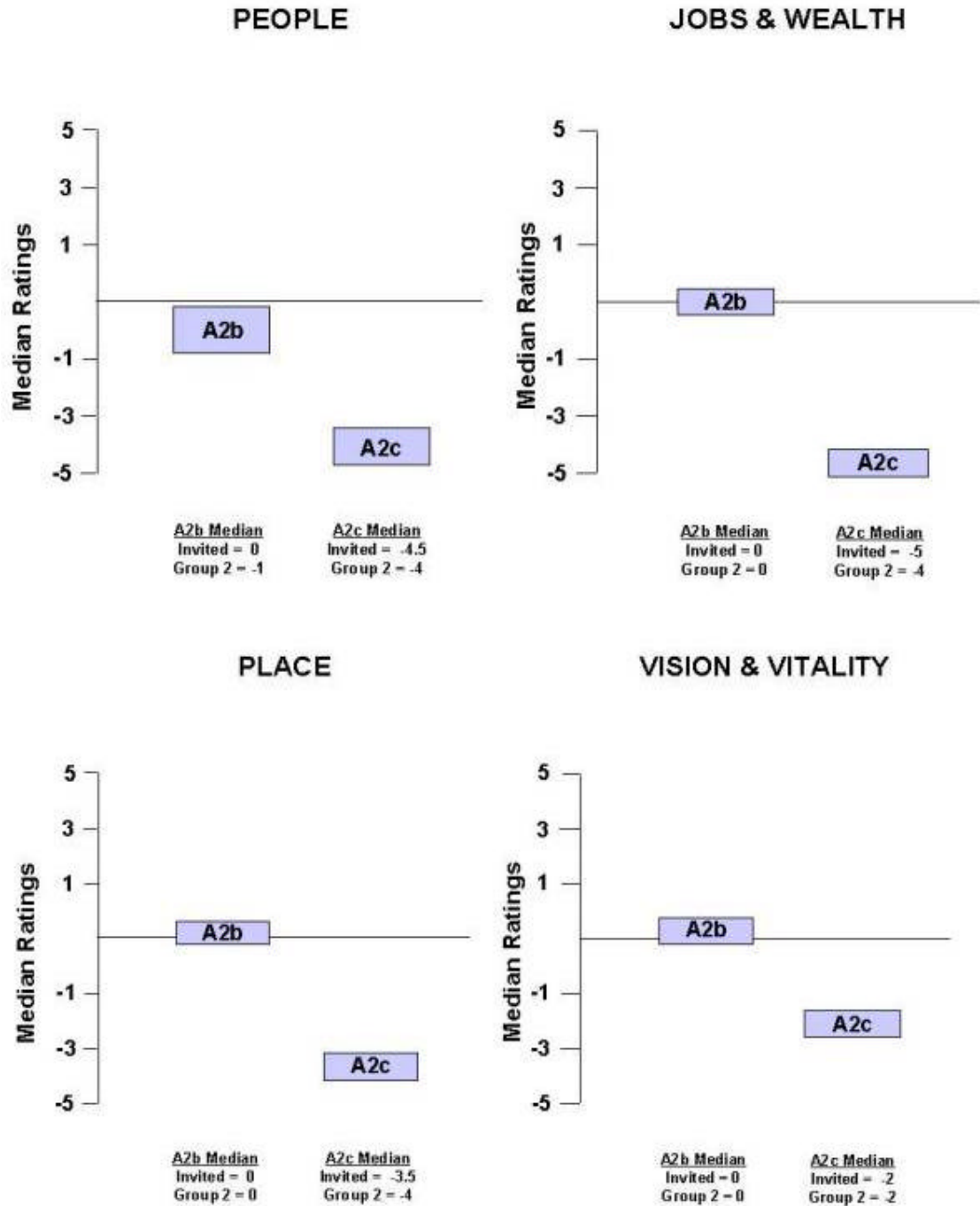


Figure 2-21. Median scale ratings of Pathways A2b and A2c, for Rupert, Idaho, by community dimension, across groups



### 2.25.5.6 Comparison of Pathway A1 to A3

Under the implementation of A3, the median rating for A1 shifted toward the *adversely affected* end of the impact rating scale for all dimensions: median ratings for the four dimensions, which loosely clustered around 0 for A1, decreased to -3 for A3 ([Figure 2-20](#)). Specifically, median group ratings ranged from -2 for the Vision & Vitality dimension to -3.5 for the Jobs & Wealth dimension, with both the People and Place dimensions receiving an overall median rating of -3. Median group ratings for the four dimensions were tightly clustered around the invited group, indicating consensus across both groups regarding the magnitude that the community would be worse off under A3 compared to A1.

#### ***People***

Individual ratings on the People dimension under A3 ranged from -5 to 2, with the median of -3 clustered across both groups. [Table 2-14](#) shows the shift in salient justifications under the implementation of A3. This included a decrease in the town's business and farm economy due to increased freight and power rates ("freight rates will go up, this snowballs to the entire spectrum of community" and "power rates would move businesses out"). The invited group added that there would be a decrease in income levels, coupled with decreases in home ownership and population levels, as further justification for their negative rating.

#### ***Jobs & Wealth***

Individual responses on the Jobs & Wealth dimension ranged from -5 to -1 across both groups, with a median of -3.5 across both groups under A3. Both groups' justifications included the compounding effects of increased utility rates, as well as a shrinking agricultural base, on the community ("costs and effect on irrigation would ripple through people, community"). Decreasing job opportunities and a declining economy were also mentioned. The invited group also mentioned that increased transportation costs would "snowball" to the entire community.

#### ***Place***

Individual responses under A3 ranged from -5 to 3 across both groups on the Place dimension, with a median of -3 clustered across both groups. Both groups mentioned that community improvements, which are dependent on the economy, would be negatively affected under Pathway A3. The invited group also mentioned that increases in power rates and transportation costs would cause economic decline, and that, as businesses and job opportunities decreased, population out-migration would occur, resulting in decreasing social services and less money for community improvements.

#### ***Vision and Vitality***

For the Vision & Vitality dimension, individual responses ranged from -5 to 3 under A3, with a median of -2 clustered around both groups. Common justifications perceived across both groups focused on impacts related to increased utility rates ("increased costs will result in negative growth") and decreasing community characteristics.

Although the invited group also added justifications that the community would be adversely affected ("increased costs will move businesses out" and "will bring a decrease in population"), it was also perceived that "Rupert would survive," perhaps leading to an overall median rating that was slightly more positive than the median ratings given to the other three dimensions, although still negative.

### **2.25.6 Minimizing Adverse Impacts**

Forum participants suggested ways to minimize the negative community impacts perceived to occur under the proposed pathways. These include the following:

Suggestions under Pathway A2 focused on methods to mitigate adverse impacts to the region, including identification of the location where the water will be taken from for flow augmentation, timing of flows to ensure that flow augmentation will produce maximum benefits, production of biological facts to show that augmentation will work, and assurance of fiscal responsibility for lost revenue to the region.

Suggestions under Pathway A3 again focused on methods to mitigate adverse impacts to the region, such as decreasing predation on fish populations, taxing commercial fishing to subsidize mitigation to communities upstream, decreasing tribal fishing, and attending more to hatchery salmon and less to natural salmon.

## **2.26 Salmon, Idaho, Community Assessment**

### **2.26.1 Summary of Key Findings**

Salmon, a growing town of about 3,200 residents, is located on the Salmon River in central Idaho, about 160 miles northwest of Idaho Falls. This town is the county seat for Lemhi County, and it is located in the midst of abundant forest and river resources -- the Bitterroot Range lies to the east, the Lemhi Range to the south and the Salmon River Mountains to the west. Salmon has gone through many changes in its social make-up and economy, and recently the timber industry has been in decline at the same time that the retirement population and tourism industry have been on the increase. Agriculture, ranching and mining have remained relatively steady, although mining operations have been cyclical.

Participants in the forum at Salmon acknowledged these changes, depicting a town in 1999 whose current situation varied considerably in terms of individual participants' ratings of the People, Place and Vision & Vitality dimensions, yet is relatively positive in terms of median ratings. The population was described as stable, yet participants also acknowledged a change in the demographic structure of the community, with retirees moving in and youth moving out. Nonetheless, participants favorably rated the "very friendly, honest home town people" of Salmon. While the threat of community growth and poor land use planning detracted from the Place dimension, participants were extremely positive about the outdoor recreation opportunities, "10+ views" and "large amount of public land." In terms of Vision & Vitality, political and civic leadership is said to be strong, and residents are actively involved in community. As the diversity of people and interests grow in Salmon, there is a "tendency to keep things fragmented"

with "a lack of communication between factions." Nonetheless, participants generally described a high level of cohesiveness among residents. In contrast to the high ratings of these three dimensions, the town's economy was rated lower, at the neutral (5) point of the rating scale. A combination of the elimination of the basic economy (timber, mining, farming) and the low-paying tourist-based economy, contributed to this low rating.

Participants were relatively pessimistic about Salmon's future under Pathway A1 (the existing situation on the Lower Snake River continued on into 2020), with ratings of its impact falling on the negative, adversely affected end of the scale for all four dimensions. The declining fish population was the over-arching concern for all dimensions. Participants described how the loss of fish "will remove the last underpinnings of local economy," will "ensure social fabric and relations deteriorate" and will "reduce future options in Salmon." One participant noted that maintaining the "existing situation is decline, not 'no change'."

Participants perceived little impacts under Pathway A2 (major system modification) compared to A1 for the People and Jobs & Wealth dimensions, while the Place dimension improved slightly and the Vision & Vitality dimension decreased slightly. Participants focused on continued fish declines with additional utility costs, as detrimental to community dimensions. Use of taxes to pay "to support a doomed strategy" as well as increased regulations, were also perceived characteristic of A2. Ratings and justifications for A2b (major system modifications with the elimination of flow augmentation) were much the same as for A2, though slightly lower for the Vision & Vitality dimension. Participants generally perceived that the community would be affected the same under A2b as under A2. In sharp contrast, participants were extremely concerned about their community's future under Pathway A2c (major system modifications with an additional 1 million acre-feet flow augmentation), with ratings of its effects in 2020 clustered at the extreme negative, *adversely affected* end of the scale. It was also the most consistent negatively rated pathway by the forum participants. In contrast to the other pathways, emphasis was placed on negative impacts to agriculture and the community in general, associated with water loss, with fish reductions receiving less mention. Participants described how the "agriculture-based economy would suffer greatly," and the elimination of "some ranches, the majority of which would be subdivided which would accelerate the switch to increasing retirees." In addition, "there would probably be an exodus due to loss of water," with decreasing jobs, school enrollment, and sense of place. Several participants also mentioned how A2c was a lose-lose situation, "terminal to fish and people."

Participants were very optimistic about their community's future under Pathway A3 (natural river drawdown and dam breaching). Median ratings and justifications were at the positive end of the scale for all dimensions. Major benefits included how "an increased diversity would add depth and stability; begin to recover lost potential of past 30+ years," with decreased Federal regulations and increased tourism. Participants were concerned that "electric rate increases could discourage new industry," but

generally acknowledged the positive effects that salmon fishing would have on the local economy. In addition, the noted increased population had some participants worried about "more crimes and social problems." Under A3, participants generally perceived there would be "significant improvement to character of community named 'Salmon' with salmon back in rivers."

In its suggestions for mitigating negative effects to the community of Salmon, residents recommended that a reduction in power bills be made for all of the previous efforts in saving salmon. Participants noted that their community would continue to change regardless of which pathway is implemented. A major concern was over finding ways to maintain their high quality of life and all the positive characteristics of community associated with it. Participants at the forum represented a diversity of community residents, in that a spectrum of interests provided input, ranging from interests reflecting older traditional resource-based industries, to growing travel and recreation interests, to more conservation- (some might say "environmentalist") oriented concerns. In evaluating Pathway A3 (dam-breaching and natural river drawdown on the Lower Snake River), the three groups of Salmon participants overall were optimistic when considering potential impacts to their community, with the median impact ratings of all groups showing a movement from the negative and adversely affected end of the scale under A1 and A2 to the positive and beneficially affected end under A3.

### **2.26.2 Interactive Community Forum Participants**

Thirty-three community members provided perspectives on the history, 1999 situation and Pathways A1, A2, A2b, A2c, and A3 for Salmon, Idaho. These forum participants sat at three facilitated tables (see methodology), working in interactive small groups (hereafter, "groups"). The overall diversity index rating for participants was 0.85 (on a scale from 0 to 1.0), indicating that 13 of 14 pre-identified community roles were present at the forum (see methodology). Of the total number of participants completing the sign-in questionnaire, 21 percent were retired, 12 percent worked in agriculture, and 9 percent were guides or outfitters. The remaining 77 percent were employed in one of the following occupations: fisheries-related worker, electrical contractor, BLM employee, geologist, county commissioner, mayor, operations manager, teacher, sales manager, realtor, medical store manager, biologist, priest, regional supervisor, wildlife biologist, nurse, and auto parts jobber.

### **2.26.3 Community Background**

Salmon is located on the Salmon River in central Idaho, 160 miles northwest of Idaho Falls. It currently has a population of about 3,200 people. This town is the county seat for Lemhi County and is located in the midst of abundant forest and river resources, with the Bitterroot Range to the east, the Lemhi Range to the south and the Salmon River Mountains to the west. The town of Salmon was incorporated in 1892, but traces its origins back to 1860, when it served as a supply center for the gold mines of Leesburg and other high country settlements. Mining has since been key to the town's economy, and livestock/ranching also has been a traditional resource-based industry. Since the 1960s, the town's population has remained steady in size. At about that time, the

perception of declining availability of federal lands for traditional uses began and continues up until the present. The 1970s brought a variety of changes to the town of Salmon and its traditional residents and lifestyles: the Native Americans left the area; an increase in Federal government employment began to occur (as one example, the BLM tripled in staff size); sheep began to be phased out of the area; and motorized outdoor recreation vehicles along with other individual, freely engaged-in forms of recreational activity began to be reduced. Also, until the 1980s, a good, steady supply of timber was available from the national forests, but after 1980 the timber industry became a hit-and-miss situation. The 1980s also brought about a change in the make-up of the town of Salmon with an increase in retirees moving to the community, and especially growth out in the county. Since the 1970s, old-timers have continued to hold elected office, but much of the perceived vision, vitality, and new energy have come from new-comers. At about this time, although the town has long served as a center for the outfitting-and-guiding operations in the area, the tourism industry began to take off, and activity continues to increase at an estimated 1-2 percent rate each year. A new city building was constructed by the late 1980s.

Salmon remains a central distributing point for a large agricultural, stock-raising, and mining area. In the 1990s, the number of ranches in the area has remained steady; however, timber harvesting and processing has dropped, as has the quality of fishing in the region. A major, steady sector of Salmon's economy has been federal, state and local government jobs (including the school district), providing over 20 percent of all jobs in Salmon. The town of Salmon is the county seat of Lemhi County, and the headquarters for Salmon National Forest also is located in Salmon. Currently, the population is 3,200, and the community is in a process of revitalization of their downtown area.

## 2.26.4 Community Assessment of 1999 Situation

### 2.26.4.1 1999 Situation: Community Dimensions and Rating Scale

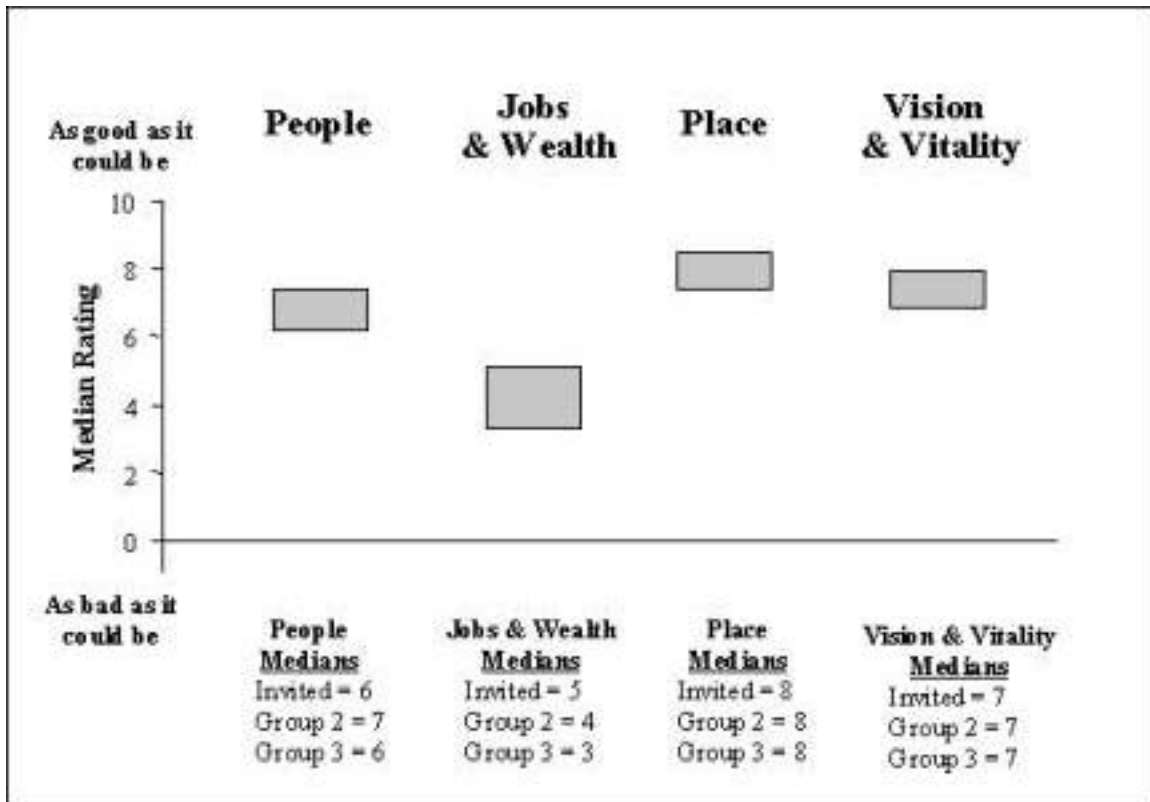
The following "current community situation" rating scale was used by participants from Salmon to rate the current (1999) situation of the following four dimensions: 1) **People** -- Social Make-up; 2) **Jobs and Wealth** -- Economy; 3) **Place** -- Character; and 4) **Vision and Vitality** -- Organization and Leadership Capacity. Following a presentation of descriptive information about their community and a community interactive timeline they developed (see above), forum participants were asked to rate the extent to which their community situation was good or bad on a 10-point scale for each of the four dimensions and to write justifications for each of their numerical ratings.

In 1999, the situation in  
my community is as **bad** 1 2 3 4 5 6 7 8 9 10  
as it could be

In 1999, the situation in  
my community is as **good**  
as it could be

### 2.26.4.2 1999 Situation: Ratings

As [Figure 2-22](#) presents, the median ratings on the current situation rating scale for the three groups participating in the forum ranged from a 3 on the Jobs & Wealth dimension to an 8 on the Place dimension. The People and Vision & Vitality dimensions fell in between this range, with median ratings of 6 and 7. Specifically, although all dimensions were oriented towards the *as good as it could be* end of the scale, the three facilitated groups perceived the Place dimension of the current situation higher than the People and Vision & Vitality dimensions. The Jobs & Wealth dimension, rated at the mid-point (5) of the rating scale by the invited group, was perceived to have a mix of both good and bad attributes.



**Figure 2-22. Median scale ratings for the current (1999) situation in Salmon, Idaho, by community dimension, across groups**

The differences between the invited group's median score and that of the other two facilitated groups ranged from 0 to 2 rating points on the current (1999) rating scale. Group 3's perception of the Jobs & Wealth dimension resulted in a median rating two points lower than that of the invited group. The general clustering of group medians demonstrates that, for most of the dimensions assessed, the facilitated groups perceived their community similarly, independently arriving at similar conclusions regarding the current state of Salmon.

### 2.26.4.3 1999 Situation: Rating Justifications

[Table 2-15](#) presents the clustering of justifications for the facilitated groups. Justifications noted across the invited and one other group are categorized as 'All Groups.' Justifications noted by only the invited group are categorized as 'Invited Group.' Finally, justifications noted by the other two groups are categorized as 'Other Groups.'

#### **People**

The People dimension of Salmon's current situation received a median rating of 6, with individual responses ranging from 3 to 10 across all groups. As presented in [Table 2-15](#), key factors mentioned across all groups to justify their rating included the perception that Salmon is a good community to raise a family, with strong prevalent values, friendly active people, and a safe environment. Nonetheless, the prevalence of public assistance, high-risk families and social problems was also noted. These comments appear more pronounced by the invited group. All groups also felt that recreation and tourism are important to the community, while Federal restrictions impact community growth. Salmon's stable population was also characterized as changing, due to the in-migration of retirees to the area.

#### **Jobs & Wealth**

The Jobs & Wealth dimension was the one most oriented towards the *as bad as it could be* end of the scale, with a median rating of 5. Individual responses ranged from 1 to 8 across all forum participants. Group medians did not cluster, with a disparity in the third group's median rating of 3. Nonetheless, all groups were consistent in their assessment that this was the lowest rated dimension. Negative comments affecting this rating included the prevalence of high poverty and low employment opportunities. High levels of government employment, and seasonal, low-paying tourism and natural resource jobs were also perceived as attributes of Jobs & Wealth in Salmon. In contrast, the low cost of living and low utility rates were perceived favorably among participants.

#### **Place**

The Place dimension received the highest rating, with an overall median rating of 8 across all groups. Individual responses ranged from 5 to 9 across all forum participants. Justifications provided across all groups indicated that pride in and commitment to the community, along with good social services and low traffic congestion, were positive reasons for the high rating. In addition, participants described characteristics of the natural environment, such as good air and water quality, attractive scenery, and outdoor recreation opportunities, as positive aspects of Place in Salmon ("the large amount of public land is a critical element of the local lifestyle...10+ land views"). According to the invited group, negative comments that tended to detract from the Place dimension included a changing rural character: poor land-use planning, bad peripheral growth, and increased traffic.

**Vision & Vitality**

Vision & Vitality was the second highest-rated dimension, with an overall median rating of 7 across all groups, and individual responses ranging from 4 to 9 across all forum participants. Justifications indicated that many participants were divided in their perception of the degree of civic organizational capacity and community cohesiveness in Salmon, although they agreed that Salmon has a high level of community participation, leadership and civic organizations. Further, participants felt that the diversity of people and opinions was a plus, but that it tended to lead to a fragmented community. Participants also noted that the community does not cope well with, and tends to resist, change.

Dimension	Replication Across All Groups	Invited Group	Other Groups
<b>People</b>			
Positive	Stable population (43)	Good customs and lifestyles/change for the better (51)	
	Good prevalent values (61)	Children and education are high priority (66)	
	Stable families (103)	Good, strong churches (67)	
	Safe place to live with low crime (191)	Strong/increasing quality of life (209)	
	Good, friendly, helpful people (201)	Good community attitude (221)	
	Strong sense of community among residents (203)		
	Supportive of community activities and involved (241)		
	Good community to live and raise family (424)		
	Recreation and tourism is important (positive) (441)		



Negative	Lack of opportunities for young people (11)	Poor prevalent values (62)	Families are becoming less stable (102)
	Families at risk/single parents (105)	Drug and alcohol problems (194)	Increasing/high public assistance (112)
	Lack of vision (237)	Domestic violence (197)	Loss of industries and lack of job opportunities (492)
	Heavily regulated by government/intervention (255)	Poor sense of community among residents (204)	Decreasing school enrollment (72)
	Low/decreased income and wages with increased poverty (534)	Social problems (general) (198)	Ethnic diversity is low/decreasing (302)
		Polarization on natural resource issues (223)	
		Lack of involvement and community activities (242)	
Other	Prevalent values (general) (69)	Lifestyles changing (54)	Customs and lifestyles (general) (59)
	Diversity (general) (309)	Home ownership (general) (159)	Families (general) (109)
		Safety (general) (196)	
		Could be worse/room for improvement (324)	
		Increasing development (511)	
<b>Jobs and Wealth</b>			
Positive	Stable government jobs (48)	Good job opportunities (2)	
	Low cost of living (78)	Stable job opportunities/employment (8)	
	Economically diverse (121)	Money reinvested in local business (54)	
		Housing fairly priced (83)	
		Strong sense of place (84)	
		Stable population (212)	
		Outside money spent locally (55)	
		Good rural area (228)	

Negative	Poor job opportunities (3)	Struggle to keep head above water (165)	Decreased economic base (124)
	Low employment for youth (6)	Many good jobs changes community for the worse (234)	Money leaves (51)
	Negative impacts associated to public sector jobs (45)	Less likely to pass school bonds (24)	
	Shrinking agriculture, mining, and timber base (135)	Short-term and temporary jobs/part-time jobs (37)	
	Income stratification within the community (179)	Money leaves (51)	
	High poverty (183)		
	Increasing/high government assistance (184)		
	High unemployment (191)		
	Low economic diversity (122)		
	Seasonal employment (35)		
	Constrained by government regulations (951)		
Other	Natural resource-based, extractive economy (142)	Low property values (199)	High number of public sector jobs (47)
	High property values (198)	Public sector jobs (general) (44)	
		Government-based economy (145)	
		Economically dependent on water and river (149)	
<b>Place</b>			
Positive	Improving business appearances/revitalization (535)	Good/improving community appearance (511)	Good quality of life (901)
	Good/social services, same access to services (561)	Quiet, peaceful community (781)	
	Community character is good (566)		
	Close proximity to outdoor recreation opportunities (662)		
	Good parks and open spaces, public lands (667)		
	Strong sense of place/heritage/morale and community (670)		
	Pride in/commitment to community (671)		

Positive	Family-oriented, small town with pleasant atmosphere (681)		
	Close-knit community with many activities/ cohesive (700)		
	Attractive scenery (771)		
	Good air and water quality (780)		
	Low traffic congestion (599)		
	Safe and crime free (902)		
Negative		Poor schools (573)	
		Poor medical services (576)	
		Bad peripheral growth (637)	
		Poor land-use planning, concern over plan (713)	
		Increasing crime and drug-use/less safety (903)	
		Increased traffic (606)	
		Lack bike paths (669)	
		Changing rural character (686)	
		Poor/decreasing quality of life (906)	
Other		Importance of river for recreation (674)	
		Cultural events (general) (702)	
<b>Vision and Vitality</b>			
Positive	Strong, active civic organizational capacity (11)	Successful at getting and using grants (241)	Strong, active civic leadership (41)
	Confident, caring leaders (141)	Community cohesiveness (310)	Strong, active, astute political leadership (81)
	Numerous, varied, good, or improving social activities (301)	Cope well with change (361)	Strong cohesive community (341)
	Friendly, sociable community (305)	Preparedness for the future/vision (380)	
	Interesting community (307)	Strong/increasing community vision and vitality (601)	
	Planning and plans exist, good base for the future (403)	Increased population and related improvements (891)	

Positive	Positive/increasing community characteristics (541)		
	Strong, high level of community participation (work together) (561)		
	Positive attributes of people (881)		
Negative	Insufficient/decreasing tax base/fiscal resources (202)	Diminished civic organizational capacity (12)	Lack of planning and ability to plan for the future (404)
	Inadequate community cohesiveness (342)	Lack of community involvement in community affairs (562)	Lack of community control of outside forces (economics/regulations) (442)
	Do not cope well with or resist changes (362)	Negative economic opportunities (582)	Limited budget (482)
		Decreasing/lack of community vision and vitality (602)	Mistrust of and too much Federal government (466)
Other	Community characteristics (general) (549)	Community planning (general) (400)	Political leadership and organization (general) (83)

## 2.26.5 Comparison of Salmon Recovery Pathways A1 to A3

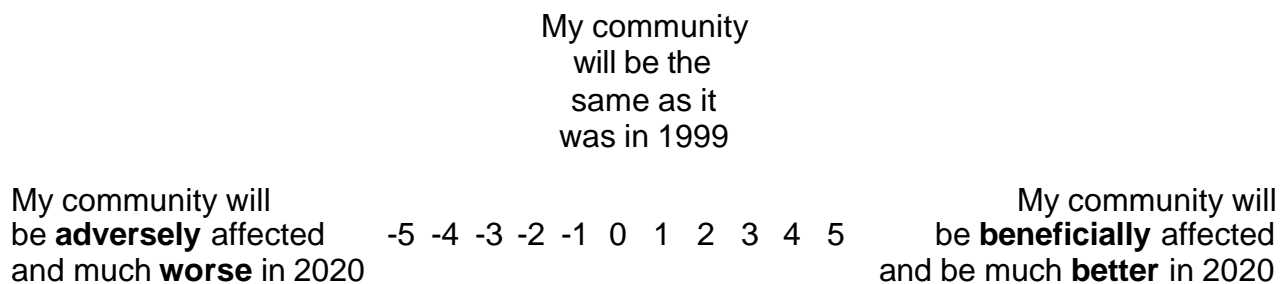
### 2.26.5.1 Community Dimension Impact Rating Scale

Forum participants were asked to assess how their community would be impacted in the year 2020 by implementation of the five salmon recovery pathways proposed by the U.S. Army Corps of Engineers to return juvenile salmon to the Lower Snake River. Pathway A1 involves maintenance of the existing Lower Snake River System, A2 involves major modifications to the existing Lower Snake River System, and A3 involves natural river drawdown and dam breaching. Supplementing Pathway A2, A2b involves the elimination of flow augmentation (from the current 427,000 acre-feet to 0 acre-feet), while A2c involves increasing flow augmentation (by 1 million acre-feet) into the Snake River system.

A second rating scale was used by forum participants to indicate the situation for each of the four community dimensions (*People, Jobs & Wealth, Place, and Vision & Vitality*) in terms of how adversely or beneficially they felt their community would be impacted in the year 2020. In thinking about the future, participants were asked to consider all of the normal changes that are likely to occur in a community over time, along with specific changes they would expect to result from adding a pathway. To provide a basis for thinking about their community's future situation, forum participants received information

from Corps and NMFS' studies specific to their community for each of the proposed pathways. Information provided to participants included salmon recovery probabilities, physical changes, and economic changes. (For more information on the information presented and their sources, see [Appendix A](#).) Community members then gave an initial rating of the impacts on their community in the year 2020 for each dimension. After a facilitated group discussion of how and why their community would be affected or not affected, participants rated the community dimensions and listed their justifications.

To ground the rating scale in reality, forum participants were instructed to use their community's 1999 situation, which they had just rated and described for each dimension, as the mid-point (0) of the scale from which to determine the magnitude of adverse (negative) or beneficial (positive) effects to their community in the year 2020 for each dimension. To rate Pathways A2b and A2c, participants were instructed to use their rating for Pathway A2 as the mid-point of the scale for each dimension. In each case, the zero or mid-point represents the "no impact" or "no change" situation. Participants were specifically instructed to focus on adverse and beneficial impacts only on their community and not on the entire region.



### 2.26.5.2 Summary of Findings on Pathways A1, A2, and A3

[Figure 2-23](#) illustrates that, across all facilitated groups, forum participants generally perceived that the community situation would be worse off in the year 2020 for each of the dimensions under A1 and A2. Median ratings for A1 ranged from a high of -2 in the People, Place and Vision & Vitality dimensions to a low of -3 in the Jobs & Wealth dimension. Similar to A1, median ratings for A2 ranged from a high of -1.5 in the Place dimension to a low of -3 in the Jobs & Wealth and Vision & Vitality dimensions. The People dimension, with a median rating of -2, fell in-between this range. Under Pathway A3, groups medians were clustered towards the positive end of the scale for all four dimensions, making this the highest rated pathway. Median ratings ranged from 1 in the Vision & Vitality dimension to 2 in the People, Jobs & Wealth and Place dimensions.

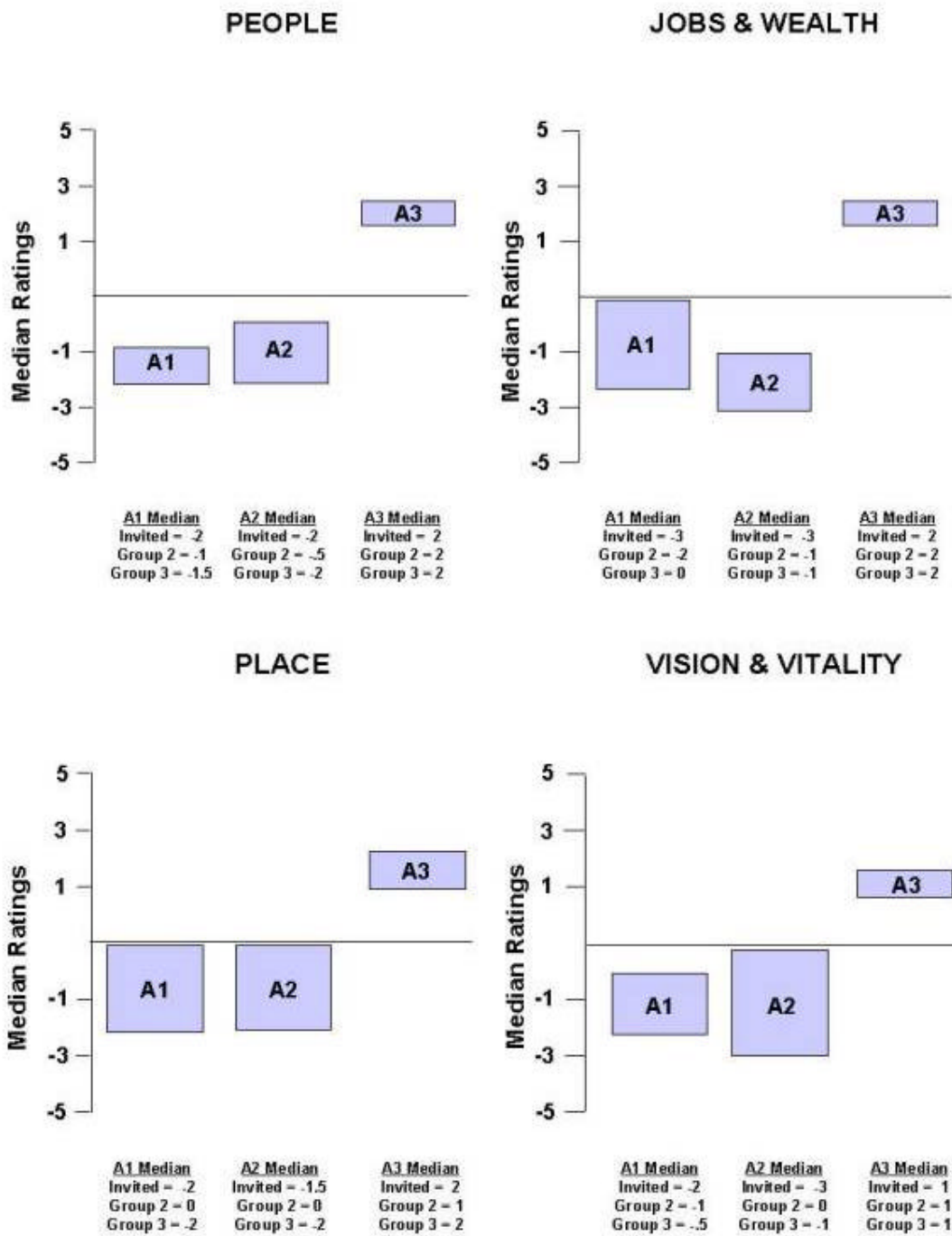


Figure 2-23. Median scale ratings of Pathways A1, A2, and A3, for Salmon, Idaho, by community dimension, across groups

Under Pathways A1, A2 and A3, median ratings across the three groups did not always cluster around the invited group. For A1, median ratings across groups differed by 2 points in the Jobs & Wealth and Place dimensions, and by 1.5 point on the Vision & Vitality dimension, with the invited group generally having the lowest rating. Under A2, median ratings across groups differed by 2 points in the Jobs & Wealth and Vision & Vitality dimensions, and by 1.5 point in the People and Place dimensions, with the invited group generally having the lowest rating. In contrast, in the case of A3, group medians clustered tightly around the invited group. This suggests that all three groups generally agreed that A1 and A2 would adversely impact their community, although they disagreed on the magnitude of impact. Also, they independently arrived at similar conclusions regarding the positive impact of A3 to their community. In the case of Pathways A2b and A2c, participants generally perceived A2b (major system modifications with elimination of flow augmentation to 0 acre-feet) to be the same as A2 under all four dimensions, although the median rating for Vision & Vitality was slightly lower. Pathway A2c (major system modifications with increase in flow augmentation to 1.4 million acre-feet) was perceived to be most oriented towards the *as bad as it can be* end of the rating scale, receiving overall median ratings ranging from -3 for the Place dimension to -5 for the Jobs & Wealth dimension. Median ratings for A2b clustered tightly around the invited group, with the median rating at the midpoint of the scale (0). This suggests that participants held similar perceptions that there would be no effects to the community under A2b compared to A2. Under A2c, median ratings across groups did not cluster for the Place and Vision & Vitality dimensions. Group 2 tended to give slightly less unfavorable ratings to A2c, and Group 3 tended to give more unfavorable ratings. This suggests that all groups perceived Salmon to be worse off under A2c, but they differed in the perceived magnitude of the adverse effects on their town.

### **2.26.5.3 Rating Justifications Across Pathways A1, A2, A2b, A2c and A3**

In the analysis of A1, the "no action" pathway, a process similar to that for the 1999 current situation was followed to examine participants' perceptions of likely future changes to the community in 2020. The premise for the scenario was that the river system would remain unchanged but other social, economic, and cultural trends would continue on their current trajectory, as perceived by forum participants. Both numerical scores and the reasons and changes underlying them were examined. Pathway A1 was treated as the base-case, and the results for this pathway provided the basis for assessing the impact of both A2 ("major modification") and A3 ("natural river drawdown, or dam breaching"): A2 and A3 were analyzed to identify changes of clustered numerical ratings and qualitative justifications from the baseline forecasts under A1. Similarly, Pathway A2 was treated as a base-case for analyzing Pathways A2b (major system modifications with elimination of flow augmentation) and A2c (major system modifications with additional 1 million acre-feet flow augmentation) to determine the perceived impacts of flow augmentation to Salmon in 2020 according to forum participants.

### ***People***

Under A1 for the People dimension, the group median rating was -2, clustered around the invited group, with individual responses across all forum participants ranging from -5 to 1. As presented in [Table 2-16](#), in addition to the perception that no change would occur under A1 ("adaptable community with little impact...no change"), characteristics consistently mentioned across the groups to justify their negative ratings included reduced recreation and tourism opportunities, with declines in related jobs and industries. This would also result in projected population reductions and declines in community customs and lifestyles.

### ***Jobs & Wealth***

In the case of the Jobs & Wealth dimension, the group median was -3 under A1, with individual responses ranging from -5 to 1 across all forum participants. Group medians did not cluster, with a disparity in the group's median ratings. Overall, this was the lowest rated dimension, exemplified by the lack of positive justifications across all groups. Negative ones included a perceived economic decline associated with a reduced fish population: lost recreation and tourism-related business ("will remove last underpinnings of local economy"), decreased job opportunities and continued government regulations. The invited group added that a declining tax base would also result under A1. Group three's overall perception was that no change would occur in Jobs & Wealth under A1.

### ***Place***

The Place dimension had a median rating of -2, with individual responses ranging from -5 to 1 across all forum participants. Median ratings did not cluster across all groups, with group 2 indicating little change, with a median rating of 0. Along with the perception that Salmon would experience little impact under A1, a variety of negative characteristics were also mentioned across all groups. These included a decline in businesses ("sports shops closed...vacated"), sense of place and community pride ("heritage is gone...Salmon, ID, should we rename it?"), as well as a perceived loss of surrounding natural beauty. The invited group also mentioned that community appearance and character would decline, while peripheral growth, mentioned in the current situation, would continue to increase.

### ***Vision & Vitality***

Median ratings across the groups did not cluster across all groups, with a group's median rating. Individual responses ranged from -5 to 2 across all groups. There were no positive justifications mentioned across all groups, while negative ones included decreasing community characteristics related to declining fish populations ("fish extinction will reduce future options in Salmon" and "efforts to deal with this issue sap a great deal of effort and energy"). The invited group also perceived a decline in leadership.



**Table 2-16  
Comparison of Rating Justifications For Pathways A1, A2, and A3  
For Salmon, Idaho,  
By Community Dimension and Type of Group**

<b>Year 2020 Rating Justifications</b>	<b>Pathway 1 Existing Condition</b>	<b>Pathway 2 System Modification</b>	<b>Pathway 2b 0 Flow Augmentation</b>	<b>Pathway 2c 1.427 Flow Augmentation</b>	<b>Pathway 3 Drawdown</b>
<b>People</b>					
Across All Groups	Increasing number of retirees (21)	Increasing number of retirees (21)	Decreasing/low population (42)	Increasing number of retirees (21)	Increasing/high population (41)
	Decreasing/low population (42)	Decreasing/low population (42)	Declining fish populations/listed (462)	Decreasing/low population (42)	Customs and lifestyles (general) (59)
	Poor customs and lifestyles/change for the worse (52)	Poor customs and lifestyles/change for the worse (52)		Heavily regulated by government/intervention (255)	People changing for better/positive change (311)
	Lose families (107)	People changing for the worse/negative change (312)		Negative impacts (general) (322)	Strong/improving/recovered fisheries (461)
	Heavily regulated by government/intervention (255)	No change in people/little/no impact (313)		Loss/change in recreation and tourism opportunities (442)	
	No change in people/little/no impact (313)	Negative impacts (general) (322)		Declining fish populations/listed (462)	
	Negative impacts (general) (322)	Current trends will continue/little/no impact (325)		Decrease/loss of agricultural-based economy (503)	
	Current trends will continue/little/no impact (325)	Loss/change in recreation and tourism opportunities (442)		Decrease in water availability (604)	
	Loss/change in recreation and tourism opportunities (442)	Declining fish populations/listed (462)			
	Declining fish populations/listed (462)				
	Fish recovery (general) (469)				
Loss of industries and lack of job opportunities (492)					

	Decreasing number of retirees (22)	Decreasing number of retirees (22)	Decreasing number of retirees (22)	Change (general) (318)	Opportunities for youth exist (12)
	Increasing/high public assistance (112)	Schools/education (general) (89)	Poor customs and lifestyles/change for the worse (52)	Poor community appearance (412)	Increasing number of retirees (21)
	Social fabric/relations deteriorate (199)	Lose families (107)	Lose families (107)	Fish recovery (general) (469)	Natural resource values/outdoor oriented (58)
Invited Groups	Diversity (general) (309)	Social fabric/relations deteriorate (199)	Social fabric/relations deteriorate (199)	Businesses suffer (512)	Strong/increasing quality of life (209)
	People changing for worse/negative change (312)	Diversity (general) (309)	Negative impacts (general) (322)		Good community attitude (221)
	Change (general) (318)	Change (general) (318)	Poor community appearance (412)		Not heavily regulated by government (254)
	Poor community appearance (412)	Poor community appearance (412)	Loss/change in recreation and tourism opportunities (442)		Stability of community (general) (323)
	Growth in recreation and tourism opportunities (443)	Growth in recreation and tourism opportunities (443)	Fish recovery (general) (469)		Fish recovery is good/important (463)
	Businesses suffer (512)	Hatcheries (general) (467)	Businesses suffer (512)		Increased utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)
		Fish recovery (general) (469)			Businesses suffer (512)
		Power/electricity/utilities (general) (488)			
		Businesses suffer (512)			
	Other Groups	Community change with changing situation/adaptation (319)	Loss of industries and lack of job opportunities (492)	No change in people/little/no impact (313)	Poor customs and lifestyles/change for the worse (52)
			Current trends will continue/little/no impact (325)	Loss of industries and lack of job opportunities (492)	Increase industries/good job opportunities (491)

Jobs and Wealth					
Across All Groups	Decreasing job opportunities (general) (18)	Decreasing job opportunities (general) (18)	Negative impact to jobs from declining fish populations (25)	Decreasing job opportunities (General) (18)	Increasing job opportunities (general) (10)
	Negative impact to jobs from declining fish populations (25)	Negative impact to jobs from declining fish populations (25)	Loss of fishery (138)	Decreasing agricultural jobs (22)	Less government regulation (34)
	Loss of recreation and tourism-related business (134)	Increasing utility costs (73)		Bad for ranching (49)	Expanding economic base (125)
	Loss of fishery (138)	Loss of fishery (138)		Shrinking agriculture, mining, and timber base (135)	Resource tourism and amenity recreation growth (126)
	Declining economy (162)			Declining economy (162)	Do not believe the data (250)
	Constrained by government regulations (951)			People will leave (206)	
				Bad for community (956)	
Invited Groups	Loss of fish will destroy sense of place and community spirit (103)	Shrinking agriculture, mining, and timber base (135)	Decreasing job opportunities (general) (18)	Jobs decrease due to the ripple effect from agriculture losses (26)	Outside money spent locally (55)
	Shrinking agriculture, mining, and timber base (135)	Declining/limited businesses and shops (136)	Stable economic base (139)	Ripple effect in community and all dimensions (93)	Strong sense of place (84)
	Declining/limited businesses and shops (136)	Stable economic base (139)	Declining economy (162)	Loss of recreation and tourism-related businesses (134)	Decreased economic base (124)
	Stable economic base (139)	Declining tax base (172)	Declining tax base (172)	Declining/limited businesses and shops (136)	No new industries, businesses (140)
	Declining tax base (172)	Increasing/high government assistance (184)		Loss of fishery (138)	Things will become worse before getting better (164)
	Loss/decrease of schools (243)	Increasing poverty (187)		Stable economic base (139)	Struggle to keep head above water (165)
	Bad for community (956)			Agricultural/food processing-based economy (143)	Not enough information (249)
				Will be better (955)	

Other Groups	Less hunting and fishing (229)	Declining economy (162)	Same/no change (245)		Increased fishing/maintenance of fishery and fish (129)
	Will adapt (960)	Same/no change (245)			Fish will improve economy (133)
		Pathway 2 does not benefit fish or people (246)			
<b>Place</b>					
Across All Groups	Struggling businesses and vacant storefronts (520)	Decline in sense of place and community pride (672)	Maintain status quo, no change (841)	Loss of environmental beauty, rivers, scenery (777)	Strong sense of place/heritage/morale and community (670)
	Loss of tourism (664)	Decreasing population (823)		Decreasing population (823)	Community growth and improvement (general) (721)
	Decline in sense of place and community pride (672)			Decline in sense of place and community pride (672)	Good, healthy environment and great outdoors (775)
	Loss of environmental beauty, rivers, scenery (777)			Ruin of community, complete negative community change (844)	Positive impacts associated with fish recovery (808)
	Decreased wildlife and fish (802)				Increase in fishing (813)
	Decreasing population (823)				Negative impacts associated with population change (822)
	Maintain status quo, no change (841)				
	No negative changes, little impact (849)				
	Economic decline/loss of economic diversity (733)				
	Loss of fish results in a loss of recreation (679)				

Invited Groups	Poor/declining community appearance (513)	Poor/declining community appearance (513)	Poor/declining community appearance (513)	Struggling businesses and vacant storefronts (520)	Struggling businesses and vacant storefronts (520)
	Community character is poor/declining (577)	Other community changes independent of waterway operations (842)	Bad peripheral growth (637)	Community character is poor/declining (577)	Increased power rates (594)
	Bad peripheral growth (637)	Increased need for public services (569)	Decline in sense of place and community pride (672)	Changing community character (578)	Close proximity to outdoor recreation opportunities (662)
	Poor/loss of recreation and tourism opportunities (666)	Increased power rates (594)	Service-based economy (735)	Bad peripheral growth (637)	Pride in/commitment to community (671)
	Service-based economy (735)	Bad peripheral growth (637)	Other community changes independent of waterway operations (842)	Decline in farming (654)	Stable community (723)
	Decrease in jobs (748)	Service-based economy (735)	No negative changes, little impact (849)	Negative aspects of being a retirement community (693)	Loss of environmental diversity and environmental balance (778)
	Decreased income/increased poverty (751)	Decreased income/increased poverty (751)		Community decline and worsening (722)	Fewer regulations and increased local control (885)
	Good people (832)	Decreased wildlife and fish (802)		Increased government regulations and decreased local control (886)	
	Other community changes independent of waterway operations (842)				
Other Groups		Maintain status quo, no change (841)	Decreased wildlife and fish (802)	Economic decline/loss of economic diversity (733)	Maintain status quo, no change (841)
			Poor/decreasing quality of life (906)		

Vision and Vitality					
Across All Groups	Insufficient/decreasing tax base/fiscal resources (202)	Insufficient/decreasing tax base/fiscal resources (202)	Insufficient/decreasing tax base/fiscal resources (202)	Negative/decreasing community characteristics related to water (308)	Community control of outside forces (441)
	Increasing government expenditures (282)	Negative/decreasing community characteristics (542)		Negative economic opportunities (582)	Positive/increasing community characteristics related to fish recovery (545)
	Negative/decreasing community characteristics (542)	Impacts related to increased utility rates (750)		Decreasing/lack of community vision and vitality (602)	No change (673)
	Negative economic opportunities (582)			Outmigration of population (892)	Positive impacts on vision and vitality with more fish (681)
	Impacts of changing demographics (886)				
	Emotional comments (911)				
	Negative/decreasing community characteristics related to fish recovery (546)				
Invited Groups	Leadership decline (124)	General vision and vitality (600)	Increasing government expenditures (282)	Leadership decline (124)	Insufficient/decreasing tax base/fiscal resources (202)
	Change is inevitable (366)	Decreasing/lack of community vision and vitality (602)	Less commitment to community (504)	Loss of community cohesiveness (344)	Increased community cohesiveness (345)
	Dependencies (445)	Impacts related to decreased utility rates (751)	Negative/decreasing community characteristics (542)	Dependencies (445)	Strong/increasing community vision and vitality (601)
	Mistrust of and too much Federal government (466)	Increased population and related improvements (891)	General vision and vitality (600)	Negative/decreasing community characteristics (542)	Fish-related uncertainty (665)
	Negative impacts on agriculture and land tenure (544)		Decreasing/lack of community vision and vitality (602)	Poor community services (862)	Positive attributes of people (881)

Invited Groups	General community characteristics (549)		Impacts of changing demographics (886)		Don't know/no comment (998)
	General vision and vitality (600)		Increased population and related improvement (891)		
	Decreasing/lack of community vision and vitality (602)				
	Increased population and related improvements (891)				
Other Groups	Positive/increasing community characteristics (541)	Negative economic opportunities (582)	No change (673)		
		No change (673)			

### 2.26.5.5 Comparison of Pathway A1 to A2

Under the implementation of A2, median group ratings did not change from A1 to A2 for the People and Jobs & Wealth dimensions, while median ratings for the Place dimension increased slightly and the Vision & Vitality dimension decreased by one rating point (Figure 2.26.1). In general, forum participants perceived that Salmon would experience no change under A2 in the People and Jobs & Wealth dimensions, a slight improvement in the Place dimension, and a slight decline in the Vision & Vitality dimension. Median ratings varied as much as 3 points across groups, signifying varied assessments by the groups of the degree of perceived negative impacts under A2.

[Table 2-16](#) presents the salient justifications under the implementation of A2. For the People dimension, the negative impacts associated with A1 were perceived by all groups as characteristic of A2. This included a decreasing population and decreased customs and lifestyles related to reductions in fish populations. The invited group added that the agriculture base would decline and poverty would increase. In terms of the Jobs & Wealth dimension, all groups noted similar justifications under A2 as under A1, adding a perceived increase in utility costs ("more money is spent on slowing down the inevitable"). In terms of the Place dimension, a decline in sense of place and community pride, similar to A1, was mentioned by all groups to justify their negative ratings. Also similar to A1, bad peripheral growth and a declining community appearance were mentioned by the invited group. Finally, the low ratings for the Vision & Vitality dimension were noted by all groups to be due to impacts related to increased utility rates, a decreased tax base and a deterioration in community characteristics ("loss of heritage -- diminished enthusiasm").

### 2.26.5.5.1 Comparison of Pathway A2 to A2b and A2c

Under the implementation of A2b (major system modifications with elimination of flow augmentation to 0 acre-feet), group median ratings in comparison to A2 were around 0 for all four dimensions. Median ratings for each group clustered tightly around the invited group for all dimensions, ranging from 0 to 0.5 rating points across groups. These median ratings reflect the overall perception that the community will be affected the same under A2b as under A2.

Under the implementation of A2c (major system modifications with increase in flow augmentation to 1.4 million acre-feet), the median group ratings shifted greatly toward the *adversely affected* end of the impact rating scale for all dimensions compared with A2 (see [Figure 2-24](#)). Alternative A2c was the lowest rated pathway. Median group ratings ranged from -5 in the Jobs & Wealth dimension to -3 in the Place dimension. The People and Vision & Vitality dimensions received group median ratings of -4 and -4.5. Group medians clustered around the invited group for the People and Jobs & Wealth dimensions, indicating that all three groups independently arrived at similar conclusions regarding the magnitude of the negative impact associated with A2c. The clustering of median ratings across groups did not occur for the Place and Vision & Vitality dimensions, with Group 3 offering a lower median rating for the Place dimension and Group 2 offering a higher median rating for the Vision & Vitality dimension. For the negative People rating under A2c, justifications across all groups included a perceived decrease in the agriculture-based economy, with related impacts to people and the farming community ("would be an exodus due to loss of water for irrigation" and "would eliminate some ranches the majority of which would be subdivided which would accelerate the switch to increasing retirees"). Population losses, resulting in decreased school enrollment, were also mentioned. For the Jobs & Wealth dimension, characteristics consistently mentioned across all groups were the shrinking agricultural base and decreasing agriculture and ranching-related jobs ("elimination of many ranches" and farm income backs Salmon's business...loss of agriculture -- 25%). For the Place dimension, salient justifications described negative impacts to sense of place and (community pride resulting from the weakened natural environment and farming industry ("loss of ranches, increased housing developments"). The invited group also included vacant storefronts, as well as negative impacts associated with shifts toward a predominantly retiree-based population ("would become dependent on retirement income" and "loss of young people...school population") in the assessment. Finally, in terms of the Vision & Vitality dimension under A2c, negative comments made by all groups relate to impacts associated with water losses, such as lost volunteerism and enthusiasm. Leadership decline, loss of cohesiveness, and decreased community services were additional justifications offered by the invited group.



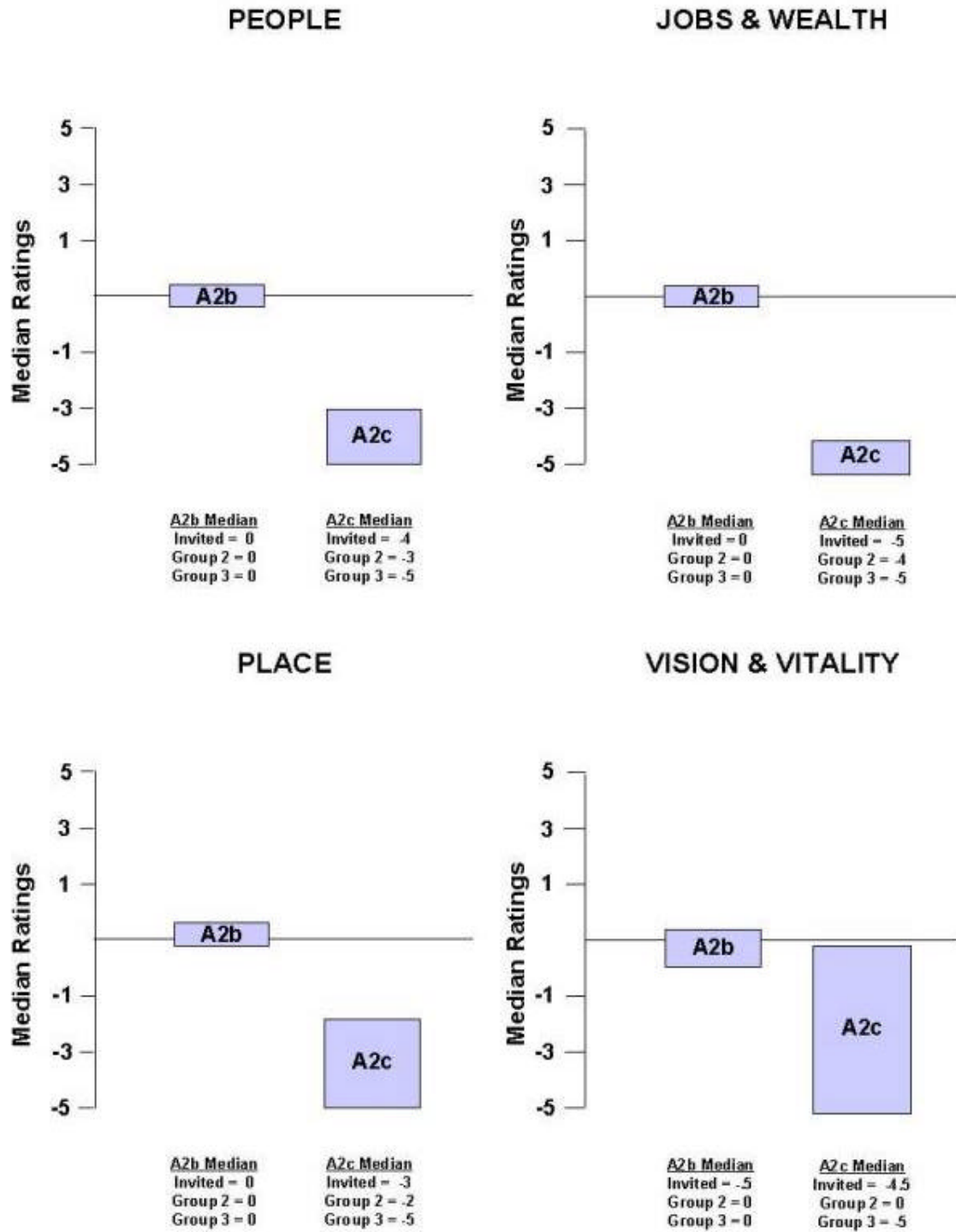


Figure 2-24. Median scale ratings of Pathways A2b and A2c, for Salmon, Idaho, by community dimension, across groups

### 2.26.5.6 Comparison of Pathway A1 to A3

Under the implementation of A3, the median group ratings for A1 shifted toward the *beneficially affected* end of the impact rating scale: median ratings loosely clustered around -2 for A1 increased to 2 for A3 ([Figure 2-23](#)). This was the highest rated pathway across all four dimensions. Specifically, median group ratings ranged from 2 in the People, Jobs & Wealth and Place dimensions to 1 in the Vision & Vitality dimension. The range of median group ratings for the four dimensions was tightly clustered around the invited group, indicating that there was some consensus across all groups as to the degree the community would be better off under A3 compared to A1.

#### **People**

Individual responses ranged from -5 to 5, with a group median of 2 for all groups. [Table 2-16](#) shows the shift in salient justifications under the implementation of A3. These included a forecast increase in population, with people changing for the better, associated with improved fisheries ("young people will have an outdoor outlet; retirees will be attracted"). The invited group added that the quality of life would improve, as would community attitude ("an increased diversity would add depth and stability; begin to recover lost potential of past 30+ years"), while Federal regulations would decrease.

#### **Jobs & Wealth**

Individual responses ranged from -5 to 5 across all groups, with a median rating of 2 clustered across all groups. The three groups' justifications clustered around the positive economic effects associated with an expanded economic base and resource tourism/recreation growth ("Salmon survives on hunting, fishing seasons -- a spread of wealth moves through the community during steelhead season"). However, the invited group was divided in terms of impacts to the Jobs & Wealth dimension under A3, with some participants mentioning that the loss of industries may result in a declining economic base ("electrical rate increase could discourage new industry"), while others mentioned that in general the economy would be better.

#### **Place**

Individual responses ranged from -5 to 5 across all groups, with a median rating of 2 clustered around the invited group. All groups mentioned an increased sense of place in Salmon associated with fish recovery and the great outdoors ("significant improvement to character of community named 'Salmon' with salmon back in rivers"). In contrast, participants also mentioned negative impacts associated with ensuing population changes ("more people means more crime and social problems" and "air quality and scenic may decrease with more people, more traffic"). The invited group offered several positive and negative justifications, such as vacant storefronts and increased power rates associated, but increased pride and fewer federal regulations.

### ***Vision and Vitality***

For the Vision & Vitality dimension, individual responses ranged from -5 to 5, with a median rating of 1 clustered across all groups. Common justifications perceived across all groups focused on an improved vision associated with improvements made to fish populations and heightened community control of outside forces. In addition, the invited group perceived increased community cohesive as a characteristic of A3.

### **2.26.6 Minimizing Adverse Impacts**

Forum participants suggested ways to minimize the negative impacts to the community, and maximize the positive ones, associated with the proposed pathways. These included:

#### ***Pathway A1***

Participants suggested the need to compensate for economic losses, such as recreation-related. An economic loss inventory should be conducted to determine the losses. Business opportunities should be enhanced and a recreation visitor center could be built.

Participants also offered several suggestions for mitigating regional impacts. These included: increasing federal land payments to schools; giving recovery programs back to the authority of local/state agencies, and returning natural resource management back to local management; attaining recovery at the soonest possible date; increasing grant availability; creating an economic development director to stimulate rural jobs; providing grant money to expand other recreational opportunities; repealing the Endangered Species Act (ESA); making the federal government pay the same tax rate; allowing economic litigation for loss of fish stocks; and recognizing local scientific data and managing accordingly.

#### ***Pathway A2***

Locally, participants suggested that schools could be provided with free electricity, and that utility rate increases could be deferred for businesses. Regionally, participants suggested the need to mitigate increases in utility rates and to consider a real bypass system as a salmon recovery pathway. They also suggested that a political decision should be made as soon as possible.

#### ***Pathway A3***

Residents suggested providing the community of Salmon with a break in power bills for all of the previous efforts in saving the Salmon.

## 2.27 Twin Falls, Idaho, Community Assessment

### 2.27.1 Summary of Key Findings

Twin Falls, a city of about 32,000 people, is located south of the Snake River Canyon in south central Idaho, at the intersection of US 30 and US 93. This city is a growing population and trade center in the region. Currently Twin Falls continues to experience commercial growth and development, with a rapid rise in the city's population since 1960. As one forum participant put it, some residents are concerned with their community becoming thought of as a "Little Boise."

Participants in the forum at Twin Falls depict a town in 1999 whose current situation, in terms of People, Jobs & Wealth, Place, and Vision & Vitality, varies considerably by individual participant ratings, yet is relatively positive in terms of median ratings. The people, described as friendly and honest, who "care about and help one another," have stable families and good family values. Nonetheless, the current influx of new residents into the community is a prevalent concern of participants who describe it as detrimental to "rural settings and values." Justifications in the Place dimension indicate that residents are extremely positive about the "outstanding" natural environment surrounding the community, while the consequences of community growth (poorly planned urban sprawl, traffic congestion, and farm subdivisions) are negatively affecting the human-built environment. Participants in the forum rated the Vision & Vitality dimension the highest, reflecting on the "strong sense of togetherness due to our rural background" as a justification. While some participants were optimistic about the community's ability to cope with the changing times, others were more apprehensive, particularly because of threats associated with growth. While the Jobs & Wealth dimension was rated lowest of the four dimensions, its overall median rating was still above average. Participants were optimistic about the low unemployment, low cost of housing and cheap utility costs. Yet, with its tourism-based economy, Twin Falls is also characterized as having a high rate of under-employment, with low-paying service industry jobs. Nonetheless, "people work for less to stay in the area."

Participants were mildly concerned about their community's future under A1 (the existing situation on the Lower Snake River continued on into 2020), with ratings of impact falling on the negative, *adversely affected* end of the scale for most of the dimensions. A major concern was the perceived negative impacts associated with declining fish populations, as well as the threat of continued government regulations and the continued use of tax dollars on "futile endeavors." While participants recognize the economic impact related to a drop in the tourism industry, they also note the importance of fish for their "spiritual wealth," sense of place, and community spirit. In general, the 'do nothing' pathway will lead to outsiders taking actions adverse to the local community...and runs go extinct." In contrast, another key theme to come forth in the ratings was the positive impact to the farm-based industry associated with A1: the existing situation is beneficial for agriculture and "an agriculture-based economy...necessitates people, not salmon, a priority."

Participants perceived little impact under Pathway A2 (major system modifications) compared to A1 for the People and Vision & Vitality dimensions, while the Jobs & Wealth dimension declined slightly and the Place dimension improved slightly. The negative effects of declining fish population were described for all dimensions, in terms of population reductions, lost community pride, and a weaker tourist economy. Justifications also focused on perceived "increased costs with no benefits" associated with A2: the increased competition for tax dollars, higher utility rates, and decreased water availability would impact all community residents and sectors of the economy. Ratings and justifications for A2b (major system modifications with the elimination of flow augmentation to 0 acre-feet) indicate a divided assessment of impacts under A2b. While median ratings reflect minimal change, with a slight decline in the Jobs & Wealth, Place, and Vision & Vitality dimensions, individual comments describe positive benefits to the agriculture industry associated with increased water availability, contrasted with continued negative attributes associated with decreased fish populations. In contrast, participants were highly concerned about their community's future under Pathway A2c (major system modifications with an increase in flow augmentation to 1 million acre-feet), with ratings of its affects in 2020 at the extreme negative, *adversely affected* end of the scale. It was also the most consistent negatively rated pathway by forum participants. Participants primarily focused on how the loss of water availability would severely worsen the agriculture-based economy, and the community, in general. "Farm will dry up...character declines with economic depression." Although comments specific to the continued loss of fish were not mentioned, several participants acknowledged the lack of "information that it would improve fish stocks." Under A2c, "that much water going out of the area would adversely affect most every aspect here."

Participants were very optimistic about their community's future under Pathway A3 (natural river drawdown, and dam breaching). Median ratings and justifications were at the positive end of the scale for all dimensions. Participants noted that recovered fish populations would greatly benefit the tourism-based economy, individual recreation opportunities, and sense of place. While increased power and transportation costs may negatively affect the economy, decreased restrictions placed on industries for salmon recovery may attract industries and improve the economy. Under A3, "if the salmon were returned...our leadership people would have confidence in their ability to realize the future and would make better decisions."

Forum participants suggested ways to minimize the negative community impacts associated with Pathway A2, including local mitigation involving the increase of water storage and recharging the aquifer. Regional suggestions included a complete Snake River water adjudication to learn the amount of water being used by the Corps of Engineers, changing energy production and consumption, providing the public with more information about proposed pathways, and making the information more accessible to allow for more informed public decision-making. Suggestions minimizing the negative impacts to the region under A3 included helping the people directly affected by dam removal, such as barge employees and farmers, solve problems with associated with increased power and transportation costs, and to develop alternative means of energy production coupled with conservation.

Overall, a strong, healthy salmon fishery was perceived as having significant beneficial impacts to the Twin Falls community. More than any other community, except for Boise, forum participants in this city focused on negative impacts on them and their community due to the loss of wild salmon stocks they perceived would result if the existing situation continues. These impacts included the loss of recreation and tourism opportunities, a decline in sense of place, local pride, and community spirit and values. The invited group, in particular, noted a perceived loss of environmental quality, decreased wildlife and fish, a decrease in fishing opportunities, and negative spiritual, symbolic, and material impacts due to the loss of fish, that Pathway A3 would mitigate. However, it is important to note that the rating justifications of participants in the forum also indicated that different residents of Twin Falls were of different minds on the effects of salmon recovery, with some perceiving that Pathway A3 could have negative impacts on their community. These impacts included such changes as increased utility and transportation costs, loss of industries and job opportunities, and related broader economic impacts.

### **2.27.2 Interactive Community Forum Participants**

Eighteen community members provided perspectives on the history, 1999 situation and Pathways A1, A2, A2b, A2c, and A3 for Twin Falls, Idaho. These forum participants sat at two facilitated tables (see methodology), working in interactive small groups (hereafter, "groups"). The overall diversity index rating for participants was 0.71 (on a scale from 0 to 1.0), indicating that 10 of 14 pre-identified community roles were present at the forum (see methodology). Of the total number of participants completing the sign-in questionnaire, 17 percent were homemakers, 12 percent were retired, 12 percent were in the retail business, and 12 percent were medical technologists. The remaining 47 percent were each employed in one of the following occupations: attorney, school administrator, physician, geneticist, Chamber of Commerce official, disaster manager, extension educator, and plant manager.

### **2.27.3 Community Background**

Twin Falls, a city of about 32,000 people, is located south of the Snake River Canyon in south central Idaho, at the intersection of US 30 and US 93. This city is a growing population and trade center in the region. The community of Twin Falls was founded in 1904. In the late 1960s, growth began to take off, as evidenced in the development of Blue Lakes Boulevard. Concerns began to be raised about issues of water and water quality in the 1970s, about the same time when locals could no longer catch salmon in the Stanley Basin. The population began a steady increase in the 1980s that has continued until today. The 1980s also brought an increase in crime and drugs in the city. Also the Magic Valley Mall was constructed in the 1980s. At about this time, the "Murtaugh run" became popular for river recreation, promoting an image of "big water" for river-running on the Snake River. In the 1990s, improvements in medical services were significant, along with revitalization of the city's old-town, road improvements, and development of an industrial park. With this growth and development, concerns remained over the city's water situation, and its relation to the local water table and use of water in eastern Idaho. In 1995, over 20 percent of the city's employment was in the wholesale and retail trade sectors of its economy. Twin Falls serves as a trading and

marketing center for the major irrigated farming area of south central Idaho. Principal crops of this major area of agricultural production included fruit, wheat, beans, onion, corn, potatoes, sugar beets, alfalfa and clover seed. Agriculture in this area also includes dairy-farming and some livestock raising. Currently Twin Falls continues to experience commercial growth and development, with a rapid rise in the city's population since 1960. As one forum participant put it, some residents are concerned with their community becoming thought of as a "Little Boise."

## **2.27.4 Community Assessment of 1999 Situation**

### **2.27.4.1 1999 Situation: Community Dimensions and Rating Scale**

The following "current community situation" rating scale was used by participants from Twin Falls to rate the current (1999) situation of the following four dimensions:

1) **People** -- Social Make-up; 2) **Jobs and Wealth** -- Economy; 3) **Place** -- Character; and 4) **Vision and Vitality** -- Organization and Leadership Capacity. Following a presentation of descriptive information about their community and a community interactive timeline they developed (see above), forum participants were asked to rate the extent to which their community situation was good or bad on a 10-point scale for each of the four dimensions and to write justifications for each of their numerical ratings.

### **2.27.4.2 1999 Situation: Ratings**

As Figure 2-25 presents, the median ratings on the current situation rating scale for the two groups participating in the forum ranged from a 6 on the Jobs & Wealth dimension to an 8 on the People and Vision & Vitality dimensions. The Place dimension, with a median rating of 7, fell in-between this range. Specifically, although all dimensions were oriented towards the *as good as it could be* end of the scale, the two facilitated groups perceived the People and Vision & Vitality dimensions slightly higher than the Jobs & Wealth dimensions under the current situation. Across all dimensions, the difference between the invited group's median score and that of the other facilitated group ranged from 0 to 1 rating points on the current (1999) rating scale. The clustering of group medians demonstrates that, for the four dimensions assessed, both facilitated groups perceived their community similarly, independently arriving at similar conclusions about the current state of Twin Falls.

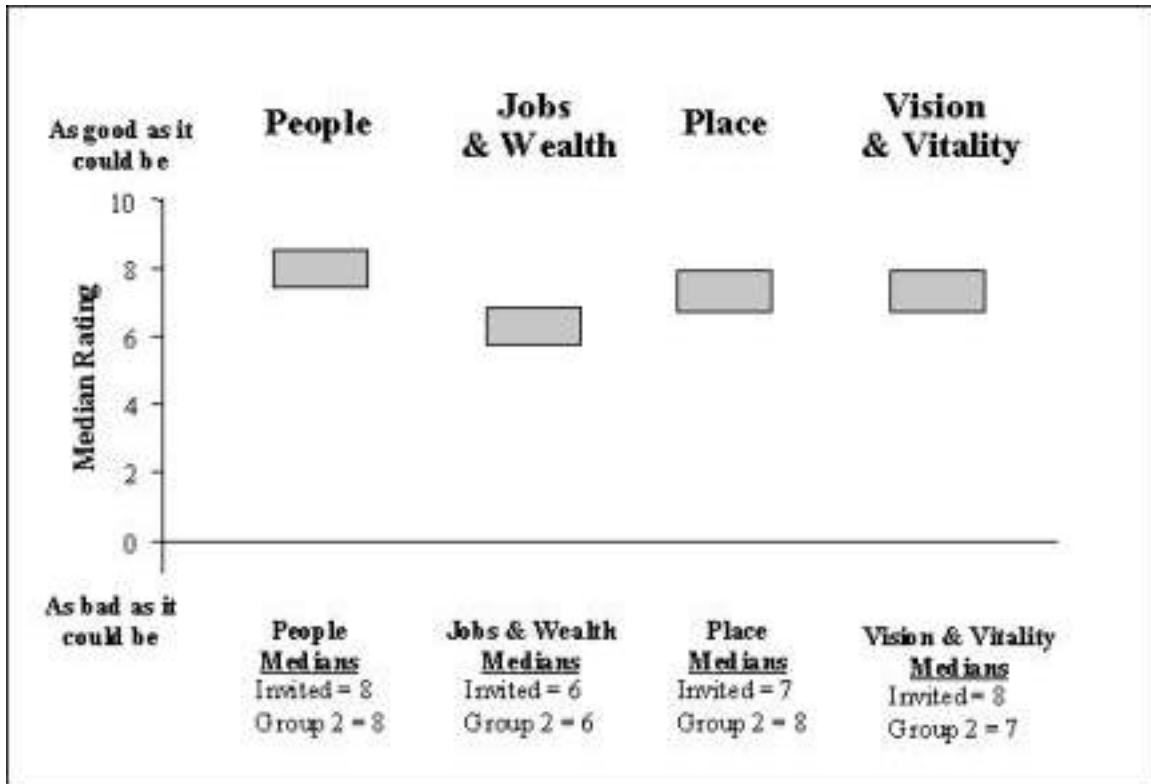


Figure 2-25. Median scale ratings of the current (1999) situation in Twin Falls, Idaho, by community dimension, across groups

### 2.27.4.3 1999 Situation: Rating Justifications

[Table 2-17](#) presents the clustering of justifications for both facilitated groups. Justifications noted across both the invited and the other group are categorized as 'All Groups.' Justifications noted by only the invited group are categorized as 'Invited Group.' Finally, justifications noted by only the other group are categorized as 'Other Groups.'

#### **People**

The People dimension was one of the highest rated dimensions, with an overall median rating of 8 and individual responses ranging from 4 to 9 across all participants. As presented in [Table 2-17](#), key factors mentioned across both groups to justify their high ratings included the perception of Twin Falls as a good place to raise a family, with strong prevalent values, good customs and lifestyles and a growing economy. Residents were described as friendly, honest people, while the invited group added that people care about education and are supportive and involved in community activities. In terms of the noted increase in population, participants were divided over its positive and negative effects ("population increasing to detriment of rural setting and values" and "retirees increasing, many coming home"). Ethnic and class segregation, as well as low ethnic diversity, were also mentioned as negative attributes that may have tended to lower the groups' ratings on this dimension.



### ***Jobs & Wealth***

The Jobs & Wealth dimension was most oriented towards the *as bad as it could be* end of the scale, with a median rating of 6 and individual responses ranging from 5 to 9 across all forum participants. Negative comments that resulted in lower ratings included the lack of industry in Twin Falls and the amount of money leaving the community as a result of chain stores. Participants were divided in their perception of the degree of economic and job diversity, perhaps due to limited "middle management" jobs. Additionally, while unemployment was perceived to be fairly low, the prevalence of underemployment and low-paying service-based jobs was mentioned ("we need more jobs for college educated people...need more attractive employment for young people to aspire"). However, both groups mentioned that low utility costs are a positive attribute of Jobs of Wealth in the community, and the invited group added characteristics such as the low cost of housing and the strong sense of place ("people work for less to stay in the area").

### ***Place***

The Place dimension received an overall median rating of 7, with individual responses ranging from 5 to 9 across all forum participants. Clustered justifications indicate that good social services and medical facilities, a revitalized appearance of the community's built environment and safety were positive reasons for the high rating. In addition, participants described characteristics of the natural environment, such as good air and water quality, attractive scenery, and outdoor recreation opportunities, as contributing to the Place dimension in Twin Falls ("beautiful country, sky, lakes, rivers...people like to live here"). Negative comments that may have affected the Place dimension included a decline in the sense of place and community pride, partly due to community growth: poor land-use planning, with bad peripheral growth ("Blue Lakes Blvd, entry to town! Abysmal!"), loss of open space, and increased commercial and residential development. The invited group added that farm subdivision and traffic congestion were also on the rise.

### ***Vision & Vitality***

The Vision & Vitality dimension was also one of the highest rated dimensions, with an overall median rating of 8, and individual responses ranging from 5 to 9 across all forum participants. Clustered justifications included the perceived cohesiveness of the community ("we have a strong togetherness due to our rural background"), the friendly people, numerous social activities, and participation among community members. The invited group added positive attributes such as strong civic organizations and active leaders. Participants were divided in their perception of Twin Falls' vision for the future, with some feeling that the community had a good future vision, while others felt more pessimistic about the ability to cope with change and plan for the future. Much of this may be related to threats associated with growth ("growth leads to change and problems. Twin is experiencing growth like they've never seen! And it becomes hard to deal with").

**Table 2-17  
Rating Justifications for the Current (1999) Situation  
In Twin Falls, Idaho,  
By Community Dimension and Type of Group**

Dimension	Replication Across All Groups	Invited Group	Other Groups
<b>People</b>			
Positive	Growth of businesses/good diverse, strong economy (541)	Strong sense of community among residents (203)	Ethnic diversity is high/increasing (301)
	Good prevalent values (61)	Children and education are high priority (66)	
	Good community to live and raise family (424)	Good, strong churches (67)	
		Schools/education (general) (89)	
		Increasing people own homes/many own homes (151)	
		Good, friendly, helpful people (201)	
		Supportive of community activities and involved (241)	
		Socially diverse (306)	
		Good community services (401)	
		Family-oriented community (426)	
Negative	Ethnic/class segregation (308)	Negative impacts (general) (322)	
	Ethnic diversity is low/decreasing (302)	Lack social diversity (307)	
		Low tolerance (304)	
Other	Diversity (general) (309)		
	Prevalent values (general) (69)		
	Increasing/high population (41)		
	Decreasing/low population (42)		
	Customs and lifestyles (general) (59)		
	Aging population (2)		
	Increasing number of retirees (21)		

<b>Jobs and Wealth</b>			
Positive	Low utility costs (79)	High paying jobs (30)	
	Economically diverse (121)	Strong sense of place (84)	
	Low unemployment (192)	High number of public sector jobs (47)	
		Housing fairly priced (83)	
		Positive aspects of commuting (63)	
Negative	Low economic diversity (122)	Money leaves (51)	
	No new industries, businesses (140)	Short-term and temporary jobs/part-time jobs (37)	
	Poor job opportunities (3)	Low wealth (177)	
	Few technical jobs/high skilled jobs (5)	Lack of middle-income jobs and families (189)	
	Low paying jobs (31)		
Other	Jobs becoming more service oriented (41)	Economic base (general) (120)	High property values (198)
<b>Place</b>			
Positive	Good/improving community appearance (511)	Good quality of life (901)	
	Safe and crime free (902)	Family-oriented, small town with pleasant atmosphere (681)	
	Improving business appearances/revitalization (535)	People shop within the community (532)	
	Good social services, same access to services (561)	Good schools (563)	
	Good medical facilities (564)		
	Good air and water quality (780)		
	Close proximity to outdoor recreation opportunities (662)		
	Attractive scenery (771)		
	Good parks and open spaces, public lands (667)		

Negative	Decline in sense of place and community pride (672)	Negative impacts associated with population change (822)	
	Poor land-use planning, concern over plan (713)	Poor/declining community appearance (513)	
	Increased commercial and residential development/loss of open space to it (761)	Traffic congestion/increased traffic (603)	
	Increasing crime and drug-use/less safety (903)	Increased subdivision/farm development (636)	
	Struggling businesses and vacant storefronts (520)		
	Poor air and water quality (782)		
	Bad peripheral growth (637)		
Other		Appearance (general) (517)	
		Increasing population (821)	
		New people in the community (826)	
<b>Vision and Vitality</b>			
Positive	Strong/increasing community vision and vitality (601)	Strong, active civic organizational capacity (11)	Interesting community (307)
	Numerous, varied, good, or improving social activities (301)	Coping with change (360)	
	Strong, cohesive community (341)	Improving/good schools (811)	
	Prepared for the future (381)		
	Planning and plans exist, good base for the future (403)		
	Strong, high level of community participation (work together) (561)		
	Friendly, sociable community (305)		

Negative	Do not cope well with or resist change (362)	Inefficient, ineffective local government (462)	Lack of planning and ability to plan for the future (404)
	Decreasing/lack of community vision and vitality (602)		
	Politics dominated by special interests/one-party system (84)		
Other		Role of local/Federal government (460)	

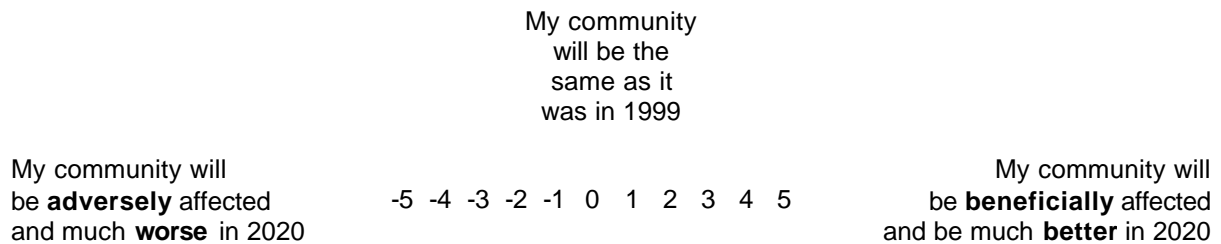
## 2.27.5 Comparison of Salmon Recovery Pathways A1, A2, and A3

### 2.27.5.1 Community Dimension Impact Rating Scale

Forum participants were asked to assess how their community would be impacted in the year 2020 by implementation of the five salmon recovery pathways proposed by the U.S. Army Corps of Engineers to return juvenile salmon to the Lower Snake River. Pathway A1 involves maintenance of the existing Lower Snake River System, A2 involves major modifications to the existing Lower Snake River System, and A3 involves natural river drawdown, or dam breaching. Supplementing Pathway A2, A2b involves the elimination of flow augmentation (from the current 427,000 acre-feet to 0 acre-feet), while A2c involves increasing flow augmentation (by 1 million acre-feet) into the Snake River system.

A second rating scale was used by forum participants to indicate the situation for each of the four community dimensions (People, Jobs & Wealth, Place, and Vision & Vitality) in terms of how adversely or beneficially they felt their community would be impacted in the year 2020. In thinking about the future, participants were asked to consider all of the normal changes that are likely to occur in a community over time, along with specific changes they would expect to result from adding a pathway. To provide a basis for thinking about their community's future situation, forum participants received information from Corps and NMFS' studies specific to their community for each of the proposed pathways. Information provided to participants included salmon recovery probabilities, physical changes, and economic changes. (For more information on the information presented and their sources, see [Appendix A](#).) Community members then gave an initial rating of the impacts on their community in the year 2020 for each dimension. After a facilitated group discussion of how and why their community would be affected or not affected, participants rated the community dimensions and listed their justifications.

To ground the rating scale in reality, forum participants were instructed to use their community's 1999 situation, which they had just rated and described for each dimension, as the mid-point (0) of the scale from which to determine the magnitude of adverse (negative) or beneficial (positive) effects to their community in the year 2020 for each dimension. To rate Pathways A2b and A2c, participants were instructed to use their rating for Pathway A2 as the mid-point of the scale for each dimension. In each case, the zero or mid-point represents the "no impact" or "no change" situation. Participants were specifically instructed to focus on adverse and beneficial impacts only on their community and not on the entire region.



### 2.27.5.2 Summary of Findings on Pathways A1 to A3

[Figure 2-26](#) illustrates that, across both facilitated groups, forum participants generally perceived that the community situation would be adversely affected by the implementation of Pathway A1 in the year 2020 for each of the dimensions, with the exception of the Vision & Vitality dimension. Median ratings across both groups for A1 ranged from a high of 1 for the Vision & Vitality dimension to a low of -3 for the Place dimension. Medians for both the People and Jobs & Wealth dimensions were at the negative, *adversely affected* end of the rating scale, with median ratings of -2 and -1. Under Pathway A2, participants perceived the community would be affected much the same under A1 on the People dimension. The Jobs & Wealth and Vision and Vitality dimensions would be slightly worse off compared to A1, with median ratings of -2, while the Place dimension would be slightly improved under A2. Under Pathway A3, groups medians were clustered towards the positive end of the scale for all four dimensions, with median ratings ranging from 2 to 3.

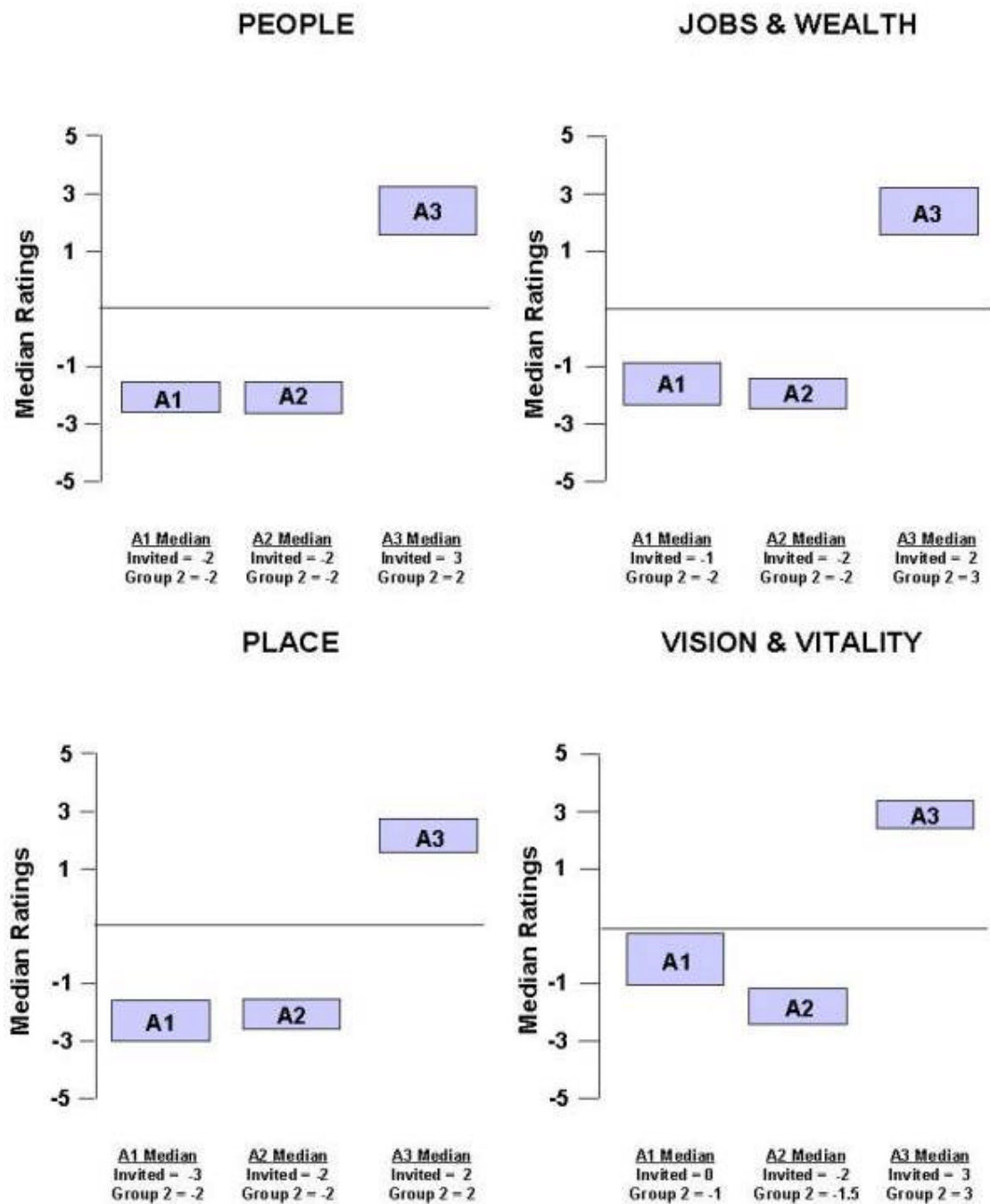


Figure 2-26. Median scale ratings of Pathways A1, A2, and A3, for Twin Falls, Idaho, by community dimension, among groups

Under Pathways A1, A2 and A3, the high degree of clustering of median ratings for both groups remained relatively constant for all four dimensions. This suggests that both groups independently arrived at similar conclusions regarding the impacts of each of the pathways on these three dimensions of Twin Falls in 2020. Overall, the median ratings indicated that participants in Twin Falls perceived the city's situation to be improved under A3 and somewhat adversely affected by A1 and A2.

In the case of Pathways A2b and A2c, participants perceived the city's situation under A2b to be much the same as A2 on the Vision & Vitality dimension and improved under the Place dimension. Median ratings for A2b did not cluster for both the People and Jobs & Wealth dimensions, with the invited group's median rating at the negative, *adversely affected* end of the scale and the other group's median rating at the positive end of the scale. This suggests that participants were divided in their assessment of community impacts under A2b compared to A2, with the invited group perceiving negative affects and other group perceiving positive ones. Pathway A2c was perceived to be most oriented towards the 'adversely affected' end of the rating scale, receiving overall median ratings of ranging from -3 to -5 on all four dimensions. Under A2c, median ratings for the invited group were somewhat lower than that of the other group. This suggests that both groups perceived Twin Falls to be worse off under A2c, but differed in the magnitude of adversity.

### **2.27.5.3 Rating Justifications Across Pathways A1, A2, A2b, A2c and A3**

In the analysis of A1, the "no action" pathway, a process similar to that for the 1999 current situation was followed to examine participants' perceptions of likely future changes to the community in 2020. The premise for the scenario was that the river system would remain unchanged but other social, economic, and cultural trends would continue on their current trajectory, as perceived by forum participants. Both numerical scores and the reasons and changes underlying them were examined. Pathway A1 was treated as the base-case, and the results for this pathway provided the basis for assessing the impact of both A2 ("major modification") and A3 ("natural river drawdown, or dam breaching"): A2 and A3 were analyzed to identify changes of clustered numerical ratings and qualitative justifications from the baseline forecasts under A1. Similarly, Pathway A2 was treated as a base-case for analyzing Pathways A2b (major system modifications with elimination of flow augmentation) and A2c (major system modifications with additional 1 million acre-feet flow augmentation) to determine the perceived impacts of flow augmentation to Twin Falls in 2020 according to forum participants.



#### **2.27.5.4 Pathway A1**

##### ***People***

Under A1 for the People dimension, the overall group median was -2, with individual responses across all forum participants ranging from -5 to 4. As presented in [Table 2-18](#), in addition to the perception that no change would occur under A1, characteristics consistently mentioned across both groups to justify the negative rating included unstable community values, adverse effects related to declining fish population ("salmon are very important...if we continue status-quo, runs go extinct"), and continued government interference ("the do nothing' pathway will lead to 'outsiders' taking actions adverse to the local community in their efforts to recover salmon"). Participants from the invited group offered diverging justifications regarding perceived impacts to the customs and lifestyles ("customs and lifestyles will be affected by not meeting growing need for water" and "customs and lifestyles because good agriculture base"), although the group agreed that the population would continue to increase. Further, some added that values and community vitality would decrease, while others felt that they would remain stable.

##### ***Jobs & Wealth***

In the case of the Jobs & Wealth dimension, the group median under A1 was -1, with individual responses ranging from -5 to 4. No positive justifications were found across both groups, while negative ones included a perceived loss of recreation and tourism-related business ("many dependent on salmon fishing in this area") with a concomitant decline in job opportunities, and negative impacts to irrigated farming in dry years. Comments given by the invited group included both positive and negative justifications: the stable economic base, job opportunities and agriculture base increased participants' ratings, while the perception that people would leave and sense of place and community spirit would decrease ("there will be a drop in spiritual wealth") because of fish reductions may have tended to decrease the ratings.

##### ***Place***

The Place dimension was the lowest rated dimension under A1, with a median rating of -3, and individual responses ranging from -5 to 3. There were no positive justifications across both groups, while negative ones mentioned how the loss of fish would result in a lost sense of place and pride in the community. Comments from the invited group were positive ones in terms of effects on agriculture and an agriculture-based community ("agriculture-based economy...necessitates people, not salmon, a priority"), while they were negative in terms of effects on recreation and tourism and sense of place due to fish reductions ("sense of place is lost without species").

##### ***Vision & Vitality***

Vision & Vitality was the highest, and only positively rated dimension under A1. Median ratings across both groups did not cluster, with a disparity between the invited group's median rating of 1 and that of the other group's 2.5. Individual responses ranged from -5 to 3 across both groups. Despite the high rating, there were no positive justifications across both groups, while the only negative one related to a perceived negative impact to Twin Falls' Vision & Vitality resulting from the loss of fish ("shows total lack of vision and courage to act"). The invited group offered several justifications for their overall

positive rating, such as continued confident and caring leaders and Twin Falls' ability to cope well with change. This group also offered several negative justifications, such as that decreased fishing would result in loss of youth, which would, in turn, decrease leadership potential in the community. Again, comments were divided in terms of positive effects to the farm economy and negative effects to the fish population. The other group added that continued use of tax dollars on "futile endeavors" affected the Place dimension under A1.

### **2.27.5.5 Comparison of Pathway A1 to A2**

Under the implementation of A2, median ratings did not change from A1 for the People and Vision & Vitality dimensions, while median ratings for the Place dimension increased slightly by 1, and those for the Jobs & Wealth dimension decreased slightly ([Figure 2-26](#)). In general, forum participants perceived Twin Falls would experience no change under A2 for the People and Vision & Vitality dimensions, would experience a slight improvement in the Place dimension, and would be slightly worse off in terms of the Jobs & Wealth dimension.

[Table 2-18](#) presents the salient justifications under the implementation of A2. For the People dimension, both groups mentioned a loss in recreation opportunities as fish populations continue to decline. Other negative impacts, such as a decrease in water availability, and increased costs with no benefits, were also associated with A2 ("by spending money to accomplish nothing, it weakens the community"). The invited group also mentioned that the "population is negatively affected with loss of fish...fewer people would want to live here." The decreased ratings for the Jobs & Wealth dimension were noted by both groups to be due to a declining economy resulting from the loss of fish-related tourism and the concomitant decrease in job opportunities. Increased utility costs were also mentioned by both groups to negatively affect the community. The invited group added that an increased cost of living, as well as money leaving the community, would further detract from the city's Jobs & Wealth. In terms of the Place dimension, both groups felt that, similar to A1, A2 would result in a diminished sense of place due to the loss of fish. Further, the invited group perceived that changes in water availability and utility rates would negatively impact farmers and the community as a whole. Increased competition for tax dollars for community improvements would also occur. Finally, the Vision & Vitality dimension was perceived by both groups to be affected under A2 similarly to A1: some comments described that no change would occur, while others perceived a decreased vision reflecting the region's continuing to "squander fish resources."

#### **2.27.5.5.1 Comparison of Pathway A2 to A2b and A2c**

Under the implementation of A2b (major system modifications with elimination of flow augmentation to 0 acre-feet), median ratings ranged from 0 in the Place dimension to -2 in the People dimension. The Jobs & Wealth and Vision & Vitality dimensions received group median ratings of -1 and -0.5, respectively. Across groups, median ratings clustered around the invited group for the Place and Vision & Vitality dimensions, while a disparity in ratings for the People and Jobs & Wealth dimensions were found. The invited group perceived both dimensions to be worse off under A2b, while the other

group perceived them to be better off. In general, median ratings reflect the perception that the community would be the same, or slightly affected, under A2b. The large range of individual responses for each dimension may explain the disparity in ratings: for the People dimension, some participants perceived the community to be beneficially affected due to increased water availability to farmers, while others perceived the community to be negatively affected due to declining fish populations. Similarly, for the Jobs & Wealth dimension, both increased and decreased job opportunities were mentioned. Both groups indicated that Place and Vision & Vitality would be similar to A2.

Under the implementation of A2c (major system modifications with increase in flow augmentation to 1.4 million acre-feet), the median group ratings shifted toward the *adversely affected* end of the impact rating scale for all dimensions (see [Figure 2-27](#)). This was the lowest rated pathway, with the median group ratings given by the invited group for all four dimensions a -5, the lowest possible rating. Across groups, only the median rating for the People dimension clustered. This lack of clustering indicates that, although both groups perceived the state of their community to be worse off under A2c, they differed in the magnitude of adversity caused, with the invited group being slightly more negative. Justifications across both groups for the negative People rating included decreases in the local population associated with loss of water availability for the farming-based economy. For the Jobs & Wealth dimension, characteristics consistently mentioned across both groups were the shrinking agricultural base and decreasing agriculture-related jobs, as well as a decreased job market in general. For the Place dimension, clustered justification describe the negative impacts to the community resulting from reduced water availability ("farms will dry up...character declines with economic depression"). Finally, in terms of the Vision & Vitality dimension under A2c, clustered justifications also related to negative impacts associated with agricultural losses.

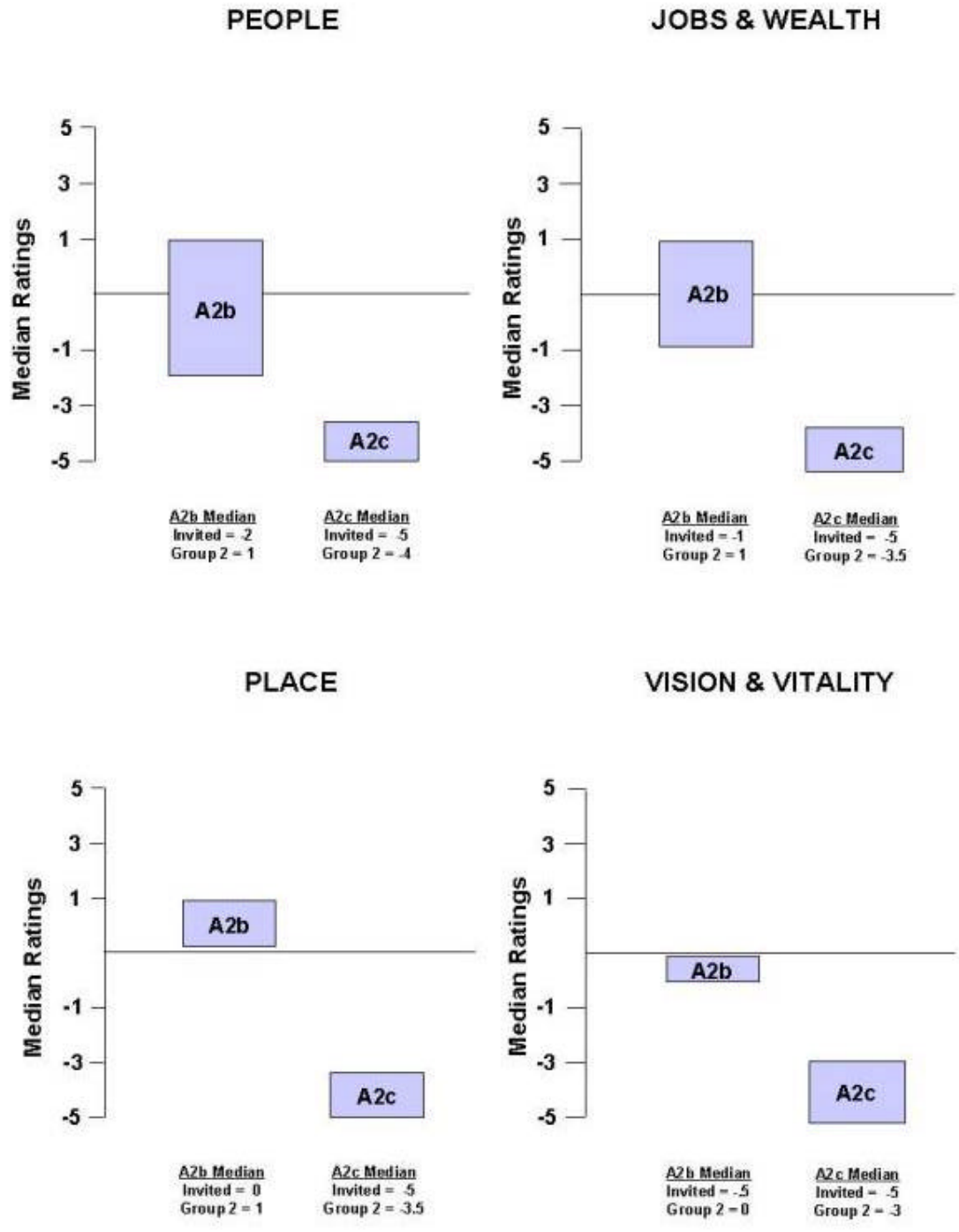


Figure 2-27. Median scale ratings of Pathways A2b and A2c, for Twin Falls, Idaho, by community dimension, across groups

### 2.27.5.6 Comparison of Pathway A1 to A3

Under the implementation of A3, the median group ratings for A1 shifted toward the *beneficially affected* end of the impact rating scale for all dimensions: median ratings that loosely clustered around -2 for A1 increased to 3 for A3 ([Figure 2-27](#)). This was the highest rated dimension. Specifically, median group ratings ranged from 3 in the People, Jobs & Wealth and Vision & Vitality dimensions to 2 in the Place dimension. Finally, the range of median group ratings for the four dimensions was tightly clustered around the invited group, ranging from 0 to 1. This indicates that there was consensus across both groups as to the degree the community would be better off under A3 compared to A1.

#### **People**

Individual ratings on the People dimension under A3 ranged from -3 to 5 across all forum participants, with the median of 3 clustered across both groups. [Table 2-18](#) shows the shift in salient justifications under the implementation of A3. These included a forecast increase in quantity and diversity of population rising from fishing and recreation opportunities ("more people here to enjoy the fishing and habitat"). There was also consensus regarding the importance of a maintained fish population ("people will know they've done the right thing to save the salmon"). The invited group added that increased power costs could have negative impacts to the economy, although they also stressed an improved economy due to increased fishing opportunities and decreased restrictions placed on industries for salmon recovery.

#### **Jobs & Wealth**

Individual responses on this dimensions under A3 ranged from -3 to 5 across both groups, with a median of 3 clustered across the invited group. Both groups' justifications clustered around the positive economic effects associated with an improved agriculture base and resource tourism growth. However, participants were divided in respect to the perceived increase ("jobs for guides and biologists") or decrease ("with increase in [power] rates, jobs will come slowly") in job opportunities associated with A3. The invited group added that increased transportation and power costs may negatively affect the economy.

#### **Place**

Individual responses on this dimension ranged from -3 to 5 across all participants under A3, with a median of 2 clustered across both groups. Salient justifications included an increased sense of place in Twin Falls ("we did something positive"), while the invited group added that recreation and a healthy natural environment would be positive impacts ("this will be a nicer place to live with salmon in the watershed"). In contrast, the invited group also associated increased power costs as a negative attribute of A3.

### Vision and Vitality

For the Vision & Vitality dimension, individual responses under A3 ranged from -3 to 5 across all forum participants, with a median of 3 clustered across both groups. Common justifications focused on an increased tax base and improved vision associated with improvements made to fish populations and agricultural viability. In addition, heightened political leadership was perceived characteristic of A3 ("if the salmon were returned...our leadership people...would have confidence in their ability to realize the future and would make better decisions").

<b>Table 2-18</b> <b>Comparison of Rating Justifications For Pathways A1, A2, and A3</b> <b>For Twin Falls, Idaho,</b> <b>By Community Dimension and Type of Group</b>					
Year 2020 Rating Justifications	Pathway 1 Existing Condition	Pathway 2 System Modification	Pathway 2b 0 Flow Augmentation	Pathway 2c 1.427 Flow Augmentation	Pathway 3 Drawdown
<b>People</b>					
Across All Groups	Community values are unstable (64)	Negative impacts (general) (322)	Decreasing/low population (42)	Decrease/loss of agricultural-based economy (503)	Socially diverse (306)
	No change in people/little/no impact (313)	Loss/change in recreation and tourism opportunities (442)	Loss/change in recreation and tourism opportunities (442)	Decreasing/low population (42)	Growth in recreation and tourism opportunities (443)
	Declining fish populations/listed (462)	Declining fish populations/listed (462)	Increased/improved farm economy (506)	Negative impacts (general) (322)	Strong/improving/recovered fisheries (461)
	Unstable/poor/decreasing economy (542)	Reliance on water/importance to people (601)	Decrease in water availability (604)	Loss of industries and lack of job opportunities (492)	Fish recovery is good/important (463)
		Decrease in water availability (604)	More water (positive) (608)	Unstable/poor/decreasing economy (542)	Decrease in water availability (604)
			Decrease in water availability (604)		
Invited Groups	Reliance on water/importance to people (601)	Change in power (general) (487)	Good customs and lifestyles/change for the better (51)	Population (general) (48)	Increasing number of retirees (21)
	Continued use of river (481)	Decreasing/low population (42)	Poor customs and lifestyles/change for the worse (52)	Growth (general) (49)	Increasing/high population (41)
	Increasing/high population (41)	Poor customs and lifestyles/change for the worse (52)	People changing for worse/negative change (312)	Families are becoming less stable (102)	Stable customs and lifestyles (53)
	Stable population (43)	Prevalent values (general) (69)	No change in people/little/no impact (313)	Decreasing people own homes/few people own homes (152)	People changing for better/positive change (311)

Invited Groups	Poor customs and lifestyles/change for the worse (52)	Heavily regulated by government/intervention (255)	Negative impacts (general) (322)	Government involvement (general) (259)	Negative impacts (general) (322)	
	Stable customs and lifestyles (53)	No change in people/little/no impact (313)	Declining fish populations/listed (42)	Increased utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)	Increased utility costs, transportation costs, and taxes; and decreased irrigation and loss of power (482)	
	Customs and lifestyles (general) (59)	Fish recovery is good/important (463)	Change in power (general) (487)	Do not know/no comment (people) (560)	Loss of industries and lack of job opportunities (492)	
	Poor prevalent values (62)		Loss of industries and lack of job opportunities (492)	Water (general) (600)	Unstable/poor/decreasing economy (542)	
	Community values are stable (63)			Reliance on water/importance to people (601)	Water (general) (600)	
	Prevalent values (general) (69)			Negative in low water years (606)	Reliance on water/importance to people (601)	
	Less community vitality (232)			Flow augmentation does not work (611)		
	Ethnic diversity is low/decreasing (302)					
	People changing for better/positive change (311)					
	Fish recovery is good/important (463)					
	Continued agricultural-based economy (505)					
	Value of agriculture (509)					
	Other Groups	Decrease in water availability (604)				Strong sense of spirit and pride in community (211)
		Need more water (605)				No change in people/little/no impact (313)

Jobs and Wealth					
Across All Groups	Loss of recreation and tourism-related business (134)	Decreasing job opportunities (general) (18)	Increasing job opportunities (general) (10)	Decreasing job opportunities (general) (18)	Increasing job opportunities (general) (10)
	Decreasing job opportunities (general) (18)	Increasing utility costs (73)	Decreasing job opportunities (general) (18)	Decreasing agricultural jobs (22)	Decreasing job opportunities (general) (18)
	Bad for irrigation farming (no water in dry years) (69)	Loss of recreation and tourism-related business (134)	Increase in agriculture (105)	Shrinking agriculture, mining, and timber base (135)	Increasing utility costs (73)
	Everything relies on water (115)	Declining economy (162)	Strong/growing economy (157)	Bad for community (956)	Good for agriculture/stable agriculture (104)
	Less hunting and fishing (229)		People will leave (206)		Resource tourism and amenity recreation growth (126)
					Declining economy (162)
Invited Groups	Stable job opportunities/employment (8)	Economy (general) (151)	Decreasing income and wages (33)	Increasing utility costs (73)	Increasing transportation costs (75)
	Money leaves (51)	Decreasing income and wages (33)	Increasing utility costs (73)	No new industries, businesses (140)	Ripple effect in community and all dimensions (93)
	Low utility costs (79)	Money leaves (51)	Economy (general) (151)	Declining economy (162)	Increase in agriculture (105)
	Increased utilities rates (86)	Increased cost of living (85)	Decreasing wealth (181)	Decreasing wealth (181)	Expanding economic base (125)
	Farming/resources (general) (99)	Loss of fish will destroy sense of place and community spirit (103)	Bad for community (56)		Industry growth (general) (127)
	Loss of fish will destroy sense of place and community spirit (103)	Declining/limited businesses and shops (136)			Fish will improve economy (133)
	Good for agriculture/stable agriculture (104)	Same/no change (245)			Increasing school jobs (15)
	Loss of fishery (138)	People will leave (206)			Declining tax base (172)
	Stable economic base (139)				Increasing property values (201)
	Agricultural/food processing-based economy (143)				
Strong/growing economy (157)					



Invited Groups	Cheap utilities keep economy growing (160)				
	People will leave (206)				
	Constrained by government regulations (951)				
	Bad for community (956)				
Other Groups		Increasing/higher taxes (74)		Loss of recreation and tourism-related business (134)	Increased fishing/maintenance of fishery and fish (129)
		Pressure from increased water conflicts (117)			Strong/growing economy (157)
					Same/no change (245)
<b>Place</b>					
Across All Groups	Loss of fish results in a loss of sense of place, pride, and values (678)	Decline in sense of place and community pride (672)	Maintain status quo, no change (841)	Importance of water to community (618)	Strong sense of place/heritage/morale and community (670)
	Negative impact (general) (850)			Negative impact of reduction in water on springs/recharging/reservoirs (619)	
				Ruin of community, complete negative community change (844)	
Invited Groups	Community character is good (566)	Decline in property values and tax base (882)	Economic growth and stability (731)	Increased power rates (594)	Increased power rates (594)
	Community character is poor/declining (577)	No money for community improvements (567)	Community improvements are dependent on economy (753)	Reduction in agriculture due to water loss (643)	Decline in farming (654)
	Importance of agriculture (644)	Community character is poor/declining (577)	Mix of positive and negative impacts (847)	Irrigation wells drying up, dryland farming only (655)	Good irrigation systems and wells, maintenance of irrigation systems (657)
	Stability of agriculture and farms (652)	Negative impacts on the number of farms and farm families (642)	Same as pathway #2, 2b (914)	Close proximity to outdoor recreation opportunities (662)	Increase in recreation opportunities is good (661)
	Recreation and tourism (general) (660)	Community decline and worsening (722)		Increase in jobs (747)	Importance of river for recreation (674)

Invited Groups	Increasing crime and drug-use/less safety (903)	Community improvements are dependent on economy (753)		Community improvements are dependent on economy (753)	Community decline and worsening (722)
	Poor/loss of recreation and tourism opportunities (666)	Decreased wildlife and fish (802)		Good, healthy environment and great outdoors (775)	Economic decline/loss of economic diversity (733)
	Pride in/commitment to community (671)	Maintain status quo, no change (841)		Poor air and water quality (782)	Decline in industries (745)
	Decline in sense of place and community pride (672)	Other community changes independent of waterway operations (842)			Positive impacts associated with fish recovery (808)
	Declining values and spirit, more stress (677)	Ruin of community, complete negative community change (844)			Moral obligation to protect fish (816)
	Loss of fish results in a loss of recreation (679)				Decline in property values and tax base (882)
	Economic growth and stability (731)				Decreasing crime (909)
	Economy more important than fish (734)				
	Need more industry (744)				
	Poor air and water quality (782)				
	Increasing population (821)				
	Decreasing population (823)				
	Community improvements, general (845)				
Other Groups	Safe and crime free (902)				
	Increased taxes, taxes wasted, competition for tax money (883)	Negative impact of reduction in water on springs/recharging/reservoirs (619)			Pride in/commitment to community (671)
	Increased taxes, taxes wasted, competition for tax money (883)			No negative changes, little impact (849)	

Vision and Vitality					
Across All Groups	Negative impacts on vision and vitality with less fish (682)	Negative economic opportunities (582)		Negative/decreasing community characteristics (542)	Good/increasing tax base/fiscal resources (201)
		Decreasing/lack of community vision and vitality (602)		Negative impacts on agriculture and land tenure (544)	Strong/increasing community vision and vitality (601)
					Positive impacts on vision and vitality with more fish (681)
Invited Groups	Civic organization decline (population decline/financial stress) (14)	Poor, lack of political leadership (82)	Economic factors increasing vision and vitality (584)	Loss of community cohesiveness (344)	Politics dominated by special interests/one-party system (84)
	Leadership decline (124)	Loss of community cohesiveness (344)	Strong/increasing community vision and vitality (601)	Negative economic opportunities (582)	Insufficient/decreasing tax base/fiscal resources (202)
	Confident, caring leaders (141)	Negative impacts on agriculture and land tenure (544)	Decreasing/lack of community vision and vitality (602)	Economic factors decreasing vision and vitality (583)	New, optimistic visions of future (385)
	Insufficient/decreasing tax base/fiscal resources (202)	Negative/decreasing community characteristics related to fish recovery (546)	No change (673)	Decreasing/lack of community vision and vitality (602)	Reduced budgets (484)
	Reduced government expenditures (283)	Economic factors decreasing vision and vitality (583)	Impacts related to increased utility rates (750)	Impacts related to increased utility rates (750)	Positive/increasing community characteristics related to water (543)
	Cope well with change (361)	No change (673)	Impacts of changing demographics (886)		Negative impacts on agriculture and land tenure (544)
	Lack of planning and ability to plan for the future (404)	Negative impacts on vision and vitality with less fish (682)			Decreasing/lack of community vision and vitality (602)
	General vision and vitality (600)	Impacts related to increased utility rates (750)			Economic base will change (726)
	Decreasing/lack of community vision and vitality (602)	Negative impact on parks and recreation facilities (832)			Impacts related to increased utility rates (750)

Invited Groups	No change (673)	Impacts of changing demographics (886)			
	Improving/good schools (811)	Outmigration of population (892)			
	Don't know/no comment (998)	Don't know/no comment (998)			
Other Groups	Increasing government expenditures (282)	Increasing government expenditures (282)		Negative/decreasing community characteristics related to water (308)	No change (673)
	Excessive, unjustified government expenditures (284)				

### 2.27.5 Minimizing Adverse Impacts

Forum participants suggested ways to minimize the negative community impacts, and maximize the positive ones, associated with the proposed pathways. These include:

#### ***Pathway A2***

In terms of local mitigation, participants discussed the need to increase water storage and to recharge the aquifer. Regional suggestions included: a complete Snake River water adjudication to learn the amount of water being used by the Corps of Engineers; changing energy production and consumption; and providing the public with more information about proposed pathways, and making the information more accessible to allow for more informed public decision-making.

#### ***Pathway A3***

Suggestions to minimize the negative impacts to the region included helping the people directly affected by dam removal, such as barge employees and farmers, solve problems with associated with increased power and transportation costs, and to develop alternative means of energy production coupled with conservation.

## 3.0 - CROSS-CASE COMPARISON OF STUDY COMMUNITY BY COMMUNITY TYPOLOGY

### 3.1 Community Structures and Processes

A community consists of people who are meeting their daily needs in a particular geographic area (not limited to jurisdictional boundaries), who have organized themselves to produce goods and services, and who invest resources (time, emotional energy, capital, *etc.*) to take cooperative actions designed to address the needs of community members and/or enhance the important characteristics of their community. For the purposes of conducting this community assessment, a multi-dimensional concept of community consists of four dimensions; 1) **People** -- Social Make-up; 2) **Jobs and Wealth** -- Economy; 3) **Place** -- Character and 4) **Vision and Vitality** -- Organization and Leadership Capacity.

Furthermore, communities are seen as constantly changing complex systems made up of individuals, household units, and other organized interests (*i.e.*, business firms, civic groups, churches, retirement and youth groups, chambers of commerce and other non-governmental organizations). Therefore, community decisions most often are a result of interactions between some combination of these units. This reality makes it difficult to determine whom, and how, to ask community members about the state of their community.

Communities also are envisioned to be parts of larger regional landscapes. In fact, relationships between and among communities exist on the basis of shopping patterns, employment patterns, social group patterns, kinship networks, collaborative government efforts, shared non-governmental organization activities (*i.e.*, joint economic development or preservation via establishing a land trust), human land use patterns, as well as the more commonly pointed out biophysical features. Regardless of whether the linkages among communities result from the functioning of a biophysical or social system, some aspects of these interactions serve as barriers between communities and others facilitate synergistic connections between them. Therefore, another reality is that within a developed region of the United States, like the Inland Northwest, there is a much greater proportion of networked communities than totally isolated ones.

The selected definition of community, the choice to focus on four dimensions of community, and the briefly outlined realities above guided the design of the two-tiered community typology developed and applied in this community-based social assessment.

### 3.2 Development of A Two-Tiered Community Typology

Two goals further guided the design of the typology. One was to develop meaningful clusters of communities in the affected environment that are based on descriptive themes relevant to the proposed salmon recovery pathways. The second goal was to capture the diversity of the communities across the affected environment.

For the purposes of this assessment, community types are defined as communities having similar land use patterns, economic composition and connections to the river. Additionally, a typical community case is a purposefully selected community that reflects a definable set of attributes for the communities within a community type. To promote the inclusion of a range of communities within and across types, the following community partitioning variables were used to describe each typical community case: population -- size; community resilience index; community economic diversity rating; dominant industrial composition (quantified natural resource and other industrial dependency); river impact (*i.e.*, sub-region location -- upstream, downstream, reservoir, important economic and social river connections); and key community trends (*i.e.*, population, economy in transition, becoming a retirement community, or becoming a bedroom community). These variables were selected because of their importance in describing the impacts that communities may experience from the proposed alternatives as well as the ongoing dynamics of community change.

The community typology was developed based on 1) the case selection process; 2) interactions with active and involved community members via community forums; and 3) the coding and analysis of the qualitative and quantitative data collected for each community during this assessment. Initial efforts to develop the typology during case selection were dependent on available secondary data. As community forums were conducted, the perceptions of community members of their community situation in 1999 in terms of the four community dimensions, and impacts on their community in terms of the same four dimensions in 2020, were used to corroborate and adjust the ideas and variables underlying the typology. Furthermore, as the ratings and justifications across all communities were analyzed to identify themes and patterns additional insights for the typology were obtained. Lastly, initial findings were examined in terms of their plausibility based upon previous research and available knowledge on community change and social assessment. All of these steps influenced the final conceptualization of the community typology, and the procedures used to apply it.

Qualitative systems of typing objects and the use of typical cases to provide insight for understanding those objects are commonly used in research. This approach however, is different from sampling and projecting to a population of communities. Therefore, care must be taken to not overstate this approach's explanatory power and transferability. For instance, as much as it is feasible at a macro, descriptive level to group communities into community types to identify impacts from proposed actions to recover salmon to typical communities within a type, care must be taken to not overlook the fact that other specific community attributes can be key to understanding how another community categorized as a particular type might be affected. This additional knowledge is critical to understand how to lessen the impacts from a proposed pathway,

or which community dimensions to target, in order to mitigate a particular environmental effect. Finally, even though typical community cases depict a community type, the transferability of the findings about a community type to another community similarly typed is contingent on having a highly comparable community context. Evidence from this assessment of 27 communities (including communities assessed in Phase I as well as in Phase II) suggests a complete contextual match of communities is rare. This makes it all the more important to look at more than just the community type when using the findings from this study.

### **3.2.1 Application of the Community Typology to the Affected Environment**

The community typology described above was applied in Phase II to the affected environment of southern Idaho. It resulted in the identification of three *community* types. They include: 1) The Trade Center Community Type; 2) The Multiple Natural Resource Use Community Type; and 3) The Middle Snake River Irrigated Agriculture Community Type. Descriptions of these three types and the communities they represent are presented below.

#### ***Trade Center Community Type***

These communities are characterized by diverse urban land use patterns with a predominance of intensely developed land types such as industrial, commercial, retail, residential and parks and open spaces. These communities are characterized by a relatively large population (over 20,000 people) and a diverse economy that represents a regional trade center. Industrial sectors typically include construction, manufacturing, wholesale, retail, transportation and communication, service, and government. The built landscape dominates the community setting. These communities directly use the Lower Snake River for port facilities and transportation of commodities. These communities also are affected by levels of flow augmentation, when water from the Snake River system is used to augment flows of water through the Lower Snake River. For the purposes of this study, typical communities used to depict the Trade Center Community Type are Boise, Idaho, and Twin Falls, Idaho.

#### ***Multiple Natural-Resource Use Community Type***

These communities are characterized by natural and rural landscapes in the upriver region, and traditionally their economies and way of life have been dominated by a mixture of resource based uses such as tourism, forestry, fisheries, mining, farming, ranching and conservation. These uses are evident throughout these communities in their industrial, commercial, retail and service developments. Discernible residential areas, downtown business centers, and parks and open spaces are normally present. A diverse range of industrial sectors, often including one or more resource-based industries (*i.e.*, forestry, natural resource based tourism, and ranching) along with state and local government and/or Federal government, characterizes these

communities' economies. These communities directly use the Lower Snake River for its port facilities and transportation of commodities. The community of Salmon also affected by management of the Snake River for fisheries and recreation/tourism. In addition, these communities are affected by levels of flow augmentation, when water from the Snake River system is used to augment flows of water through the lower Snake River. For the purposes of this study, typical communities used to depict the Multiple Natural Resource Use Community Type are Ashton, Idaho; Cascade, Idaho; and Salmon, Idaho.

### ***Middle Snake River Irrigated Agriculture Community Type***

These communities are characterized by irrigated, rural landscapes in the Middle Snake River region characterized by a predominance of agriculture oriented industrial, commercial and service establishments. Discernible residential areas, and parks and open spaces are normally present. A limited range of industrial sectors, often dominated by irrigated agriculture (*i.e.*, related picking, processing, and packaging) or state and local government, characterizes these communities' economies. They directly use the Lower Snake River for its port facilities and transportation of commodities. These communities also are affected by levels of flow augmentation, when water from the Middle and Upper Snake River system is used to augment flows of water through the Lower Snake River. For the purposes of this study, typical communities used to depict the Middle Snake River Irrigated Agriculture Community Type include Firth, Idaho; Hagerman, Ida, Rupert, Idaho; and Homedale, Idaho.

### **3.3 Risk-Assessment of Community Types by the Affected Environment and Environment Impacts of the Three Pathways**

An assessment of the risk to communities potentially affected by the three pathways under study by the U.S. Army Corps of Engineers can be based on the results of the community assessment reported in [Section 2](#). Those results suggest that communities of some types would be at greater risk of being significantly affected by proposals to change the existing river system on the Lower Snake River than would some other types of towns. The degree to which a community is at-risk is assessed here based on two factors. One is the town or city's current community capacity to respond to change, which is dependent on the community's affected environment. Second is the perceived degree and kind of impact the community would experience, or the environmental effects of a particular pathway, if each one of the three pathways was implemented.

Cross-case comparison of communities and the types they represent reveal patterns in the responses of forum participants that lend support for the construct validity of the forum process and the means used to elicit the perceptions of the forum participants.



### 3.3.1 Synopsis of Affected Environments and the Environmental Effects of Pathways A1, A2, and A3 by Community Type

The study communities, labeled as "typical community cases," their community type, and other characteristics relating to first and second tier variables are listed in [Table 3.1](#). [Table 3.2](#) is a synopsis of "Affected Environments," and [Table 3.3](#) is a synopsis of "Environmental Effects" of Pathways A1, A2, and A3. The median ratings used in [Table 3.3](#) are those of the first invited group; these participants comprised one of the more diverse and neutral groups at the forum, and their median rating was treated as a reasonable indicator of shifts under the three pathways.

Table 3-1 1999 Situation Across Community Types							
Typical Community Case	Population 1996-1997	Region	Relation to Snake River	Identified Trends	CRI	Economic Diversity	Dominant Industries
<b>Trade Center Community Type</b>							
Boise, Idaho	166,647	Upper Basin	Transportation, Flow Augmentation	Growing trade center; rapid population growth; low unemployment; income stratification; loss of open space	--	High	Government; Retail; Tourism
Twin Falls, Idaho	31,989	Upper Basin	Transportation, Flow Augmentation	Population increase and community growth; underemployment; growing service industry	--	High	Government; Retail; Tourism
<b>Multiple Natural Resource Use Community Type</b>							
Ashton, Idaho	1,085	Upper Basin	Transportation; Flow Augmentation	Decreasing farm numbers/increasing farm size; limited shopping and retail; increasing tourism	High	High	Agriculture; Timber; Services
Cascade, Idaho	1,059	Upper Basin	Flow Augmentation	Growing retirement community; outmigration of youth; declining timber industry; growth in service industry	High	Medium	Government; Tourism; Timber
Salmon, Idaho	3,270	Upper Basin	Transportation, Flow Augmentation, Upriver Fisheries	Declining timber industry; increasing tourism industry; growing retirement community	High	High	Agriculture; Government; Tourism
<b>Middle Snake River Irrigated Agriculture Community Type</b>							
Firth, Idaho	453	Upper Basin	Transportation, Flow Augmentation	Poor job opportunities; declining industry; declining farm economy	Medium High	Low	Food processing; Agriculture
Hagerman, Idaho	812	Upper Basin	Transportation, Flow Augmentation	Income stratification; high commuting; declining economy	Medium High	Medium	Agriculture; Government
Homedale, Idaho	2,285	Upper Basin	Transportation, Flow Augmentation	Limited employment; outmigration of youth; decreasing farm numbers/increasing farm size	Medium Low	Medium Low	Agriculture/Ranching; Mining; Government
Rupert, Idaho	5,936	Upper Basin	Transportation, Flow Augmentation	Declining economy; outmigration of youth; income stratification; community revitalization	Medium Low	Medium	Food processing; Agriculture; Federal/state government

**Table 3-2  
Affected Environment Across Community Types  
For the 1999 Situation**

Trade Center Community Type				
Typical Community Case	People		Jobs and Wealth	
	Median Ratings <sup>1</sup>	Rating Justifications <sup>2</sup>	Median Ratings <sup>1</sup>	Rating Justifications <sup>2</sup>
Boise, Idaho Twin Falls, Idaho	6.5 8	Increasing/high population (41)	7 6	Few technical jobs/high skilled jobs (5)
		Customs and lifestyles (general) (59)		Low paying jobs (31)
		Good prevalent values (61)		Jobs become more service oriented (41)
		Children and education are high priority (66)		High number of public sector jobs (47)
		Prevalent values (general) (69)		Money leaves (51)
		Schools/education (general) (89)		Low utilities (79)
		Good, friendly, helpful people (201)		Economically diverse (121)
		Supportive of community activities and involved (241)		Low unemployment (192)
		Ethnic diversity is high/increasing (301)		High property values (198)
		Ethnic diversity is low/decreasing (302)		
		Diversity (general) (309)		
		Negative impacts (general) (322)		
		Growth of businesses/good, diverse, strong economy (541)		

Typical Community Case	Place		Vision and Vitality	
	Median Ratings <sup>&amp;sup1;</sup>	Rating Justifications <sup>&amp;sup2;</sup>	Median Ratings <sup>&amp;sup1;</sup>	Rating Justifications <sup>&amp;sup2;</sup>
Boise, Idaho Twin Falls, Idaho	7 7	Good/improving community appearance (511)	4.5 8	Strong, active civic organizational capacity (11)
		People shop within the community (532)		Politics dominated by special interests/one-party system (84)
		Improving business appearances/revitalization (535)		Numerous, varied, good, or improving social activities (301)
		Good social services, same access to services (561)		Friendly, sociable community (305)
		Good schools (563)		Coping with change (360)
		Traffic congestion/increased traffic (603)		Lack of planning and ability to plan for the future (404)
		Close proximity to outdoor recreation opportunities (662)		Strong/increasing community vision and vitality (601)
		Good parks and open spaces, public lands (667)		
		Poor land-use planning, concern over plan (713)		
		Increased commercial and residential development/loss of open space to it (761)		
		Attractive scenery (771)		
		Poor air and water quality (782)		
		Safe and crime free (902)		

Multiple Natural Resource Use Community Type				
Typical Community Case	People		Jobs and Wealth	
	Median Ratings & sup1;	Rating Justifications & sup2;	Median Rating & sup1;	Rating Justifications & sup2;
Ashton, Idaho Cascade, Idaho Salmon, Idaho	6 6.5 6	Ageing population (2)	4 4 5	Poor job opportunities (3)
		Lack of opportunities for young people (11)		Low paying jobs (31)
		Increasing/high population (41)		Seasonal employment (35)
		Stable population (43)		Negative impacts associated to public sector jobs (45)
		Good customs and lifestyles/change for the better (51)		High number of public sector jobs (47)
		Customs and lifestyles (general) (59)		Money leaves (51)
		Good prevalent values (61)		High commuting (66)
		Children and education are high priority (66)		Low cost of living (78)
		Families are becoming less stable (102)		Low utilities (79)
		Stable families (103)		Economically diverse (121)
		Increasing/high public assistance (112)		Low economic diversity (122)
		Home ownership (general) (159)		Shrinking agriculture, mining, and timber base (135)
		Strong sense of community among residents (203)		High poverty (183)
		Strong sense of spirit and pride in community (211)		Increasing/high government assistance (184)
		Supportive of community activities and involved (241)		High unemployment (191)
		Diversity (general) (309)		High property values (198)
Recreation and tourism is important (positive) (441)				
Loss of industries and lack of job opportunities (492)				

Typical Community Case	Place		Vision and Vitality	
	Median Ratings <sup>sup1</sup> ;	Rating Justifications <sup>sup2</sup> ;	Median Ratings <sup>sup1</sup> ;	Rating Justifications <sup>sup2</sup> ;
Ashton, Idaho Cascade, Idaho Salmon, Idaho		Good/improving community appearance (511)		Strong, active civic organizational capacity (11)
		People shop elsewhere due to lack of businesses/not spending money here/poor business opportunities (22)		Diminished civic organizational capacity (12)
		Improving business appearance/revitalization (535)		Insufficient/decreasing tax base/fiscal resources (202)
		Good social services, same access to services (561)		Successful at getting and using grants (241)
		Close proximity to outdoor recreation opportunities (662)		Friendly, sociable community (305)
		Good parks and open spaces, public lands (667)		Interesting community (307)
		Strong sense of place/heritage/morale and community (670)		Strong cohesive community (341)
		8 Pride in/commitment to community (671)		8 Inadequate community cohesiveness (342)
		8 Family-oriented, small town with pleasant atmosphere (681)		7 Do not cope well with or resist change (362)
		Attractive scenery (771)		Planning and plans exist, good base for the future (403)
		Good air and water quality (780)		Lack of community control of outside forces (economics/regulations) (442)
		Good people (832)		Limited budget (482)
		Good quality of life (901)		Strong and high level of community participation (work together) (561)
		Safe and crime free (902)		Strong/increasing community vision and vitality (601) Decreasing/lack of community vision and vitality (602)

Middle Snake River Irrigated Agriculture Community Type				
Typical Community Case	People		Jobs and Wealth	
	Median Ratings <sup>1</sup> ;	Rating Justifications <sup>2</sup> ;	Median Rating <sup>1</sup> ;	Rating Justifications <sup>2</sup> ;
Firth, Idaho Hagerman, Idaho Rupert, Idaho Homedale, Idaho		Lack of opportunities for young people (11)		Poor job opportunities (3)
		Increasing/high population (41)		Low paying jobs (31)
		Good prevalent values (61)		Money leaves (51)
		Prevalent values (general) (69)		Low utilities (79)
	6	Strong schools/education (81)	4	Declining/limited businesses and shops (136)
	6		4	
	7	Good, friendly, helpful people (201)	5	Agricultural/food processing-based economy (143)
	6		5	
	Supportive of community activities and involved (241)		Some poverty/level of low income families (86)	
	Good community to live and raise family (424)		High property values (198)	
	Loss of industries and lack of job opportunities (492)			

Typical Community Case	Place		Vision and Vitality	
	Median Ratings <sup>1</sup> ;	Rating Justifications <sup>2</sup> ;	Median Ratings <sup>1</sup> ;	Rating Justifications <sup>2</sup> ;
Firth, Idaho Hagerman, Idaho Rupert, Idaho Homedale, Idaho	7 5 7 7	Good/improving community appearance (511)	6 5.5 7 7	Strong, active civic organizational capacity (11)
		Struggling businesses and vacant storefronts (520)		Strong, active civic leadership (41)
		People shop elsewhere due to lack of businesses/poor business opportunities (522)		Strong, active, astute political leadership (81)
		Poor downtown/business appearance (524)		Support for bonds and levies (181)
		Good social services, same access to services (561)		Insufficient/decreasing tax base/fiscal resources (202)
		Good schools (563)		Successful at getting and using grants (241)
		Low traffic congestion (599)		Numerous, varied, good, or improving social activities (301)
		Decreased number of farms and increased farm size; absentee owners, corporate farms (653)		Friendly, sociable community (305)
		Close proximity to outdoor recreation opportunities (662)		Interesting community (307)
		Good parks and open spaces, public lands (667)		Strong, cohesive community (341)
		Strong sense of place/heritage/morale and community (670)		Positive/increasing community characteristics (541)
		Importance of river for recreation (674)		Strong and high level of community participation (work together) (561)
		Attractive scenery (771)		
		Good air and water quality (780)		
				Safe and crime free (902)

<sup>1</sup>Median ratings reflect the invited groups' median (see methodology for discussion of invited groups).

<sup>2</sup>Written justifications for median ratings that are perceived across all communities in the community type.

**Table 3-3  
Environment Effects Across Community Types  
For A1 to A3**

Typical Community Case	A1 Median Rating <sup>1</sup>	A2 Median Rating <sup>1</sup>	A1 to A2 Rating Shift <sup>2</sup>	A1 to A2 Rating Justifications <sup>3</sup>	A3 Median Rating	A1 to A3 Rating Shift	A1 to A3 Rating Justifications <sup>3</sup>
<b>Trade Center Community Type</b>							
<b>Community Dimension - People</b>							
Boise, Idaho Twin Falls, Idaho	-2 -2	-3 -2	↓Adverse ↔Adverse	Negative impacts (general) (322)	3 3	↑Beneficial ↑Beneficial	Growth in recreation and tourism opportunities (443)
				Prevalent values (general) (69)			Strong/improving/recovered fisheries (461)
				Loss/change in recreation and tourism opportunities (442)			Increasing/high population (41)
				People changing for the better/positive change (311)			Increased utilities, transportation costs, and taxes; decreased irrigation and loss of power (482)
				Strong sense of spirit and pride in community (211)			
<b>Community Dimension - Jobs and Wealth</b>							
Boise, Idaho Twin Falls, Idaho	-2 -1	-3 -2	↓Adverse ↓Adverse	Declining economy (162)	3.5 2	↑Beneficial ↑Beneficial	Increasing job opportunities (general) (10)
				Increasing/higher taxes (74)			Increasing utilities (73)
				Resource tourism and amenity recreation growth (126)			Strong/growing economy (157)
<b>Community Dimension - Place</b>							
Boise, Idaho Twin Falls, Idaho	-3 -3	-3 -2	↔Adverse ↑Adverse	Decreased wildlife and fish (802)	5 2	↑Beneficial ↑Beneficial	Strong sense of place/heritage/morale and community (670)
				Pride in/commitment to community (671)			Positive impacts associated with fish recovery (808)
				Increase in recreation opportunities is good (661)			
<b>Community Dimension - Vision and Vitality</b>							
Boise, Idaho Twin Falls, Idaho	-3 0	-3 -2	↔Adverse ↓Adverse	Poor, lack of political leadership (82)	4.5 3	↑Beneficial ↑Beneficial	Strong/increasing community vision and vitality (601)
				Loss of community cohesiveness (344)			Positive impacts on vision and vitality with more fish (681)
				Outmigration of population (892)			New, optimistic visions of future (385)



Multiple Natural Resource Use Community Type							
<b>Community Dimension - People</b>							
Ashton, Idaho Cascade, Idaho Salmon, Idaho	1 0 -2	0 0 -2	↓Same99 ←→Same99 ←→Same99	Decreasing/low population (42)	-2.5 1 2	↓Adverse ↑Beneficial ↑Beneficial	Opportunities for youth exist (12)
				People changing for worse/negative change (312)			Families (general) (109)
				Loss/change in recreation and tourism jobs (442)			People changing for better/positive change (311)
							Strong/improving/recovered fisheries (461)
							Increased industries/good job opportunities (491)
							Increased utilities, transportation costs, and taxes; and decreased irrigation and loss of power (482)
<b>Community Dimension - Jobs and Wealth</b>							
Ashton, Idaho Cascade, Idaho Salmon, Idaho	2 0.5 -3	-1 -1 -3	↓Adverse ↓Adverse ←→Adverse	Decreasing job opportunities (18)	-3.5 2.5 2	↓Adverse ↑Beneficial ↑Beneficial	Increasing job opportunities (general) (10)
				Negative impact to jobs from declining fish populations (25)			Less government regulation (34)
				Increasing utilities (73)			Increasing transportation costs (75)
				Decreasing wealth (181)			Resource tourism and amenity recreation growth (126)
				Same/no change (245)			Increased fishing/maintenance of fishery and fish (129)
				Decreased economic base (124)			
				Declining economy (162)			
<b>Community Dimension - Place</b>							
Ashton, Idaho Cascade, Idaho Salmon, Idaho	1 0.5 -2	0 0 -1.5	↓Same99 ↓Same99 ↑Adverse	Increased power rates (594)	-2.5 2 2	↓Adverse ↑Beneficial ↑Beneficial	Pride in/commitment to community (671)
				Decreasing population (823)			Community growth and improvement (general) (721)
							Positive impacts associated with the fish recovery (808)
<b>Community Dimension - Vision and Vitality</b>							
Ashton, Idaho Cascade, Idaho Salmon, Idaho	2 0.5 -2	0 0 -3	↓Same99 ↓Same99 ↓Adverse	Strong/increasing community vision and vitality (601)	-3 2 1	↓Adverse ↑Beneficial ↑Beneficial	Support for bonds and levies (181)
				Impacts related to increased utility rates (750)			Positive economic opportunities (581)
							Fish-related uncertainty (665)
							Increased population and related improvements (891)

Middle Snake River Irrigated Agriculture Community Type							
<b>Community Dimension - People</b>							
				Current trends will continue/no impact (325)			No change in people/little/no impact (313)
				High/increasing cost of living (455)			Negative impacts (general) (322)
Firth, Idaho	3	2	↓Beneficial		-1.5	↓Adverse	
Hagerman, Idaho	0	-1.5	↓Adverse	Increased utilities, transportation costs, and taxes; and decreased irrigation and loss of power (482)	-2	↓Adverse	
Rupert, Idaho	0	-1	↓Adverse		-3	↓Adverse	
Homedale, Idaho	2	0	↓Same <sup>99</sup>	Decrease in water availability (604)	-3	↓Adverse	Fish recovery good/important (463)
<b>Community Dimension - Jobs and Wealth</b>							
				Increased pumping costs (20)			Decreasing job opportunities (general) (18)
				Increasing utilities (73)			Increased transportation costs (75)
Firth, Idaho	2.5	2	↓Beneficial		-1.5	↓Adverse	
Hagerman, Idaho	-1	-1	←→Adverse	Pressure from increased water conflicts (117)	-2	↓Adverse	Resource tourism and amenity recreation growth (126)
Rupert, Idaho	0	-1	↓Adverse		-3.5	↓Adverse	
Homedale, Idaho	2	0	↓Same <sup>99</sup>		-2	↓Adverse	Declining/limited businesses and shops (136)
<b>Community Dimension - Place</b>							
				Increased power rates (594)			Struggling businesses and vacant store fronts (520)
				Negative impact of reduction in water on springs/recharging/reservoirs (619)			No money for community improvements (567)
Firth, Idaho	3	2	↓Beneficial		-1.5	↓Adverse	
Hagerman, Idaho	-1	-2	↓Adverse	No negative changes, little impact (849)	-0.5	↓Adverse	
Rupert, Idaho	0	-1	↓Adverse	Costs more than pathway #1, with no benefit (923)	-3.5	↓Adverse	
Homedale, Idaho	2	1	↓Beneficial		-2.5	↓Adverse	Decline in farming (654)
<b>Community Dimension - Vision and Vitality</b>							
Firth, Idaho	2	1.5	↓Beneficial	Impacts related to increased utility rates (750)	-1	↓Adverse	Economic factors decreasing vision and vitality (583)
Hagerman, Idaho	0	-0.5	↓Adverse		-1	↓Adverse	
Rupert, Idaho	0	0	←→Same <sup>99</sup>		-2	↓Adverse	Decreasing/lack of community vision and vitality (602)
Homedale, Idaho	1.5	1	↓Beneficial		-2.5	↓Adverse	
<sup>1</sup> Median ratings reflect invited groups' medians (see methodology for discussion of invited groups). <sup>2</sup> Directional shift of median ratings from A1 to A2 on the "Community Impact Rating Scale" (see methodology). <sup>3</sup> Salient justifications for ratings identified across all typical community cases specific to A2 or A3, in addition to those justifications given for A1.							

The columns in [Table 3.3](#) labeled "Rating Shift" include an arrow indicating whether the change in median ratings from Pathway A1 is an increase, or a positive change, as indicated with an 'up' arrow, or whether it is a decrease, or a negative change, as indicated with a 'down' arrow. The columns also include a label for whether the shift resulted in a net positive median rating for the community (a *beneficial* effect) or a

negative median rating (an *adverse effect*). The *Rating Justification* column includes characteristics that were mentioned by forum participants across all the communities in the given community type, categorized by community dimension. These reasons, or justifications, for the ratings emphasize the common characteristics across communities of each type, and are helpful for understanding the reasons for the ratings listed in the table.

### **3.3.1.1 The Trade Center Community Type**

#### *Affected Environment:*

As [Table 3.2](#) shows, the forum participants in trade-center communities like those in the Middle Snake region's larger cities (Boise and Twin Falls) tended to rate their communities' affected environment toward the as good as it could be end of the rating scale, with the exception of the median rating for the Vision & Vitality dimension of 4.5 in Boise. Increasing population, economic diversity, close proximity to outdoor recreation activities, increased development and traffic congestion, and low but increasing ethnic diversity characterize these cities. Boise is currently a rapidly growing city and home to the headquarters of a number of international, national, regional and state corporations including Hewlett-Packard, Boise Cascade, Simplot Corporation, Albertsons, Micron Technology, and Morrison-Knudsen. As the state capital, it also serves as the political center of Idaho. Twin Falls serves as a trading and marketing center for the major irrigated farming area of south central Idaho. It too is experiencing rapid population and economic growth. As a result, it is sometimes referred to (somewhat critically) as "Little Boise" by some residents.

Although these communities vary significantly in population, they are both significant population and trade centers. Along with its ongoing development and economic diversity, however, Boise participants reported that the city is lacking in political leadership, which some participants felt is dominated by special interests and a one-party system. Participants also mentioned a lack of planning for the future, with developers controlling many of the decisions concerning how and where Boise will grow. In contrast, participants in the Twin Falls forum rated Vision & Vitality as one of the city's strongest dimensions, with participants citing strong, active civic and organizational capacity as a strength of the community. Aside from this one discrepancy in median ratings between the two cities, participants in both Boise and Twin Falls perceived their communities similarly in many respects. The people were perceived as having good prevalent values, customs, and lifestyles where children and education are given a high priority. In terms of their economies, although unemployment was perceived to be low, the perception of a large number of unskilled, low paying, and service oriented jobs was common. Close proximity and access to open space and outdoor recreation activities was certainly a consideration of participants when rating the Place dimension. These positive justifications were tempered by perceptions of poor land use planning and open space being lost to rapid commercial and residential development.

### *Environmental Effects:*

The relationship of both Trade Center communities to the Lower Snake River is primarily indirect. The river and its associated fishery was viewed as a source of recreation and amenity value. Neither community stressed dependence on the river as a source of irrigation water for agriculture, although they did mention the low cost of utilities.

As [Table 3.3](#) shows, participants in both Boise and Twin Falls generally forecasted adverse impacts in all four community dimensions (medians ranging from -1 to -3) if the existing river system was maintained on to 2020 under Pathway A1. An exception here was the Twin Falls rating for Vision & Vitality of "no impact." Median ratings were similar for Pathway A2, which clustered around -2 and -3 for all four community dimensions. Ratings for A3 clustered around 3 across the four dimensions, indicating perceptions of significantly beneficial impacts from A3 due to growth in recreation and tourism opportunities, recovered fisheries, a strong sense of place and heritage, and a growing economy and increasing job opportunities, among others.

In the case of Boise, medians ranged from -2 for the People and Jobs & Wealth dimensions, to -3 for the Place and Vision & Vitality dimensions under Pathway A1. Similarly, the median rating was -3 for all four community dimensions under Pathway A2. Pathway A3 showed an increase in ratings that ranged from 3 for the People dimension to 5 for the Place dimension.

Similar results were reported by forum participants in Twin Falls. Under Pathway A1, group medians ranged from -3 for the Place dimension to 0 ("no impact") for the Vision & Vitality dimension. Under Pathway A2, the median rating was -2 for all four community dimensions. Median ratings for Pathway A3, although consistently positive, were slightly lower than those in Boise. They ranged from 2 for the Jobs & Wealth and Place dimensions to 3 for the People and Vision & Vitality dimensions. Twin Falls medians differed from Boise medians by as many as 3 rating scale points.

Overall, the perceived impacts for both trade center community types were very similar across pathways and across all four community dimensions. Generally, adverse impacts were forecast when considering Pathways A1 and A2. In contrast, beneficial impacts were forecast under Pathway A3 implementation. Participants at these two forums focused on the issue of fish recovery as a major consideration when evaluating the proposed pathways. As the statistical probability of fish recovery increased, so did the median ratings of the invited groups.

### 3.3.1.2 The Multiple Natural Resource Use Community Type

#### *Affected Environment:*

As [Table 3.1](#) shows, the Multiple Natural Resource Use Community type ranges from the small agriculture and timber manufacturing town of Ashton to the government, timber and tourism-dominated town of Cascade. This type also includes the highly diverse resource-use oriented community of Salmon (mostly farming, medical services, tourism, and government). While these towns differ in size and economic diversity, they are relatively small in population, with economies that are moderately to highly diverse. These communities also face the challenge of economic transitions due to changes in Federal land management practices and markets for their natural resource-based products. All are involved in ongoing efforts to integrate nature-based tourism and recreation into their economies. For the towns under this category, natural amenities and rural lifestyles are among their primary attractions and contributors to their quality of life.

As [Table 3.2](#) shows, forum participants in multiple natural resource use communities consistently rated their community's Place and Vision & Vitality dimensions as the highest of the four dimensions, at the extremely high *as good as it could be* end of the community situation rating scale. Justifications for these ratings were based on participants' positive perceptions of their family-oriented community, with good people who have community pride and a strong sense of place. The towns were viewed very positively in terms of their community appearance, social services, clean air and water, attractive scenery, safe and crime free environment, and good access to outdoor recreation opportunities, parks and open spaces. Participants also described their communities as strong in the areas of civic organizations, community cohesion, planning for the future, and community participation. The next highest, mid-range rated, dimension was People. Its ratings were justified in terms of positive characteristics, such as people with good customs and lifestyles, a strong sense of community spirit and pride, and stable families. These positive characteristics were counterbalanced by the negative characteristics of an aging population, lack of opportunities for youth, families becoming less stable, and more need for public assistance. An increasing population was noted by these communities as having both good and bad attributes. The Jobs & Wealth dimension was rated lowest by forum participants in these communities. Its ratings were most oriented towards the *as bad as it could be* end of the scale, with justifications for these relatively low ratings including the prevalence of poor job opportunities, low paying jobs, low employment for youth, and seasonal employment. High rates of commuting to work and shop, a shrinking natural resource-based economy, and high poverty were also mentioned as affecting the communities' Jobs & Wealth.

As communities in transition, all three towns of this type face new challenges. Cascade and Salmon see themselves as attracting retirees and losing youth, while residents of Ashton also perceive their community's population to be aging. All three communities described declining timber and farm industries and a growing tourism economy with service-based jobs. As they try to protect their heritage and rural way of life, they also are focusing on how to capitalize on the abundance of high-quality natural resources surrounding them.

#### *Environmental Effects:*

The relationship of all three communities of this community type to the Lower Snake River is indirect. The Snake River is viewed as important for recreation and tourism and for flow augmentation. Decisions made about the hydro-system on the Snake River, which presently provides transportation of commodities and requires flow augmentation for salmon fisheries, could significantly affect the towns of this type. All three communities associated characteristics such as a declining economy caused by reductions in the fish population and recreation/tourism losses, as well as increased utilities and decreased populations, with Pathways A1 and A2. Under A3, these communities described improved fisheries, increasing job opportunities, resource tourism and amenity recreation growth, population growth, and increasing transportation and utility costs, as impacts characteristic of this pathway. As [Table 3.3](#) shows, Ashton participants forecasted adverse impacts to all four community dimensions (medians ranging from -3.5 to -2.5) from A3, with the negative justifications outweighing the positive ones. In Cascade and Salmon, which are communities with tourism economies more dependent on natural amenities and fish than on farming and river transportation, forum participants forecasted adverse impacts or no change to all four community dimensions under A1 and beneficial affects under A3.

The invited participants at Salmon forecast adverse effects to their town in 2020 if Pathway A1 or A2 were selected on all four dimensions. Median ratings ranged from -1.5 to -3 for all four community dimensions under Pathway A1 and A2. In contrast, A3 was perceived to be clearly beneficial in this upriver, recreation-oriented town, with median ratings ranging from 1 to 2 across the four dimensions.

Cascade's invited participants perceived slightly beneficial, or no change (0), across all dimensions under A1. Under A2 they perceived no change in three of the four dimensions (0), while the Jobs & Wealth dimension declined somewhat. A3 was perceived to be clearly beneficial in Cascade, and ratings were similar to those of Salmon (median ratings ranged from 1 to 2.5).

Ashton's invited participants reported some improvement in 2020 under A1 and no change under A2 for three out of four dimensions. Jobs & Wealth received a lower rating of -1. Unlike its effects on Cascade or Salmon, A3 was perceived to adversely affect Ashton, with median ratings ranging from -2.5 to -3.5. Despite fish and recreation-related improvements, increased utility, costs lower-paying jobs, and a decrease in agriculture jobs were noted as influencing these ratings.



Overall, the Multiple Natural Resource Use Community Type perceived natural river drawdown and dam breaching more positively, and as having greater potential to create beneficial effects, than did some other community types. The analysis of the impact rating justifications suggests that forum participants were less focused on commodity transportation issues of the Snake River and more influenced by desires for higher probabilities of salmon recovery. Recovered salmon populations were perceived to contribute to these towns' nature-based tourism industry, enhance their fishing opportunities, and strengthen their sense of place. However, some communities of this type, like Ashton, may be more traditional in their focus on commodity production and basic industries like agriculture, and thus more focused on the negative impacts of salmon recovery, such as higher utility costs, than on the positive ones.

### **3.3.1.3 The Middle Snake River Irrigated Agriculture Community Type**

#### *Affected Environment:*

Firth, Hagerman, Rupert and Homedale represent the irrigated agriculture community type on the Middle Snake River. As [Table 3.1](#) shows, these communities vary greatly in population, ranging from Firth's small population of 453 to Rupert's relatively large population of 5,936. These communities also vary in economic diversity, although all depend on irrigated agriculture to drive their economy. The economy of Firth, which is based largely on food processing, represents the least economic diversity of these towns. Hagerman and Rupert have medium to medium-low economic diversity, based largely on agriculture and food processing, with an added infusion of government jobs in the Hagerman area. Homedale, with a higher level of economic diversity, relies on a variety of agriculture, including seed crops and ranching. All these communities confront a current situation characterized by a declining farm economy, with numbers of farm decreasing and their sizes increasing, youth moving elsewhere due to inadequate employment opportunities, and the flow of money to larger communities.

As [Table 3.2](#) shows, forum participants in Middle Snake River Irrigated Agriculture type communities rated their community's Place dimension the highest of the four dimensions, at the *as good as it could be* end of the community situation rating scale. Justifications for these ratings were based on low traffic congestion, good community appearance, good schools, a sense of community pride, and opportunities for outdoor recreation. Nonetheless, vacant storefronts, decreases in farm numbers and increases in farm size, and inadequate shopping opportunities tended to lower the ratings for some towns, particularly for Hagerman. The next highest, mid-range rated, dimensions were People and Vision & Vitality. Their ratings were justified in terms of positive

characteristics such as strong, active civic organizational capacity and leadership, strong political leadership, a high level of community cohesion and participation, and the presence of friendly and supportive residents. These positive characteristics were counter-balanced by negative characteristics such as poor job opportunities for youth and a decreasing tax base. In terms of their economy, the Jobs & Wealth dimension of these communities was rated lowest and was most oriented towards the *as bad as it could be* end of the community situation scale. Dependence on an agriculture-based economy, low paying jobs, and poor job opportunities, as well as a decline in businesses and shopping potential, characterized these communities' current situation.

#### *Environmental Effects:*

The relationship of these four irrigated agricultural communities to the Lower Snake River, which are located upriver from that stretch of river, is primarily based on the impacts of flow augmentation on irrigated farming and river transportation. As [Table 3.3](#) shows, forum participants in all four communities of this type forecasted adverse impacts to all four community dimensions under Pathway A3. Negative impacts would include decreased farming, increased transportation costs, and declining businesses. Participants in these communities also acknowledged that a growth in resource tourism and recreation would accompany A3, but the overall impacts would still be negative. There was more variation in the ratings for Pathways A1 and A2 across communities, with a range from -1 to 3 for these pathways. While some participants perceived that no change in community dimensions would occur, others described negative impacts, such as increased costs of living, increased utility rates, increased pumping costs, increased taxes, and decrease water availability affecting them. Invited participants at Firth perceived positive impacts in 2020 if the existing river system was maintained on to 2020 (A1) or modified (A2). Median ratings ranged from 2 to 3 under A1 and 1.5 to 2 under A2. Alternative A3 shows a definite decrease in ratings under A3 towards the negative, *adversely affected* end of the impact rating scale, with ratings that ranged from -1.5 to -1 across the four dimensions.

Invited participants at the Hagerman forum perceived adverse affects or no change (0) across all dimensions under A1, while they perceived negative affects across all dimensions under A2. Median ratings under A1 ranged from -1 to 0 across all four dimensions, and from -2 to -0.5 for A2. Similar to other communities, A3 was also rated low, ranging from -0.5 to a -2. The change from A2 to A3 does not appear to be markedly different for Hagerman.

Rupert's invited participants reported no change (0) under A1 for all dimensions, and negative changes for three out of the four dimensions under A2, ranging from -1 to 0. Ratings for A3 were much lower, ranging from -3.5 to -2.

Homedale's participants reported some improvements in 2020 under A1, with ratings ranging from 1.5 to 2 and some improvement or no change under A2, ranging from 0 to 1 across all dimensions. Ratings for A3 were significantly lower, ranging from -3 to -2.



Overall, the participants from communities of the Middle Snake River Irrigated Agriculture Community Type perceived natural river drawdown and dam breaching Pathway (A3) more negatively, and as more likely to create adverse community effects than did participants from most other community types. The analysis of the impact rating justifications suggests that these communities see themselves less directly related to fish recovery issues of the Snake River, and more influenced by increased utility and transportation costs, as well as by the potential loss of irrigated water.

### **3.4 Key Findings**

Key findings presented in the report focus on four areas. One is the community typology that was developed on the basis of the community assessment. Findings also are reported about the impacts perceived by participants in the community forums, as well as findings about the resilience of the different types of communities assessed and the risk to them based on perceived impacts. The third area of findings focuses on participants' ideas about actions that could be taken to minimize the negative effects on communities of efforts to recover salmon runs, both generally and specifically looking across pathways and at each type of community. Finally, other, more general findings about the assessment process, participants in the forums, and the issue of salmon recovery are presented.

Trustworthiness (Erlandson *et al.*, 1993) of the findings were increased by using replicated groups, triangulation of sources, consistently following a set of rules and procedures, and maintaining a chain of evidence. Forum participants were asked to justify or explain the reasons behind their ratings to reduce the need of the researchers to interpret the meanings of the ratings. This approach allowed the reporting of the meaning using the words of the forum participants.

To enhance the transferability of the findings to other similar communities, the attempt is to present a description of each community, community type and the context of each community relative to the proposed pathways. Second, we purposively sampled residents living and working in a variety of diverse roles in each of the communities studied to elicit the maximum variation of viewpoints. Finally, the conclusions drawn can be traced to the database of ideas given by forum participants.

By design, these findings do not represent all people who live in a particular community. Rather, they document the range of viewpoints held by the diversity of people who live there and are actively involved in community affairs. Random sampling was not used because it would not have insured the inclusion of all the different interests and leaders who make things happen at the community level.

### 3.4.1 Findings Related to Perceived Impacts

Impacts perceived by forum participants are summarized here for Phase I as well as Phase II, placing all of these findings in a broader context. Forum participants in the agriculturally based communities and ones closest to the segment of the Lower Snake River perceived the impacts of Pathway A3 (dam breaching and natural river drawdown) on their communities to be the most severe and adverse. In Phase I, these towns and cities in the "reservoir region" included the Tri-Cities (Trade Center Type) and the small farming towns of the Columbia Basin, the Palouse, and the Camas Prairie. Towns perceived to be especially affected were ones dependent on irrigated farming (Prescott and Burbank, Washington), for which additional pumping capacity would be needed at significant expense, and towns dependent on dryland agriculture, for which transportation costs would increase (towns of the Productive and Highly Productive Dryland Agriculture Community Types). Although forum participants in the farming communities in the "downriver region" of south central Washington and northeastern Oregon were asked to focus on their local environment and the Snake River, as opposed to the Columbia River, these participants exhibited more of a "halo effect" in their assessment of impacts. This effect reflected their antipathy towards the Federal government and its activities and also their belief in a domino effect of dam breaching that eventually would extend to the Columbia and have major impacts on them, even if there were no direct impacts of Pathway A3 on the Snake River on them.

In Phase II, participants in those agriculturally based communities in southern Idaho (those of the Middle Snake River Irrigated Agriculture Type, including Firth, Hagerman, Homedale, and Rupert) perceived the impacts of Pathway A3 (dam breaching and natural river drawdown) on their communities to be the most severe and adverse. Overall, the participants from towns of this community type perceived dam breaching and natural river drawdown (Pathway A3) more negatively and as being more likely to create adverse community effects than did participants from most other community types. The analysis of the impact rating justifications suggests that these communities perceived themselves to be less directly related to fish recovery issues of the Snake River and more influenced by increased utility and transportation costs, as well as by the potential loss of irrigated water. Similar results were found for the traditionally multiple resource-use type of communities in which irrigated agriculture continues to play a major role (e.g., Ashton) in the upriver region of southern Idaho.

In contrast, participants in those towns of the Multiple Resource-Use Community Type (e.g., Salmon, Cascade) likely to be more directly affected by any loss of salmon runs perceived the impacts of Pathway A3 on their communities to be the most positive and beneficial, and those of Pathway A1 (maintaining the existing situation) to be most severe and adverse. Overall, the Multiple Natural Resource Use Community Type towns perceived natural river drawdown and dam breaching more positively, and as having greater potential to create beneficial effects, than did some other community types. The analysis of the impact rating justifications suggests that these forum

participants were less focused on commodity transportation issues of the Snake River and more influenced by desires for higher probabilities of salmon recovery. Recovered salmon populations were perceived to contribute to these towns' nature-based tourism industry, enhance their fishing opportunities, and strengthen their sense of place. However, some communities of this type, like Ashton, may be more traditional in their focus on commodity production and basic industries like agriculture, and thus more focused on the negative impacts of salmon recovery, such as higher utility costs, than on the positive ones.

Much the same results were found for the Trade Center Types of communities in southern Idaho, Boise and Twin Falls. The relationship of these Trade Center communities to the Lower Snake River is primarily indirect, with participants from them perceiving direct impacts on them in terms of a diminished quality of life and community character. More than any other community type, participants at the forums in these cities viewed the river and its associated fishery as a critical source of recreation and amenity value, with the exception of the above towns of the Multiple Resource-Use Community Type (Salmon, Cascade) that perceived themselves to be most directly affected by any loss of salmon runs.

### **3.4.2 Findings Concerning Community Resilience and Assessment of Risk**

An important contribution of the community assessment is its evaluation of the risk to communities potentially affected by the three pathways under consideration by the U.S. Army Corps of Engineers, based on the assessment results. Those results suggest that some types of communities would be at greater risk of being significantly affected by proposals to either maintain or change the existing river system on the Lower Snake River than would other types. The degree to which a community is at-risk was assessed based on two factors: 1) the town or city's current community capacity to respond to change, which is dependent on the community's affected environment; and 2) the perceived degree and kind of impact the community would experience, or the environmental effects of a particular pathway, if each one of the three pathways was implemented. An exhaustive analysis of risk across communities examined in Phase I and Phase II is beyond the scope of this research. The following is a brief summary of the risk identified by and the degree of forecasted impacts as identified by forum participants.

#### ***The Trade Center Community Type:***

Participants in the forums held in Trade Center communities in Phase II perceived substantial positive impacts associated with the implementation of Pathway A3. The fact that these communities have relatively diverse, vibrant economies and active community vision and vitality suggests that their ability to cope and respond to adverse changes to the environment at the community level is relatively high. Additionally, these communities are highly resilient trade centers that will continue to grow and change aiding them in their ability to respond to negative impacts.

### ***The Multiple Natural Resource Use Community Type***

Forum participants in the Multiple Natural Resource Use communities perceived a range of potential impacts associated with the implementation of Pathway A3, from somewhat beneficial to very adverse. Salmon, Idaho, is more distant from the immediate Lower Snake River region, yet this town could be beneficially affected by increased salmon runs. As suggested by their identified impacts and the travel and tourism nature of their local economy, participants perceived some benefits from increased salmon runs and adverse impacts associated with declining salmon and steelhead runs under Pathways A2 and A3. Similar results were found for Cascade, Idaho. Communities of the Multiple Natural-Resource Use Community Type tended to be more resilient and economically diverse, indicating that they, too, would be less at-risk to changes resulting from the pathways; it should be noted, however, that residents of this type of town perceived that their community character -- a key attraction for the viability and diversity of their economy -- would be significantly adversely affected by Pathways A1 and A2.

However, participants in Ashton in southeastern Idaho perceived adverse impacts associated with the implementation of Pathway A3, such as increased transportation and utility costs and possible effects on the traditional forest industry of the area. Given these communities' varied perceptions of the risks associated with A3, the mix of beneficial and adverse impacts, and their active, on-going efforts to adapt and respond to socioeconomic changes, these communities have a low to moderate level of risk.

### ***The Middle Snake River Irrigated Agriculture Community Type***

Participants in the forums held in Middle Snake River Irrigated Agriculture communities, including Firth, Hagerman, Homedale, and Rupert, perceived substantial negative impacts associated with the implementation of Pathway A3. These towns are communities in transition with increasing numbers of residents on public assistance and poor job opportunities. Coupled with the fact that these communities have a low level of resilience, the potential loss of irrigated agriculture lands from the implementation of A3 would have significant negative impacts on these communities and their ability to adapt and respond to changes.

## **3.4.3 Findings Concerned with Minimizing Negative Impacts**

### **3.4.3.1 General Observations**

Participants at each community forum identified potential actions or efforts to minimize the negative socioeconomic impacts they identified for each pathway. This brainstorming activity was designed to be open and unstructured so that participants would feel free to provide any and all ideas about how to minimize impacts in their community. Several consistent and identifiable patterns emerged from these data. First, participants from nearly all communities found it necessary to propose actions that went beyond their community and were more regional in nature (see [Table 3-4](#)). Second, as much as participants were asked to suggest actions to address socioeconomic effects

they often felt compelled to say something about biological issues as they related to the potential decline of salmon populations. Third, there often was great disparity between the kinds and magnitude of effects identified by participants for each pathway and the actions they suggested to minimize the negative socioeconomic effects at the community level for that pathway. Fourth, communities and community types that were more directly dependent on, and would be more directly affected by changes to the existing Snake River system demonstrated the greatest ability to articulate community-level actions or steps to minimize negative socioeconomic effects. A greater amount of diversity of local socioeconomic measures also was suggested across the facilitated groups in these communities. The community type where this was most prevalent was the Multiple Natural Resource type.

Table 3-4 Identified Means To Minimize Adverse Community Impacts By Community Types						
Community	Pathway A1		Pathway A2		Pathway A3	
	Local <sup>1</sup>	Regional <sup>2</sup>	Local <sup>1</sup>	Regional <sup>2</sup>	Local <sup>1</sup>	Regional <sup>2</sup>
<b>Trade Center Community Type</b>						
Boise	Subsidize the fishing and guide industry	Reduce funding for failed salmon recovery efforts	Compensate or subsidize losses from decreased recreation	Provide Federal money for water conservation	Compensate economic losses in recreational fisheries	Improve roads and highways for increased transportation
	Reduce power rates	Restore habitat for resident fish	Subsidize the fishing and guide industry	Improved methods for releasing water	Increased education for energy and water conservation	Compensate farmers for lost income
	Subsidize fishers to travel out of state	Fertilize streams with fish nutrients	Reduce power rates	Reduce funding for failed salmon recovery efforts		Develop strategies for increased flood risks
	Restore irrigation water	Increase education funding on the effects of salmon extinction	Subsidize fishers to travel out of state	Restore habitat for resident fish		Subsidize alternative forms of transportation
	Create fish exhibit shows	Compensate Native Americans for related treaty violations	Restore irrigation water	Fertilize streams with fish nutrients		
	Encourage water conservation		Create fish exhibit shows	Increase education funding on the effects of salmon extinction		

Boise	Provide Federal money to aid irrigation uses		Encourage water conservation	Compensate Native Americans for related treaty violations		
			Provide Federal money to aid irrigation uses			
Twin Falls	--	--	Encourage energy conservation	Increase upriver water storage	Increase marketing for tourism	Compensate for direct impacts from dam removal, including increased transportation and utility rates
			Provide public with more information on suggested alternative	Allow the aquifer to recharge	Encourage energy conservation	Develop alternative forms of energy production
			Make information more accessible for informed decision-making	Complete Snake River water adjudication to identify amount of water being used		
				Federal government to pay for adjudication		
<b>Middle Snake River Irrigated Agriculture Type</b>						
Firth	Identify alternative methods of salmon recovery without the use of augmentation water	Decrease government involvement in natural resource management	Identify alternative methods of salmon recovery without the use of augmentation water	Decrease government involvement in natural resource management	Identify alternative methods of salmon recovery without the use of augmentation water	Decrease government involvement in natural resource management
		Allow the salmon to go extinct				Allow the salmon to go extinct
Hagerman <sup>3</sup>	--	--	--	--	--	--

Multiple Natural Resource Uses Type						
Homedale	--	--	--	--	Subsidize loss of power without the use of increased utility rates	Capture more water for irrigation and power purposes during the winter
					Identify alternative methods of salmon recovery without the use of augmentation water	Compensate farmers for lost income
Rupert	--	--	Identify where augmentation water will come from	Develop improved strategies for timing of water augmentation	Tax commercial fishing to subsidize negative effects on upstream communities	Decrease the number of salmon predators
				Test increases in water augmentation to ensure success		Decrease tribal fishing
				Further study the effects of water augmentation		Increase the focus on hatchery salmon and less on wild salmon
				Ensure responsibility is taken for revenue losses		
<b>Multiple Natural Resource Uses Type</b>						
Ashton <sup>3</sup>	--	--	--	--	--	--
Cascade	Secure funding to improve transportation to Valley County	Increase the use of science in forest management	Secure funding to improve transportation to Valley County	Increase the use of science in forest management	Secure funding to improve transportation to Valley County	Increase the use of science in forest management
	Provide funding to increase light industry to area		Provide funding to increase light industry to area		Provide funding to increase light industry to area	

Cascade	Remove restrictions on natural resource uses on public lands		Remove restrictions on natural resource uses on public lands		Remove restrictions on natural resource uses on public lands	
	Develop incentives to utilize groundwater rather than reservoir water		Develop incentives to utilize groundwater rather than reservoir water		Develop incentives to utilize groundwater rather than reservoir water	
	Increase reservoir dredging under decreased water levels		Increase reservoir dredging under decreased water levels		Increase reservoir dredging under decreased water levels	
	Extend boat ramps on reservoir		Extend boat ramps on reservoir		Extend boat ramps on reservoir	

Salmon	Complete an economic loss inventory	Develop more realistic restrictions	Provide schools with free electricity	Consider alternative bypass systems	Decreased utility rates due to previous efforts by community residents	Compensation for the effects of silt and sedimentation
	Compensation for the loss of recreation and related business	Repeal the Endangered Species Act	Defer business utility rate increases	Increase utility rates only after results are seen		Improve transportation systems (roads and highways)
	Increase local and state control of salmon recovery programs	Recognize and utilize local scientific data	Compensate losses from increased utility rates	Expedite political decisions		
	Increase Federal land payments to schools		Complete an economic loss inventory	Develop more realistic restrictions		
	Revert natural resource management back to local government		Compensation for the loss of recreation and related business	Repeal the Endangered Species Act		
	Increase grants to generate alternative recreation opportunities		Increase local and state control of salmon recovery programs	Recognize and utilize local scientific data		



Salmon	Create an economic development director to stimulate rural jobs		Increase Federal land payments to schools			
			Revert natural resource management back to local government			
	Build a recreation visitor center		Increase grants to generate alternative recreation opportunities			
			Create an economic development director to stimulate rural jobs			
			Build a recreation visitor center			
<sup>1</sup> Identified measures to minimize local adverse impacts. <sup>2</sup> Identified measures to minimize regional adverse impacts. <sup>3</sup> Data were not collected related to minimizing adverse impacts.						

### 3.4.3.2 Findings Across Pathways

In general, communities focused on regional actions, such as the need to address habitat improvement or to reduce Federal government involvement in natural resource decision-making. However, they also focused on local issues related to Pathways A1 and A2 such as compensation for losses to the recreation and fishing industries from reduced salmon numbers. Additionally, participants called for increased local involvement in salmon recovery decision making.

In the case of Pathway A3, participants identified the need to compensate those most directly affected by the breaching of the dams including farmers and the transportation infrastructure of the downriver and reservoir region. This focus on downriver and reservoir communities for regional and non-local level efforts provides evidence that many upriver communities perceived they would be less, or more indirectly, affected by the implementation of this pathway than other communities. In contrast the highly productive dry-land farming communities from Phase I, perceived direct socioeconomic effects on their community, and these communities identified specific and detailed actions to minimize these negative socioeconomic effects under Pathway A3.

### **3.4.3.3 Findings by Community Type**

The following sections provide an overview of common themes identified across communities, within community types, and some unique possible actions or efforts identified at both the regional and local level to minimize negative impacts. It is important to note that these actions are specific to the community in which they were identified by community participants. Although there may be common themes across all community types or within all community types there is not a "one-size-fits-all" action to minimize negative impacts across all communities. The impacts and the communities are unique and each community has different capabilities to deal with distinct direct, indirect and perceived impacts. To minimize the negative impacts of implementing any of these pathways, it would be prudent to assess and design mitigation strategies at the community, county, and regional level with direct input from these stakeholders.

#### ***Trade Center Community Type:***

In Phase II, forum participants in Boise identified the need under the implementation of Pathway A1 to subsidize the fishing and guide industries for lost business opportunities as well as an increased focus on irrigation water. Specifically, forum participants mentioned the need to restore irrigation water to previous levels, encourage water conservation and provide federal money to aid irrigation uses. Regional considerations tended to focus more on specific elements of the management of the fisheries including a need to restore habitat for resident fish and fertilizing streams. Other issues identified a need to reduce funding for failed salmon recovery efforts and to compensate Native Americans for related treaty violations. Participants in the Twin Falls forum did not identify specific elements for A1.

For A2, forum participants in Boise felt that if this pathway were to be implemented, similar needs would arise as identified under A1. Specifically, participants again felt that the fishing and guide industries would need to be subsidized in addition to other losses from decreased recreation in the area. Additionally, issues of water conservation and irrigation uses dominated identified needs. Twin Falls participants identified the need to provide the public with more information and to make information more accessible. Regional considerations included the need for the Federal government to pay for water adjudication and to identify the amount of water currently being used. Other issues identified specific to water concerns were allowing the aquifer to recharge, increase upriver water storage and improve methods for releasing water. Additionally, Boise participants again felt that the government should reduce funding for failed salmon recovery efforts and compensate Native American for treaty violations.

Forum participants in Boise and Twin Falls generally perceived similar measures to minimize negative impacts associated with the implementation of A3. In particular, these communities identified a need for energy and water conservation, as well as a need to compensate economic losses associated to recreational fishers. They also identified the need to increase marketing efforts directed at recreation and tourism.

Regional considerations addressed the need to minimize negative impacts to those more directly affected by dam removal, including compensation of farmers for lost income, road and highway improvement to handle the increased transportation of commodities, as well as the development of alternative forms of transportation and energy production.

***Multiple Natural Resource Use Community Type:***

In the forums in Cascade and Salmon, participants generally focused on specific issues unique to their communities under Pathway A1, and no similarity in actions to minimize adverse impacts was found. Forum participants in Cascade focused on specific elements of local land use planning and infrastructure including the need to improve transportation and increase light industry. Issues specifically relating to Pathway A1 included utilizing ground water rather than reservoir water and the need to extend boat ramps on Cascade Reservoir. Salmon's forum participants focused on the need to complete an economic loss inventory related to lost recreation and related business tied to salmon fishing. In addition, participants felt a need to increase local and state control of salmon recovery efforts and to revert resource management to the local government. Regional considerations included the need to increase the use of science in forest management and to recognize and utilize local scientific data. Data were not collected relating to minimizing adverse impacts for Ashton.

Under Pathway A2, community participants in Cascade identified the need to increase reservoir dredging with decreased water levels. Participants in Salmon focused on the need to compensate schools, businesses and residents for increased utility rates. They also perceived a need to increase funding related to generating alternative recreation opportunities and to increase federal land payments to schools. Other factors identified by both communities were similar to issues identified in A1. Regional suggestions included the need to consider alternative bypass systems, increase utility rates only after successful results relating to this pathway have been shown, and expedite political decisions related to salmon recovery. Again, no data were collected relating to minimizing adverse impacts for Ashton.

Under Pathway A3, Cascade participants perceived similar needs as those identified for A1. In particular, they felt the need to increase reservoir dredging activities with decreased water levels and to extend boat ramps on Cascade Reservoir. In addition, Salmon participants felt that community utility rates should decrease in light of previous efforts residents have made to improve salmon habitat. Regional issues focused on the compensation of downriver residents for the effects of silt and sedimentation, and improvement of roads and highways in the area of direct impact from dam removal. Again, no data were collected relating to minimizing adverse impacts for Ashton.

### ***Middle Snake River Irrigated Agricultural Community Type:***

Only participants in the forum at Firth provided suggestions for minimizing negative impacts for Pathway A1. Homedale, Rupert and Hagerman did not provide specific suggestions. Firth participants identified the need to explore alternative methods of salmon recovery without the use of local water for flow augmentation purposes. Regionally, participants felt that there should be decreased government involvement in natural resource management and that the salmon should be allowed to go extinct.

For Pathway A2, Firth participants again felt that alternative methods of salmon recovery should be explored. In addition, Rupert participants felt that before any decisions are made on increasing water augmentation for salmon recovery purposes, the location of where the water will come from should be identified. Regional considerations again included decreasing government involvement in natural resource management. It also included the need to develop improved strategies for releasing augmented water, to test the effects of water augmentation on salmon recovery efforts, and to provide assurance that responsibility is taken for any revenue lost from increased water augmentation. No suggestions were made related to minimizing adverse impacts in Hagerman or Homedale.

Under the implementation of Pathway A3, forum participants in Firth and Homedale suggested that alternative methods of salmon recovery be explored without using augmentation water. Additionally, Homedale participants felt that the loss of power should be subsidized without increasing utility rates, while Rupert participants felt that a commercial fishing tax should be imposed to help subsidize mitigation of negative effects on upstream communities. Regional concerns focused on the need to compensate farmers for lost income and to capture more water for irrigation and power purposes from winter runoff. More emotional concerns focused on preventative measure such as decreasing the number of salmon predators, focusing less on wild salmon, and limiting fishing rights. Again, no data were collected related to minimizing adverse impacts in Hagerman.

#### **3.4.4 Other Findings**

Communities in southern Idaho are in transition and on-going changes, such as increased commuting for employment opportunities, the use of rural towns as "bedroom communities," the outmigration of youth and in-migration of retirees, the expansion and development of population and trade centers, and the continuing consolidation of farms, are commonplace in participants' perception of their community's future. Findings also included the paradox that rural community residents generally oppose Federal government intervention, yet they are highly dependent on federal subsidies and government employment.

The research team was surprised by how willing participants, especially those in small towns, were to come out, discuss, and learn from one-another. The community forum process took over 4 hours, yet few people left prior to the completion of the forums. Participants were very willing to share with their opinions with their neighbors and learn how others felt the community might be affected by the proposed pathways.

These discussions and sharing of ideas increased participants' comprehension of the complexity of the issues involved, resulting in greater social learning and two-way communication between people and the U.S. Army Corps of Engineers. The interactive process involved in the community forums provided a rich source of information and insights into key issues, concerns and perceptions of impacts. The team concluded from its analysis of the qualitative data, in particular, that people perceived the linkages among specific social and economic impacts of the pathways across community dimensions.

Another general finding was that the concept of dam removal is a very emotional issue. Participants came to the forums with intense feelings, whether pro or con, on the various pathways. The research team noted that the level of interest in the issue was apparently higher in small towns, where it was the talk of the town. Proportionately, more people came to the forums in the small communities than in larger ones, with fewer people turning out in larger communities than larger ones. Many possible reasons could explain this phenomenon. They include that the implementation effects were often perceived to be greater in smaller communities; in a city, residents are not as close socially or they feel less empowered; some people (in large or small towns) felt that the U.S. Army Corps of Engineers had already made its decision; many residents were burned-out and exhausted from previous meetings and rallies; or people believed that, in a larger community, they could rely on others to participate.

The one exception in turnout in larger cities, across both Phase I as well as Phase II, was the turnout for the forum held in the large population center of Boise, Idaho. Unlike the turnout in other large cities across the region, residents of Boise turned out in larger numbers for a single meeting (49 participants) than did residents in Twin Falls or in other cities in Phase I (in those cities, two forums were held in two separate sessions). In those cities, only 9 participants (in two sessions in Pasco, one of which was cancelled due to lack of attendance) to 40 participants (in two sessions in Lewiston) per community participated in the forums. The obvious explanations for the relatively high participation in Boise are not only that this city is about three-times larger in population than even the other larger cities of the Trade Center Type, but also that it was a major center of environmental support for dam-breaching, just as many of the small rural towns were the center of opposition to dam-breaching.

The assessment team also noted that the common belief across all communities was not only that the U.S. Army Corps of Engineers has already made a decision, but also that the interactive community forums were an attempt to rationalize that decision post-hoc. Also, the team experienced concerns about who is ultimately in charge and responsible for decisions affecting salmon recovery, as well as frustration over the lack of local control over these decisions.

The complexity of the current situation, complete with a multitude of data sources and results, has led to confusion amongst the public and increased citizens' anxiety over the lack of certainty in knowing what is happening and what is going to happen with respect to the system of dams on the Lower Snake River. Some of this response is due to the sheer amount of information that people have been receiving, while some is the result of confusion created by competing (and sometimes conflicting) scientific information. Many people were well informed, which was reflected in the quality of questions asked and their desire to understand the science behind the issue.

Some of this concern and confusion was due to increased information, and some to different kinds of information -- people are more informed now in some ways, but some also are questioning what to believe. In the case of much of the data, people often were found to be comparing apples to oranges in considering what was presented at the forums vis a vis what they had heard or read elsewhere -- in part due to different scales and conditions being considered. Although the team emphasized that the scientists and decision makers still were in the stage of collecting information and completing studies like this one to obtain information for evaluating the situation on the Lower Snake River and preparing the environmental impact statement on salmon recovery there, many community residents did not believe this. Mistrust was apparent at many of the forums where participants expressed concerns that they were somehow being manipulated by the government to give certain desired answers by Federal agencies. This finding shows how difficult the task of ensuring meaningful public involvement really is for Federal agencies.

A final conclusion was that, while the research was able to identify a typology of communities, the assessment team would emphasize that every community is unique. Exceptions and special considerations need to be considered in examining the myriad of community characteristics and conditions that determine what each community is today, and that are crucial in successfully understanding what it is likely to become in the future.

## 4.0 CONCLUSIONS

Nine community interactive forums conducted as Phase II of the Community-Based Social Impact Assessment provided residents in the upriver region of southern Idaho with the opportunity to be involved in this assessment. The five objectives of the forums were to:

- Introduce community members to preliminary information from the U.S. Army Corps of Engineers' study to help them identify positive and negative social impacts;
- Understand communities' current situations and how they have changed since 1960;
- Provide residents with the opportunity to assess how their community would be affected by the major pathways under consideration (Pathways A1, A2 and A3; Pathways A2b and A2c);
- Obtain community residents' ideas about effective strategies for minimizing negative social impacts of the proposed pathways; and
- Provide people with an opportunity to have their input included by the U.S. Army Corps of Engineers' as part of the Lower Snake River Juvenile Salmon Recovery Feasibility Study.

The community assessment conducted as Phase II was effective in meeting its stated goals of: 1) assessing the current characteristics and conditions of the region's communities (*i.e.*, affected environment); and 2) assessing residents' perceptions of the impacts on their communities of the three pathways being considered for salmon recovery on the Lower Snake River (*i.e.*, environmental effects on the communities). In a true two-way communication process, the UI research team informed the public about the information and data on the impacts of the pathways that decision-makers were assembling for evaluating those pathways and recommending a preferred pathway. Although it may appear rather elementary, the task of communicating and sharing this information with community members was an arduous one: some participants brought with them facts, figures, and studies that differed from those presented, and these participants were frustrated with whom and what to believe. Some found the information too vague and uncertain to make impact judgements, and some expected to receive more information and were discouraged at the limited information presented. Nonetheless, the University of Idaho assessment team answered many questions, clarified many doubts, and provided a solid basis with which participants could rate community impacts.

At the same time, the public from a theoretical sample of the diversity of communities across the region of southern Idaho informed the assessment team with their perceptions of the affected environment and the likely environmental effects of the pathways on their communities.

In discussing and rating their current situation, most communities portrayed optimistic portraits. Participants generally rated the current situation on the People, Place and Vision & Vitality dimensions towards the positive, *as good as it can be* end of the rating scale. A strong sense of place and pride in their rural way of life were some of the characteristics reported by participants, particularly in communities of the Multiple Resource Use Community Type (Ashton, Salmon, Cascade) and the Irrigated Agriculture Community Type (Firth, Hagerman, Homedale, Rupert). In assessing their Jobs & Wealth, however, the participants' ratings of their communities' current situation were not as positive. Shrinking natural resource-based economies, low-wage jobs associated with tourism-based economies, and slow growth in the tourism sector were some of the challenging trends they perceived they currently face.

A typology of communities, or array of kinds of communities having common characteristics, emerged as a result of conducting the interactive process involved in the community forums. The typology depicts the range of kinds of communities that are found in the region, what they have in common, and what distinguishes among them in terms of significant differences. The community typology presented here is based on communities' relationships to the river, economic base and level of diversity, population, and other key factors identified in the community forums.

The assessment of impacts to the community under the three pathways was more contentious, yet several conclusions may be inferred from the participants' ratings and justifications. Overall, the impacts of Pathway A2c were rated to be extremely negative and adverse by forum participants across communities. It was perceived to "help neither the fish nor the people," yielding no benefits for either the salmon runs or the communities. Participants in forums at Trade Center Communities (Boise and Twin Falls) rated the effects of A1 and A2 negatively, but were positive about those of A3. In these cities, buffered as they are from many of the negative impacts associated with the pathways, forum participants tended to focus more on the pathways that provided the greatest chance of fish recovery as the basis for their rating. Communities of the Multiple Natural-Resource Use Community Type appeared more divided in their perceptions of pathway impacts. Participants in the forum at Salmon, a community that relies heavily on salmon for tourism and recreation, were focused on fish recovery as their criteria for rating the pathways, with Pathway A3 rated most positively and thus as having the most beneficial impacts. Cascade does not rely as heavily on viable fish populations, nor on a tourism economy. Participants in the forum at that town appeared more focused on maintaining recreation potential on Lake Cascade and improving the timber industry. Thus water availability and decreased Federal regulations were central in their ratings (with impacts of Pathway A3 again rated most positive). Residents of Ashton, with a less evolved tourism industry and a viable natural resource-based economy, perceived that the negative effects associated with fish recovery would outweigh the positive ones (with impacts of A3 rated most negatively). High utility and transportation costs, for example, would adversely impact economic growth.



Participants in forums in communities of the Irrigated Agriculture Community Type appeared most focused on water availability to guide their ratings. Participants across these communities were divided in their ratings of A1 and A2, but A2c was consistently rated as having extremely negative, adverse impacts. In addition, these communities might not receive direct benefits from fish recovery, and their residents perceived the negative impacts of A3 to outweigh the positive ones.

Another contribution of the community assessment is the identification of social and economic risk to communities that could result if the proposed pathways for salmon recovery were implemented. Findings suggest that different community types would differ in the extent to which communities would be at risk of being significantly affected by proposals to change the existing river system on the Lower Snake River. Trade Center Community Type cities would be the least at-risk in terms of their comparative economic and social capacity, although their residents generally perceived the character of their community and the region in which it is located would be at-risk were wild salmon runs not to be recovered. Communities of the Multiple Natural-Resource Use Community Type tended to be more resilient and economically diverse, indicating that they, too, would be less at-risk to changes resulting from the pathways; it should be noted, however, that residents of this type of town perceived that their community character -- a key attraction for the viability and diversity of their economy -- would be significantly adversely affected by Pathways A1 and A2. Communities of the Irrigated Agriculture Community Type were more mixed in their community capacity, but tended to have the lowest capacity and thus would be the most vulnerable to pathways such as A2c.

This dominantly qualitative assessment of community perceptions has limitations. Results of this assessment must be interpreted, understood, and used within the qualitative and quantitative research framework. Care was taken to employ conservative statistical analyses such as median ratings within communities and replication logic, as opposed to sampling logic, to make scientifically defensible inferences. The ratings presented and discussed here are not representative of the total population of the communities studied, but rather capture the diversity of perceived effects and associated justifications from citizens who are actively involved in their communities or interested in the salmon recovery issue. Also, it is important to note that equal-appearing interval scales used for rating the community dimensions should be interpreted in conjunction with the qualitative justifications for those ratings.

One other objective of the community forums was to obtain community resident ideas concerning ways to minimize perceived negative impacts of particular pathways. Overall, this objective was not accomplished with much consistency or informed judgment. It came at a difficult time in the process. Participants had just finished their final ratings and justifications for a particular pathway, and they were sometimes either up from the table getting coffee, or engaged in conversation with their neighbor. Facilitators had a difficult time getting their groups focused again for an additional exercise. As a result, some participants did not appear to be interested in giving much thought to suggestions for mitigation. Often times, it was viewed as an opportunity to vent frustration, to express suspicion concerning the science, or to get a cup of coffee.

Other times, suggestions were regional in nature rather than focused at the community level. Nonetheless, at times participants offered sincere and informed judgements concerning mitigation. Those who were concerned to maintain wild runs of salmon, no matter what the social and economic costs, felt that they and their communities should be mitigated for the extinction of the salmon ("given an annual trip to Alaska for salmon fishing"). Those who were employed in agriculture or sympathetic to possible impacts on that industry and way-of-life felt that, at a minimum, farmers and ranchers should be mitigated for increased costs to them resulting from any action taken by the U.S. Army Corps of Engineers ("subsidize increased power costs"). Based on these kinds of comments, it might be worthwhile in the future to pursue separate public involvement processes aimed specifically at mitigation.

The intent of these community forums was to obtain formal public input on the pathways under consideration prior to a record of decision being issued. In addition to other components of the social assessment, these interactive forums represent a community-based input assessment by the people most directly affected. Therefore, the assessment process provided these community residents with the opportunity to participate in the US Army Corps of Engineers Lower Snake River Juvenile Salmon Migration Feasibility Study, and to have their judgments included in the decision-making process.

The benefits and costs of the three pathways were perceived to vary within communities, as well as across communities and the geographic region being assessed. Nonetheless, given the legal requirement currently mandating the Federal government to recover the salmon stocks, understanding who the likely winners and losers are, and the trade-offs associated with the various pathways, is critical for sound decision-making. To some people, the loss of the salmon stocks and the extinction of the affected species, should it occur, is an irreversible and unacceptable outcome. To other people, the loss of jobs, and potentially families and social services, not to mention the character of the place they call home, is irreplaceable. For them, the welfare of people living and working in the region, which depends on economic development and the area's built environment, is paramount -- irregardless of the impact on the runs of wild salmon.

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# APPENDIX A - COMMUNITY DIMENSIONS USED IN THE INTERACTIVE COMMUNITY FORUMS

## The People

### *Your Community's Social Make-Up*

This dimension refers to characteristics of individuals or households in your community. Characteristics relating to the individual or household might include your community's population size, how rapidly it is growing or losing population, its age and family structure, as well as the make-up of various groups of people, including their ethnicity, their values and lifestyles, and other kinds of diversity.

Some questions for you to think about:

- To what extent is your community's **population** increasing or decreasing in size?
- Is your community's population **aging**? Is there an increasing amount of older people living in your community?
- Are growing numbers of **retirees** living in or moving to your community?
- To what extent is *ethnic diversity* an important element of the social make-up of your community? Is that **diversity** increasing or decreasing?
- Is **school enrollment** increasing or decreasing?
- To what extent do people have **extended families** living in your community? Are your relatives or children moving away?
- Do most people in your community own their **own homes**? Has this changed in recent years?
- To what extent are individuals and households on **public assistance** in your community?
- What are the most **prevalent values** in your community -- how would you describe your community's **customs & lifestyle**?
- Are **families stable** in your community?

# Jobs & Wealth

## *Your Community's Economy*

This dimension refers to the major businesses and sources of jobs in your community, and the diversity of your economy in terms of the variety of businesses, industries, and financial assets (the amount of capital or wealth) available to support your community's services and activities.

The major businesses and industries of your community, such as manufacturing, services, retail and wholesale trade, agriculture, forestry, and government are interrelated and provide a source of jobs and income. The relative mix of jobs and income in these industries is an indication of your community's economic diversity.

Some questions for you to think about:

- How would you assess the **job opportunities** in your community -- are there many, and how well do they pay?
- To what extent do people have to **commute** to other places to work?
- What proportion of your community's adults are **unemployed**? How many people in your community are employed?
- What is the **economic base** of your community -- do a few major industries or businesses dominate, or is your community **economically diverse**?
- To what extent are **public sector jobs** a major part of your community's economy? Are many people employed by federal, state, county, and municipal agencies? To what extent are **schools** a major employer?
- Where does **money go** from sales in your community -- does it flow out to other places? Is **income reinvested** in local businesses and the community or is it invested elsewhere?
- How **wealthy** are people in your community? What is the proportion of households in your community living below the **poverty level**?
- How costly is it to live in your community? How **costly are utilities** such as electricity where you live relative to other places in the U.S.?
- Are **property values** comparatively high or low in your community?

# The Place

## *The Character of Your Community*

This dimension refers to the characteristics of the human-built and natural environment of your community. Your community's physical infrastructure and built-environment includes characteristics such as the attractiveness of the downtown, the quality of the community's roads, and traffic safety and congestion, as well as the level of social services provided. Your community's natural environment includes characteristics such as parks, fields and rivers, as well as the attractiveness of the surrounding scenery.

Some questions for you to think about:

- What is the **appearance** of your community's central downtown and of its residential areas?
- How many **storefronts are vacant** -- are they increasing or decreasing?
- To what extent do **people shop** in your community opposed to elsewhere?
- How adequate are the **social services** (*i.e.*, health, safety, and education) in your community? Are your medical facilities, community/senior centers, *etc.*, adequate? Are there an adequate number of doctors, parks, and police available in your community? How adequate are your schools?
- How **safe and crime-free** do people feel in your community?
- What are the **dominant modes of transportation** (*i.e.*, car, truck, railroad, and barging) that moves people and goods in your community?
- How are the conditions of **roads and highways** in your community and region? Are they adequately maintained? Are you at a central crossroads?
- Is there **traffic congestion** in your community? How **safe** are your streets?
- Are there changes in your community's **land-use patterns**?
- How is **land tenure and absentee ownership** of farms changing?
- What is happening to the **size of farms** surrounding the community? Is there any annexing of farmland to residential areas?
- To what extent does your community have **parks, open space and rivers**?
- How **attractive** is the community's surrounding **scenery**?
- What is the level of **air and water quality** in your community?
- Overall, how would you describe the **sense of place** in your community? How **attached** are people to your community?

# Vision and Vitality

## *Your Community's Organization and Leadership Capacity*

This dimension refers to the characteristics of your community's social organizations, including the number of civic groups and their level of activity. This dimension also refers to your community's cohesiveness -- the extent to which people identify with your community, are committed to it, and work together to get things done. In addition, this dimension refers to the effectiveness and vitality of your community's government and its ability to accomplish its goals. Finally, this dimension refers to your community's vision for the future and your desire and preparedness to make that future a reality.

Some questions for you to think about:

- How many **civic organizations** are active in your community?
- What is the level and quality of **political and civic leadership** in your community?
- How large is your community's **budget**, and what is your level of **government expenditures**?
- Has your community successfully used **bonds and levies** to pay for projects?
- To what extent does your community have adequate **fiscal resources and tax revenues**?
- Does your community have any economic **development** plans? Has the community engaged in a process of planning or zoning?
- Has your community applied for and received **grants**?
- To what extent does your community have **control** over influential events as opposed to being affected by outside forces?
- How **prepared for the future** is your community? Has your community discussed its **vision for the future** and how to realize that vision?
- How would you describe the level of **social activities** (*i.e.*, events and festivals) in your community? Are there many church or school activities?
- How **friendly and interesting** is your community?
- How do people respond to and **cope with change**? How would your community respond to future changes?
- What is your community's level of **cohesiveness** or commitment to the community and ability to work together to get things done?

## APPENDIX B - PRESENTED IMPACT INFORMATION FOR SOUTHERN IDAHO FORUMS

Presented Impacts	Pathway A1: Maintenance of Existing System	Pathway A2: Systems Modifications	Pathway A2B: Systems Modifications 0 AF	Pathway A2C: Systems Modifications 1.427 MAF	Pathway A3: Natural River Drawdown
<b>Ashton, Idaho</b>					
<b>Power</b>	No change in production or utility rates	Possible increase in utility rates, no change in production	Possible increase in utility rates	Demand for power in region may continue to grow	Loss of regional energy production
			No change in production	<p>If costs of modifications are passed on to consumers, average monthly household utility rates would increase (actual amount pending)</p> <p>Power generation from additional 1 MAF would result in a loss of \$2.7 million to a gain of \$1.9 million</p>	Possible increase in utility rates
<b>Recreation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Decline in associated recreation revenue by \$4-13.7 million annually across southern Idaho	Increased jobs and sales
				Recreational visits would decline at Cascade Reservoir	
				Reductions in associated water quality would affect recreational fisheries and endangered bald eagles	



<b>Transportation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Discontinue barging on the lower Snake River
					Grain and other commodities shift to rail and truck
					Increase in trucking-related jobs and services
					Decrease in related net farm income
<b>Air and Water Quality</b>	No projected changes	No projected changes	Elimination of 427,000 acre feet currently used for salmon flow augmentation	Increased flows associated with augmentation are assumed to have a positive effect on instream water quality	No projected changes
				Increased reservoir levels would reduce the risk of winter fish kill and drought conditions	
				Water quality at project pools would be adversely impacted by reduced levels	
				Reservoir levels below 300,000 acre feet would have a significant negative impact on fisheries due to oxygen limiting conditions	

<b>Water Supply</b>	Continued flow augmentation of 427,000 acre feet from southern Idaho. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Continued flow augmentation of 427,000 acre feet from southern Idaho on a willing-to-sell basis. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Elimination of the 427,000 acre-feet for flow augmentation (pre-1991 conditions) Farmers along the Snake River would continue to pump water for irrigation purposes	Increase flow augmentation by 1 million acre feet over current condition	Continued flow augmentation of 427,000 acre feet
<b>Implementation</b>	Previously planned upgrades	Major system modifications, increased fish transportation, surface bypass collectors, short-term construction and creation of related jobs	Modifications to dam operations	Modifications to dam operations	Railroad and roadway damage repair Recreation access modification Restoration and revegetation over next 10 years Increased construction workers in the lower Snake River region for 3 to 5 years Continued hatchery operation Dam breaching activities

<b>Salmon Recovery</b>	<p>Eventual delisting of species (no longer in danger of extinction). No regulatory oversight by Federal agencies. No legal requirements for state and local actions to consult with Federal agencies. Fishery management authority reverts back to state.  Source: <a href="#">NMFS Anadromous Fish Appendix</a> (go to the Lower Snake River Juvenile Salmon Migration Feasibility Study)</p>	Federal oversight of fisheries	Federal oversight of fisheries	Effects of augmentation are uncertain at this time	Meets survival thresholds
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**Bliss, Idaho**

<b>Power</b>	No change in production or utility rates	Possible increase in utility rates, no change in production	Possible increase in utility rates	Demand for power in region may continue to grow	Loss of regional energy production
			No change in production	<p>If costs of modification are passed on to consumers, average monthly household utility rates would increase (actual amount pending)</p> <hr/> <p>Power generation from additional 1 MAF would result in a loss of \$2.7 million to a gain of \$1.9 million</p>	Possible increase in utility rates

<b>Recreation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Decline in associated recreation revenue by \$4-13.7 million annually across southern Idaho	Increased jobs and sales
				Recreational visits would decline at Cascade Reservoir	
				Reductions in associated water quality would affect recreational fisheries and endangered bald eagles	
<b>Transportation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Discontinue barging on the lower Snake River
					Grain and other commodities shift to rail and truck
					Increase in trucking-related jobs and services
					Decrease in related net farm income

				Increased flows associated with augmentation are assumed to have a positive effect on instream water quality	
				Increased reservoir levels would reduce the risk of winter fish kill and drought conditions	
<b>Air and Water Quality</b>	No projected changes	No projected changes	Elimination of 427,000 acre feet currently used for salmon flow augmentation	Water quality at project pools would be adversely impacted by reduced levels	No projected change
				Reservoir levels below 300,000 acre feet would have a significant negative impact on fisheries due to oxygen limiting conditions	
<b>Water Supply</b>	Continued flow augmentation of 427,000 acre feet from southern Idaho. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Continued flow augmentation of 427,000 acre feet from southern Idaho on a willing-to-sell basis. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Elimination of the 427,000 acre feet for flow augmentation (pre-1991 conditions) Farmers along the Snake River would continue to pump water for irrigation purposes	Increase flow augmentation by 1 million acre feet over current conditions	Continued flow augmentation of 427,000 acre feet

<b>Implementation</b>	Previously planned upgrades	Major system modifications, increased fish transportation, surface bypass collectors, short-term construction, and creation of related jobs	Modifications to dam operations	Modifications to dam operations	Railroad and roadway damage repair
					Recreation access modification
					Restoration and revegetation over next 10 years
					Increased construction workers in the lower Snake River region for 3 to 5 years
					Continued hatchery operation
					Dam breaching activities
<b>Salmon Recovery</b>	<p>Eventual delisting of species (no longer in danger of extinction). No regulatory oversight by Federal agencies. No legal requirements for state and local actions to consult with Federal agencies. Fishery management authority reverts back to state. Source: <a href="#">NMFS Anadromous Fish Appendix</a> (go to the Lower Snake River Juvenile Salmon Migration Feasibility Study)</p>				

Boise, Idaho					
Power	No change in production or utility rates	Possible increase in utility rates, no change in production	Possible increase in utility rates	Demand for power in region may continue to grow	Loss of regional energy production
			No change in production	If costs of modifications are passed on to consumers, average monthly household utility rates would increase (actual amount pending)	Possible increase in utility rates
				Power generation from additional 1 MAF would result in a loss of \$2.7 million to a gain of \$1.9 million	
Recreation	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Decline in associated recreation revenue by \$4-13.7 million annually across southern Idaho	Increased jobs and sales
				Recreational visits would decline at Cascade Reservoir	
				Reductions in associated water quality would affect recreational fisheries and endangered bald eagles	

<b>Transportation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Discontinue barging on the lower Snake River
					Grain and other commodities shift to rail and truck
					Increase in trucking-related jobs and services
					Decrease in related net farm income
<b>Air and Water Quality</b>	No projected changes	No projected changes	Elimination of 427,000 acre feet currently used for salmon flow augmentation	<p>Increased flows associated with augmentation are assumed to have a positive effect on instream water quality</p> <p>Increased reservoir levels would reduce the risk of winter fish kill and drought conditions</p> <p>Water quality at project pools would be adversely impacted by reduced levels</p> <p>Reservoir levels below 300,000 acre feet would have a significant negative impact on fisheries due to oxygen limiting conditions</p>	No projected change



<b>Water Supply</b>	Continued flow augmentation of 427,000 acre feet from southern Idaho. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Continued flow augmentation of 427,000 acre feet from southern Idaho on a willing-to-sell basis. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Elimination of the 427,000 acre feet for flow augmentation (pre-1991 conditions) Farmers along the Snake River would continue to pump water for irrigation purposes	Increase flow augmentation by 1 million acre feet over current condition	Continued flow augmentation of 427,000 acre feet
<b>Implementation</b>	Previously planned upgrades	Major system modifications, increased fish transportation, surface bypass collectors, short-term construction, and creation of related jobs	Modifications to dam operations	Modifications to dam operations	Railroad and roadway damage repair Recreation access modification Restoration and revegetation over next 10 years Increased construction workers in the lower Snake River region from 3 to 5 years Continued hatchery operation Dam breaching activities

<b>Salmon Recovery</b>	<p>Eventual delisting of species (no longer in danger of extinction). No regulatory oversight by Federal agencies. No legal requirements for state and local actions to consult with Federal agencies. Fishery management authority reverts back to state.  Source: <a href="#">NMFS Anadromous Fish Appendix</a> (go to the Lower Snake River Juvenile Salmon Migration Feasibility Study)</p>	Federal oversight of fisheries	Federal oversight of fisheries	Effects of augmentation are uncertain at this time	Meets survival thresholds
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**Cascade, Idaho**

<b>Power</b>	No change in production or utility rates	Possible increase in utility rates, no change in production	Possible increase in utility rates	Demand for power in region may continue to grow	Loss of regional energy production
			No change in production	<p>If costs of modifications are passed on to consumers, average monthly household utility rates would increase (actual amount pending)</p> <hr/> <p>Power generation from additional 1 MAF would result in a loss of \$2.7 million to a gain of \$1.9 million</p>	Possible increase in utility rates

<b>Recreation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Decline in associated recreation revenue by \$4-13.7 million annually across southern Idaho	Increased jobs and sales
				Recreational visits would decline at Cascade Reservoir	
				Reductions in associated water quality would affect recreational fisheries and endangered bald eagles	
<b>Transportation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Discontinue barging on the lower Snake River
					Grain and other commodities shift to rail and truck
					Increase in trucking-related jobs and services
					Decrease in related net farm income

				Increased flows associated with augmentation are assumed to have a positive effect on instream water quality	
				Increased reservoir levels would reduce the risk of winter fish kill and drought conditions	
<b>Air and Water Quality</b>	No projected changes	No projected changes	Elimination of 427,000 acre feet currently used for salmon flow augmentation	Water quality at project pools would be adversely impacted by reduced levels	No projected changes
				Reservoir levels below 300,000 acre feet would have a significant negative impact on fisheries due to oxygen limiting conditions	
<b>Water Supply</b>	Continued flow augmentation of 427,000 acre feet from southern Idaho. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Continued flow augmentation of 427,000 acre feet from southern Idaho on a willing-to-sell basis. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Elimination of the 427,000 acre feet for flow augmentation (pre-1991 conditions) Farmers along the Snake River would continue to pump water for irrigation purposes	Increase flow augmentation by 1 million acre feet over current conditions	Continued flow augmentation of 427,000 acre feet

<b>Implementation</b>	Previously planned upgrades	Major system modifications, increased fish transportation, surface bypass collectors, short-term construction and the creation of related jobs	Modifications to dam operations	Modifications to dam operations	Railroad and roadway damage repair
					Recreation access modifications
					Restoration and revegetation over next 10 years
					Increased construction workers in the lower Snake River region for 3 to 5 years
					Continued hatchery operations
					Dam breaching activities
<b>Salmon Recovery</b>	<p>Eventual delisting of species (no longer in danger of extinction). No regulatory oversight by Federal agencies. No legal requirements for state and local actions to consult with Federal agencies. Fishery management authority reverts back to state. Source: <a href="#">NMFS Anadromous Fish Appendix</a> (go to the Lower Snake River Juvenile Salmon Migration Feasibility Study)</p>	Federal oversight of fisheries	Federal oversight of fisheries	Effects of augmentation are uncertain at this time	Meets survival thresholds

Firth, Idaho					
<b>Power</b>	No change in production or utility rates	Possible increase in utility rates, no change in production	Possible increase in utility rates	Demand for power in region may continue to grow	Loss of regional energy production
			No change in production	If costs of modifications are passed on to consumers, average monthly household utility rates would increase (actual amount pending)	Possible increase in utility rates
				Power generation from additional 1 MAF would result in a loss of \$2.7 million to a gain of \$1.9 million	
<b>Recreation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Decline in associated recreation revenue by \$4-13.7 million annually across southern Idaho	Increased jobs and sales
				Recreational visits would decline at Cascade Reservoir	
				Reductions in associated water quality would affect recreational fisheries and endangered bald eagles	

<b>Transportation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Discontinue barging on the lower Snake River
					Grain and other commodities shift to rail and truck
					Increase in trucking-related jobs and services
					Decrease in related net farm income
<b>Air and Water Quality</b>	No projected changes	No projected changes	Elimination of 427,000 acre feet currently used for salmon flow augmentation	<p>Increased flows associated with augmentation are assumed to have a positive effect on instream water quality</p> <p>Increased reservoir levels would reduce the risk of winter fish kill and drought conditions</p> <p>Water quality at project pools would be adversely impacted by reduced levels</p> <p>Reservoir levels below 300,000 acre feet would have a significant negative impact on fisheries due to oxygen limiting conditions</p>	No projected changes

<b>Water Supply</b>	Continued flow augmentation of 427,000 acre feet from southern Idaho. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Continued flow augmentation of 427,000 acre feet from southern Idaho on a willing-to-sell basis. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Elimination of the 427,000 acre feet for flow augmentation (pre-1991 conditions)	Increase flow augmentation by 1 million acre feet over current conditions	Continued flow augmentation of 427,000 acre feet
		Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Farmers along the Snake River would continue to pump water for irrigation purposes		
<b>Implementation</b>	Previously planned upgrades	Major system modifications, increased fish transportation, surface bypass collectors, short-term construction, and creation of related jobs	Modifications to dam operations	Modifications to dam operations	Railroad and roadway damage repair
					Recreation access modification
					Restoration and revegetation over the next 10 years
					Increased construction workers in the lower Snake River region for 3 to 5 years
					Continued hatchery operation
					Dam breaching activities



<b>Salmon Recovery</b>	<p>Eventual delisting of species (no longer in danger of extinction). No regulatory oversight by Federal agencies. No legal requirements for state and local actions to consult with Federal agencies. Fishery management authority reverts back to state.  Source: <a href="#">NMFS Anadromous Fish Appendix</a> (go to the Lower Snake River Juvenile Salmon Migration Feasibility Study)</p>	Federal oversight of fisheries	Federal oversight of fisheries	Effects of augmentation are uncertain at this time	Meets survival thresholds
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**Hagerman, Idaho**

<b>Power</b>	No change in production or utility rates	Possible increase in utility rates, no change in production	Possible increase in utility rates	Demand for power in region may continue to grow	Loss of regional energy production
			No change in production	<p>If costs of modifications are passed on to consumers, average monthly household utility rates would increase (actual amount pending)</p> <hr/> <p>Power generation from additional 1 MAF would result in a loss of \$2.7 million to a gain of \$1.9 million</p>	Possible increase in utility rates

<b>Recreation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Decline in associated recreation revenue by \$4-13.7 million annually across southern Idaho	Increased jobs and sales
				Recreational visits would decline at Cascade Reservoir	
				Reductions in associated water quality would affect recreational fisheries and endangered bald eagles	
<b>Transportation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Discontinue barging on the lower Snake River
					Grain and other commodities shift to rail and truck
					Increase in trucking-related jobs and services
					Decrease in related net farm income

				Increased flows associated with augmentation are assumed to have a positive effect on instream water quality	
				Increased reservoir levels would reduce the risk of winter fish kill and drought conditions	
<b>Air and Water Quality</b>	No projected changes	No projected changes	Elimination of 427,000 acre feet currently used for salmon flow augmentation	Water quality at project pools would be adversely impacted by reduced levels	No projected change
				Reservoir levels below 300,000 acre feet would have a significant negative impact on fisheries due to oxygen limiting conditions	
<b>Water Supply</b>	Continued flow augmentation of 427,000 acre feet from southern Idaho. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Continued flow augmentation of 427,000 acre feet from southern Idaho on a willing-to-sell basis. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Elimination of the 427,000 acre feet for flow augmentation (pre-1991 conditions) Farmers along the Snake River would continue to pump water for irrigation purposes</TD	Increase flow augmentation by 1 million acre feet over current conditions	Continued flow augmentation of 427,000 acre feet

<b>Implementation</b>	Previously planned upgrades	Major system modifications, increased fish transportation, surface bypass collectors, short-term construction, and creation of related jobs	Modifications to dam operations	Modifications to dam operations	Railroad and roadway damage repair
					Recreation access modifications
					Restoration and revegetation over next 10 years
					Increased construction workers in the lower Snake River region for 3 to 5 years
					Continued hatchery operations
					Dam breaching activities
<b>Salmon Recovery</b>	<p>Eventual delisting of species (no longer in danger of extinction). No regulatory oversight by Federal agencies. No legal requirements for state and local actions to consult with Federal agencies. Fishery management authority reverts back to state. Source: <a href="#">NMFS Anadromous Fish Appendix</a> (go to the Lower Snake River Juvenile Salmon Migration Feasibility Study)</p>	Federal oversight of fisheries	Federal oversight of fisheries	Effects of augmentation are uncertain at this time	Meets survival thresholds

Homedale, Idaho					
Power	No change in production or utility rates	Possible increase in utility rates, no change in production	Possible increase in utility rates	Demand for power in region may continue to grow	Loss of regional energy production
			No change in production	If costs of modifications are passed on to consumers, average monthly household utility rates would increase (actual amount pending)	Possible increase in utility rates
				Power generation from additional 1 MAF would result in a loss of \$2.7 million to a gain of \$1.9 million	
Recreation	No change from 1999 situation	No change from 1999 situation	American Falls desired pool level of 100,000 acre feet would be met 66 percent of the time	An additional 1 MAF would adversely affect recreation at project reservoirs, resulting in a decline in associated revenue by \$4 to 13.7 million, annually	Increased jobs and sales
				Increased instream flows associated with augmentation are assumed to have a positive impact on water quality, fisheries, and associated recreation	

<b>Transportation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Discontinue barging on the lower Snake River
					Grain and other commodities shift to rail and truck
					Increase in trucking-related jobs and services
					Decrease in related net farm income
<b>Air and Water Quality</b>	No projected changes	No projected changes	Elimination of 427,000 acre feet currently used for salmon flow augmentation	Increased instream flows associated with augmentation are assumed to have a positive impact on water quality, fisheries, and associated recreation  Water quality at American Falls Reservoir would be slightly adversely impacted by reduced pool levels	No projected changes
<b>Water Supply</b>	Continued flow augmentation of 427,000 acre feet from southern Idaho. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Continued flow augmentation of 427,000 acre feet from southern Idaho on a willing-to-sell basis. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Elimination of the 427,000 acre feet for flow augmentation (pre-1991 conditions)	200,000 acre feet would be reassigned from Lake Owyhee for salmon flow augmentation (current augmentation is 0 acre feet)	Continued flow augmentation of 427,000 acre feet
		Farmers along the Snake River would continue to pump water for irrigation purposes	If augmentation was achieved using irrigated water, some farmland in the Homedale area could be retired from irrigation		

<b>Implementation</b>	Previously planned upgrades	Major system modifications, increased fish transportation, surface bypass collectors, short-term construction, and creation of related jobs	Modifications to dam operations	Modifications to dam operations	Railroad and roadway damage repair
					Recreation access modifications
					Restoration and revegetation over next 10 years
					Increased construction workers in the lower Snake River region for 3 to 5 years
					Continued hatchery operations
					Dam breaching activities
<b>Salmon Recovery</b>	<p>Eventual delisting of species (no longer in danger of extinction). No regulatory oversight by Federal agencies. No legal requirements for state and local actions to consult with Federal agencies. Fishery management authority reverts back to state. Source: <a href="#">NMFS Anadromous Fish Appendix</a> (go to the Lower Snake River Juvenile Salmon Migration Feasibility Study)</p>	Federal oversight of fisheries	Federal oversight of fisheries	Effects of augmentation are uncertain at this time	Meets survival thresholds

Rupert, Idaho					
<b>Power</b>	No change in production or utility rates	Possible increase in utility rates, no change in production	Possible increase in utility rates	Demand for power in region may continue to grow	Loss of regional energy production
			No change in production	If costs of modifications are passed on to consumers, average monthly household utility rates would increase (actual amount pending)	Possible increase in utility rates
<b>Recreation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Reductions in associated water quality would affect recreational fisheries and endangered bald eagles	Increased jobs and sales
				Decline in associated recreation revenue by \$4 to 13.7 million annually across southern Idaho	
				Recreational visits would decline at Cascade Reservoir	
				Reductions in associated water quality would affect recreational fisheries and endangered bald eagles	



<b>Transportation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Discontinue barging on the lower Snake River
					Grain and other commodities shift to rail and truck
					Increase in trucking-related jobs and services
					Decrease in related net farm income
<b>Air and Water Quality</b>	No projected changes	No projected changes	Elimination of 427,000 acre feet currently used for salmon flow augmentation	Increased flows associated with augmentation are assumed to have a positive effect on instream water quality	No projected change
				Increased reservoir levels would reduce the risk of winter fish kill and drought conditions	
				Water quality at project pools would be adversely impacted by reduced levels	
				Reservoir levels below 300,000 acre feet would have a significant negative impact on fisheries due to oxygen limiting conditions	

<p><b>Water Supply</b></p>	<p>Continued flow augmentation of 427,000 acre feet from southern Idaho. Farmers along the Snake River will be able to continue pumping water for irrigation purposes</p>	<p>Continued flow augmentation of 427,000 acre feet from southern Idaho on a willing-to-sell basis. Farmers along the Snake River will be able to continue pumping water for irrigation purposes</p>	<p>Elimination of the 427,000 acre feet for flow augmentation (pre-1991 conditions)</p>	<p>Increase flow augmentation by 1 million acre feet over current conditions</p>	<p>Continued flow augmentation of 427,000 acre feet</p>
	<p>Farmers along the Snake River would continue to pump water for irrigation purposes</p>				
<p><b>Implementation</b></p>	<p>Previously planned upgrades</p>	<p>Major system modifications, increased fish transportation, surface bypass collectors, short-term construction, and creation of related jobs</p>	<p>Modifications to dam operations</p>	<p>Modifications to dam operations</p>	<p>Railroad and roadway damage repair</p>
					<p>Recreation access modification</p>
					<p>Restoration and revegetation over next 10 years</p>
					<p>Increased construction workers in the lower Snake River region for 3 to 5 years</p>
					<p>Continued hatchery operations</p>
					<p>Dam breaching activities</p>

<b>Salmon Recovery</b>	<p>Eventual delisting of species (no longer in danger of extinction). No regulatory oversight by Federal agencies. No legal requirements for state and local actions to consult with Federal agencies. Fishery management authority reverts back to state.  Source: <a href="#">NMFS Anadromous Fish Appendix</a> (go to the Lower Snake River Juvenile Salmon Migration Feasibility Study)</p>	Federal oversight of fisheries	Federal oversight of fisheries	Effects of augmentation are uncertain at this time	Meets survival thresholds
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**Salmon, Idaho**

<b>Power</b>	No change in production or utility rates	Possible increase in utility rates, no change in production	Possible increase in utility rates	Demand for power in region may continue to grow	Loss of regional energy production
			No change in production	<p>If costs of modifications are passed on to consumers, average monthly household utility rates would increase (actual amount pending)</p> <hr/> <p>Power generation from additional 1 MAF would result in a loss of \$2.7 million to a gain of \$1.9 million</p>	Possible increase in utility rates

<b>Recreation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	An additional 1 MAF would adversely affect recreation at project reservoirs, resulting in a decline in associated revenue by \$4 to 13.7 million annually	Increased jobs and sales
				Increased instream flows associated with augmentation are assumed to have a positive impact on water quality, fisheries, and associated recreation	
<b>Transportation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Discontinue barging on the lower Snake River
					Grain and other commodities shift to rail and truck
					Increase in trucking-related jobs and services
					Decrease in related net farm income
<b>Air and Water Quality</b>	No projected changes	No projected changes	Elimination of 427,000 acre feet currently used for salmon flow augmentation	Increased flows associated with augmentation are assumed to have a positive impact on water quality, fisheries, and associated recreation	No projected changes
				Reassignment of natural flow water rights would add water to the stream	

<b>Water Supply</b>	Continued flow augmentation of 427,000 acre feet from southern Idaho. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Continued flow augmentation of 427,000 acre feet from southern Idaho on a willing-to-sell basis. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Elimination of the 427,000 acre feet for flow augmentation (pre-1991 conditions)	Increased flow augmentation by 1 million acre feet across southern Idaho	Continued flow augmentation of 427,000 acre feet
		Farmers along the Snake River would continue to pump water for irrigation purposes	25 percent of irrigated lands around Salmon were modeled to be retired from irrigation		
<b>Implementation</b>	Previously planned upgrades	Major system modifications, increased fish transportation, surface bypass collectors, short-term construction, and creation of related jobs	Modifications to dam operations	Modifications to dam operations	Railroad and roadway damage repair
					Recreation access modification
					Restoration and revegetation over next 10 years
					Increased construction workers in the lower Snake River region for 3 to 5 years
					Continued hatchery operations
					Dam breaching activities

<b>Salmon Recovery</b>	<p>Eventual delisting of species (no longer in danger of extinction). No regulatory oversight by Federal agencies. No legal requirements for state and local actions to consult with Federal agencies. Fishery management authority reverts back to state.  Source: <a href="#">NMFS Anadromous Fish Appendix</a> (go to the Lower Snake River Juvenile Salmon Migration Feasibility Study)</p>	Federal oversight of fisheries	Federal oversight of fisheries	Effects of augmentation are uncertain at this time	Meets survival thresholds
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**Twin Falls, Idaho**

<b>Power</b>	No change in production or utility rates	Possible increase in utility rates, no change in production	Possible increase in utility rates	Demand for power in the region may continue to grow	Loss of regional energy production
	No change in production or utility rates	Possible increase in utility rates, no change in production	No change in production	If costs of modifications are passed on to consumers, average monthly household utility rates would increase (actual amount pending)	Possible increase in utility rates
	Power generation from additional 1 MAF would result in a loss of \$2.7 million to a gain of \$1.9 million				

<b>Recreation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Decline in associated recreation revenue by \$4 to 13.7 million annually across southern Idaho	Increased jobs and sales
				Recreational visits would decline at Cascade Reservoir	
				Reduction in associated water quality would affect recreational fisheries and endangered bald eagles	
<b>Transportation</b>	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	No change from 1999 situation	Discontinue barging on the lower Snake River
					Grain and other commodities shift to rail and truck
					Increase in trucking-related jobs and services
					Decrease in related net farm income
<b>Air and Water Quality</b>	No projected changes	No projected changes	No projected changes	Increased instream flows associated with augmentation are assumed to have a positive effect on water quality, fisheries, and associated recreation	No projected changes
				Water quality at project pools would be adversely impacted by reduced levels	

<b>Water Supply</b>	Continued flow augmentation of 427,000 acre feet from southern Idaho. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Continued flow augmentation of 427,000 acre feet from southern Idaho on a willing-to-sell basis. Farmers along the Snake River will be able to continue pumping water for irrigation purposes	Elimination of the 427,000 acre feet for flow augmentation (pre-1991 conditions)	Incidental recharge of natural flow springs above American Falls would decline	Continued flow augmentation of 427,000 acre feet
			Farmers along the Snake River would continue to pump water for irrigation purposes	Reduced natural flows in the Twin Falls area	
				Decline in groundwater levels by 44 to 46 feet for Twin Falls north side and south side after 50 years	
				Twin Falls and north side canal companies storage entitlements could be reduced	
<b>Implementation</b>	Previously planned upgrades	Major system modifications, increased fish transportation, surface bypass collectors, short-term construction, and creation of related jobs	Modification to dam operations	Modification to dam operations	Railroad and roadway damage repair
					Recreation access modifications
					Restoration and revegetation over next 10 years
					Increased construction workers in the lower Snake River region for 3 to 5 years
					Continued hatchery operations
					Dam breaching activities



<p><b>Salmon Recovery</b></p>	<p>Eventual delisting of species (no longer in danger of extinction). No regulatory oversight by Federal agencies. No legal requirements for state and local actions to consult with Federal agencies. Fishery management authority reverts back to state.  Source: <a href="#">NMFS Anadromous Fish Appendix</a> (go to the Lower Snake River Juvenile Salmon Migration Feasibility Study)</p>	<p>Federal oversight of fisheries</p>	<p>Federal oversight of fisheries</p>	<p>Effects of augmentation are uncertain at this time</p>	<p>Meets survival thresholds</p>
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