Directives and Standards

Subject: Reclamation Rural Water Supply Program

Purpose: To establish Bureau of Reclamation requirements for reviewing,

conducting, and approving appraisal investigations and feasibility studies under the Rural Water Supply Program (Program). This Directive and Standard (D&S) will establish uniform Program requirements to promote

consistency and efficiency in Program implementation.

Authority: The Rural Water Supply Act of 2006 (Title I, Pub. L. 109-451;

120 Stat. 3346; 43 U.S.C. 2401 et seq.) and 43 CFR Part 404

Approving Official: Director, Policy and Administration (Policy Director)

Contact: Water and Environmental Resources Division, 84-55000

1. Introduction.

- A. The Program is established pursuant to the Rural Water Supply Act of 2006, Title I of Pub. L. 109-451 (Act). The Act authorizes Reclamation to establish a program to work with rural communities, including Indian tribes, in the 17 Western United States to assess rural water supply needs and identify options to address those needs through appraisal investigations and feasibility studies. In November 2008, Reclamation published comprehensive programmatic criteria for the Program, as required under the Act, in the *Federal Register* (43 CFR Part 404) (Rule). The Rule describes the purposes and goals of the Program, establishes an application and review process for making financial assistance determinations, and establishes eligibility and prioritization criteria, as well as criteria to evaluate appraisal investigations and feasibility studies. This D&S describes procedural and other requirements not addressed in the Rule. There are references throughout the D&S to relevant sections of the Rule, which is attached as Appendix A.
- B. This D&S sets forth the requirements, responsibilities, and review processes for appraisal investigations and feasibility studies conducted under the Program. Other Reclamation requirements concerning appraisal investigations and feasibility studies are described elsewhere in the Reclamation Manual (RM) and are applicable to the Program to the extent that they are not inconsistent with this D&S.
- 2. Applicability. This D&S applies to all activities that are conducted under the Program by Reclamation employees and Program participants and that are related to the preparation, review, and approval of appraisal investigations and feasibility studies and appraisal and feasibility reports, including financial assistance for these activities. Program participants include applicants, project sponsors, project partners, and individuals working under contract for Reclamation or a project sponsor. This D&S applies to the study process up to congressional authorization for construction.

Directives and Standards

3. **Definitions.**

- A. **Application Review Committee (ARC).** "ARC" means the committee established annually to review all statements of interest and full proposals prepared and submitted by project sponsors seeking assistance under the Program. The ARC is comprised of staff members from Reclamation regional offices and other offices as needed. Members are selected annually.
- B. **Appraisal Investigation or Investigation.** "Appraisal investigation" or "investigation" means the term defined in § 404.2 of the Rule as an analysis of domestic, municipal, and industrial water supply problems, needs, and opportunities in the planning area, primarily using existing data. It includes a preliminary assessment of alternatives to address the identified water supply problems, needs, and opportunities. Its purpose is to determine if there is at least one viable alternative that warrants a more detailed investigation through a feasibility study.
- C. **Appraisal Report.** "Appraisal report" means the term defined in § 404.2 of the Rule as the document prepared by Reclamation, setting forth the findings and conclusions reached by Reclamation in its evaluation of a completed appraisal investigation. Its purpose is to provide a recommendation on whether a feasibility study should be initiated.
- D. Eligible non-Federal Project Sponsor(s) or Project Sponsor(s). "Eligible non-Federal project sponsors" or "project sponsors" means the entities determined to be eligible to participate in the Program as described in § 404.6 of the Rule, including:
 - (1) a state or political subdivision of a state, including a department, agency, municipality, county, or other regional or local authority;
 - (2) an Indian tribe or tribal organization, as defined in § 404.2 of the Rule;
 - (3) an entity created under state law that has water management or water delivery authority, including for example, an irrigation or water district, canal company, water users' association, rural water association or district, a joint powers authority, or other qualifying entity; or
 - (4) any combination of the entities listed above, which for the purposes of this D&S are collectively are referred to as the "project sponsor."
- E. **Feasibility Report.** "Feasibility report" means the term defined in § 404.2 of the Rule as the document prepared by Reclamation, setting forth the findings and conclusions of a completed feasibility study. The purpose of the feasibility report is to provide a recommendation to Congress regarding whether the proposed project should be authorized for construction.

- F. **Feasibility Study or Study.** "Feasibility study" or "study" means the term defined in § 404.2 of the Rule as a detailed investigation requiring the acquisition of primary data and an analysis of a reasonable range of alternatives, including a preferred alternative, to meet identified water supply problems, needs, and opportunities in the planning area. A feasibility study also includes an analysis of the technical and economic feasibility of the proposed project, the impact of the proposed project on the environment in compliance with the National Environmental Policy Act (NEPA) and other applicable environmental laws, and the financial capability of the project sponsor to pay the non-Federal share of the costs associated with constructing, operating, and maintaining the project. The completed feasibility study will form the basis for the recommendation to Congress in the feasibility report regarding whether the proposed project should be authorized for construction.
- G. **Full Proposal or Proposal.** "Full proposal" or "proposal" means the term described in § 404.20 of the Rule and refers to the detailed scope of work that is prepared in the application process as described in §§ 404.15 and 404.17 of the Rule. A full proposal includes sufficient information to address the eligibility criteria described in §§ 404.6 and 404.7 of the Rule, and the applicable prioritization criteria from § 404.13. The applicable prioritization criteria are provided in Paragraph 7 of this D&S.
- H. **In-Kind Services.** "In-kind services" means the services described in § 404.31 of the Rule that are provided by the project sponsor as part of the non-Federal cost-share contribution, including services that Reclamation determines are necessary and reasonable to conduct an investigation or study.
- I. **Plan of Study.** "Plan of study" means a fully developed scope of work describing the specific investigation or study tasks and how each task will be carried out, including the responsible party and the approach. The plan of study is more detailed than the proposal and serves as a work plan for the investigation or study.
- J. **Principles and Guidelines.** "Principles and Guidelines" means the *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies* as originally established by the Water Resources Council on March 10, 1983, or its successor document, as incorporated by reference in § 404.4 of the Rule.
- K. **Program Coordinator.** "Program coordinator" means a Reclamation employee assigned by and working for the Policy Director who provides leadership and coordination for the Program on a Reclamation-wide basis.
- L. **Reclamation Standards.** "Reclamation Standards" means the term used in §§ 404.41 and 404.47 of the Rule and refers to the requirements in this D&S governing the approach, process, and content of an appraisal investigation or a feasibility study

Directives and Standards

conducted under the Program or independently completed and submitted to Reclamation under the Program. It also refers to any requirements in other applicable D&S to the extent that they do not conflict with this D&S.

- M. **Regional Coordinator.** "Regional coordinator" means the individual selected by a regional director to serve as the region's primary point of contact with the Program coordinator on programmatic, Reclamation-wide, and other related activities as assigned.
- N. **Rural Water Supply Project or Project.** "Rural Water Supply Project" or "Project," as defined in § 404.2 of the Rule, means a project that is designed to serve a community or groups of communities, each of which has a current population of not more than 50,000 inhabitants (unless excepted by Reclamation in accordance with § 404.8 of the Rule), which may include Indian tribes and tribal organizations, dispersed home sites, or rural areas, with domestic, municipal, and industrial water, and which includes the following or any combination of the following:
 - (1) the construction or installation of new rural water supply infrastructure and facilities;
 - (2) the improvement or upgrade of existing rural water supply infrastructure and facilities;
 - (3) the extension of existing rural water supply infrastructure and facilities to reach an increased service area; or
 - (4) the interconnection of existing rural water supply infrastructure and facilities currently serving individual communities, dispersed home sites, rural areas, or tribes.
- O. **Statement of Interest.** "Statement of interest" means a preliminary scope of work for an appraisal investigation that is prepared as part of the assistance application process described in § 404.16 of the Rule.
- P. **Study Manager.** "Study manager" means the individual appointed by a regional director to ensure that appraisal investigations or feasibility studies are completed and reviewed in accordance with Reclamation standards and that appraisal or feasibility reports are prepared.

Directives and Standards

4. Responsibilities.

A. Commissioner.

- (1) The Commissioner will determine the appropriate emphasis of the Program as a mission goal within Reclamation's overall strategic plan and direct the overall implementation of the Program.
- (2) The Commissioner will be responsible for approving and prioritizing feasibility reports recommended for approval by a regional director and reviewed for program consistency by the Policy Director.

B. Policy Director.

- (1) The Policy Director will oversee the implementation of the Program in cooperation with the regional directors. The Policy Director will develop and revise appropriate policies, D&S, and guidelines for the Program.
- (2) The Policy Director will review the appraisal reports recommended for approval by regional directors and will determine whether the study meets the requirements of the Rule and Reclamation policy, as well as ensure that there is consistency across Reclamation in the form and content of reports prior to issuing final approval of the appraisal reports.
- (3) The Policy Director will review the recommended findings of feasibility studies and feasibility reports submitted by the regional directors. The Policy Director's review will determine whether the study meets the requirements of the Rule and Reclamation policy, as well as ensure that there is consistency across Reclamation in the form and content of reports.
- (4) The Policy Director will appoint a Program coordinator in Policy and Administration to oversee the implementation of the Program and will select, with input from the regional directors, qualified staff to serve on the ARC.
- (5) The Policy Director will review the recommendations of the ARC and make the final selection of appraisal investigations and feasibility studies to be funded as well as the allocation of appropriations.

C. Regional Directors.

(1) The regional directors will oversee the implementation of the Program within their regions. The regional directors will undertake outreach to inform interested Federal, state, local, and tribal government entities, other stakeholders, project sponsors, and the general public about the Program, and assist potential project sponsors in preparing proposals. The regional directors will also enter into grants

- or cooperative agreements with project sponsors that are selected for funding through the funding opportunity announcement (FOA) for the purpose of conducting and overseeing appraisal investigation and feasibility studies; reviewing completed investigations and studies; and preparing and certifying appraisal and feasibility reports in accordance with Program requirements.
- (2) Within his or her region, the regional director will recommend appraisal reports to the Policy Director for review and final approval.
- (3) The regional directors will appoint a regional coordinator to serve as the primary point of contact with the Program coordinator. The regional director or his or her designee will appoint study managers or teams to work with project sponsors and to oversee the conduct and review of investigations and studies within the region.
- D. **Program Coordinator.** The Program coordinator will provide leadership and coordination for the Program on a Reclamation-wide basis, including working with the regional coordinators to resolve issues related to Program implementation and to ensure that the Program is implemented consistently in an effective and efficient manner. The Program coordinator will:
 - (1) provide advice and information regarding Program policies and procedures;
 - (2) develop Program performance measures;
 - (3) develop and maintain Program websites and other informational materials;
 - (4) review for eligibility all applications submitted by potential project sponsors seeking feasibility study assistance under the Program in accordance with Program criteria;
 - (5) oversee the review of proposals by the ARC;
 - (6) make a recommendation to the Policy Director regarding the allocation of appropriations to conduct the highest priority investigations and studies determined eligible for financial assistance;
 - (7) formulate budgets and track the expenditure of Program funding;
 - (8) coordinate review and approval of appraisal reports through the Policy Director;
 - (9) coordinate review and approval of feasibility reports through the Commissioner;
 - (10) track the status of activities funded under the Program;

Directives and Standards

- (11) formulate and coordinate the development and publication of annual funding opportunity announcements; and
- (12) ensure that input about the Program is solicited and received on a regular basis from project sponsors, potential project sponsors, other stakeholders, and the general public.

E. **ARC.** The ARC will:

- (1) review for eligibility and evaluate all statements of interest submitted by potential project sponsors seeking assistance under the Program in accordance with Program criteria; and
- (2) evaluate and rank all proposals submitted by potential project sponsors seeking assistance under the Program in accordance with Program criteria.
- F. **Regional Coordinator.** The regional coordinator will serve as the primary point of contact with the Program coordinator on programmatic, Reclamation-wide activities. Within his or her region, the regional coordinator will be responsible for:
 - (1) assessing proposed budget and cost-share allocation for conducting an investigation or study;
 - (2) assessing the qualifications of a potential project sponsor to conduct an investigation or study and determine whether it is cost-effective for a potential project sponsor or its contractor to conduct an investigation or study;
 - (3) formulating the budget requests for reviews of independently conducted investigations and studies;
 - (4) tracking and reporting to the Program coordinator on the status of investigations, studies, and reviews, including related Program expenditures;
 - (5) working in cooperation with the Program coordinator to ensure that the Program is implemented efficiently and consistently;
 - (6) providing input on policy and Program implementation issues as they arise;
 - (7) ensuring that input about the Program is solicited and received on a regular basis from project sponsors, potential project sponsors, and the general public in his or her region;
 - (8) coordinating with and providing assistance to the study managers; and

Directives and Standards

- (9) providing copies of individual financial assistance agreements to the Program coordinator.
- G. **Study Managers.** In most circumstances, the study manager will be the primary point of contact for potential project sponsors and will take the lead to ensure that selected investigations or studies are completed and reviewed, and that reports are prepared in accordance with Program requirements. The study managers will also:
 - (1) oversee the coordination, conduct, and review of investigations and studies assigned to them;
 - (2) coordinate with the project sponsor throughout the conduct of the investigation or study to ensure that the plan of study is updated to account for unforeseen conditions or circumstances, and variations in work progress;
 - (3) develop and track the financial assistance agreement;
 - (4) coordinate with the regional coordinator on development of budget(s) for investigations and studies; and
 - (5) regularly communicate program implementation issues to the regional coordinators.

5. **Program Budgeting.**

- A. **General Approach.** The Policy Director will formulate the budget request for the Program, as described in Paragraph 5.B. Each region will submit to the Policy Director a budget for funding outreach and administrative costs associated with Program implementation within the region as described in Paragraph 5.C.
- B. **Policy Budget Request.** The budget request formulated by the Policy Director will include funds for:
 - (1) the Federal share of the cost to prepare appraisal and feasibility reports;
 - (2) the salary of the Program coordinator;
 - (3) all costs associated with financial assistance support for Program implementation;
 - (4) the costs for regional implementation of the program, as described in Paragraph 5.C.;
 - (5) all costs associated with the ARC; and
 - (6) other Reclamation-wide Program activities.

- C. Regional Implementation Costs. Regional coordinators will submit funding requests to the Program coordinator to cover regional implementation costs, including funding for the administrative cost of regional and area office staff to implement the Program within the region. Administrative costs to implement the Program include Program promotion, outreach with potential project sponsors, assisting projects sponsors with the preparation of proposals, and reporting on Program accomplishments. The administrative costs of complying with financial reporting requirements and reporting on the status of an investigation or study will be added to the Federal share of the investigation or study cost, but will not be included in the amount to be cost-shared with the project sponsor.
- 6. Application and Selection Process for Assistance.
 - A. **In General.** Under the Program, Reclamation will:
 - (1) conduct an appraisal investigation or a feasibility study on behalf of and in cooperation with a project sponsor (see § 404.11(a) of the Rule); or
 - (2) provide financial assistance to project sponsors to conduct an appraisal investigation or a feasibility study themselves or through a contractor (see § 404.11(b) of the Rule); and
 - (3) review and evaluate investigations and studies independently completed by potential project sponsors without assistance under the Program and submitted to Reclamation (see § 404.11(c) of the Rule).
 - B. **Review and Selection Process.** The Rule contains a detailed description of the application and selection process for assistance under the Program, including a description of the eligibility requirements (§§ 404.6 to 404.10), the types of assistance available (§ 404.11), and Reclamation's process for receiving and reviewing requests for assistance (§§ 404.13 to 404.27). The Rule establishes one application and review process for requests to conduct an appraisal investigation or a feasibility study under the Program and a separate process for requests for Reclamation to review and approve an independently completed investigation or study. The steps that Reclamation will take to implement these two selection processes are described separately, as follows:
 - (1) Requests for Reclamation Assistance to Conduct or Provide Financial Assistance for an Investigation or Study. Reclamation's application and review process for requests for assistance to conduct or provide financial assistance for an investigation or study under §§ 404.11(a) and (b) of the Rule is as follows:
 - (a) **Prepare and Post FOA.** The Program coordinator, in consultation with the regional coordinators, will prepare an FOA during each year in which

- program funds are available for award to new applicants, seeking applications from eligible entities interested in assistance under the Program. This FOA will be posted by a Reclamation grants officer.
- (b) **Establish the ARC.** The Policy Director will select the members of the ARC prior to the deadline for applications submitted in response to the FOA.
- (c) **Review Applications and Statements of Interest.** The ARC will review submitted applications and statements of interest for eligibility (see §§ 404.6 and 404.7 of the Rule) and priority (see § 404.13 of the Rule) to determine whether the proposed investigation or study merits preparation of a full proposal. See § 404.16 of the Rule for the information that must be included in the statements of interest.
- (d) **Notify Applicants of Status.** A Reclamation grants officer, in consultation with the Policy Director, will notify all applicants whether or not to submit a full proposal and the deadline for submitting a full proposal.
- (e) **Assist in Preparation of Full Proposals.** Reclamation will assist and coordinate with the project sponsors on the preparation of the full proposal as requested. Reclamation and the project sponsors will each pay their own costs incurred in preparation of the proposal.
- or Study and Cost Effectiveness. Project sponsors seeking Program funding to conduct an investigation or study themselves, or through a contractor, will be required to submit qualifications or resumes for Reclamation review as part of their full proposal as described in § 404.20 of the Rule. The regional coordinator will review the resumes to determine whether the project sponsor or their contractor(s) have appropriate technical capabilities and experience as described in § 404.23 of the Rule. The regional coordinator will also determine whether it is cost effective for the project sponsor or their contractor(s) to conduct the investigation or study as described in § 404.24 of the Rule.
- (g) **Review Full Proposals.** The ARC will review and score the full proposals using the prioritization criteria in Paragraph 7.
- (h) **Policy Director Approval.** The Policy Director will approve an allocation of funding for financial assistance awards based on the ARC's review and recommendation.
- (i) **Develop Plan of Study and Enter into Financial Assistance Agreement.**Once an investigation or study has been selected for funding, Reclamation and the project sponsor will enter into the appropriate agreement (e.g., grant,

Directives and Standards

cooperative agreement, Indian Self-Determination Act agreement, etc.) setting forth the terms applicable for the funded activity. The agreement will include, but is not limited to: the plan of study, which will be developed jointly by Reclamation and the project sponsor; cost-share requirements, as applicable; the responsibilities of the parties; and actions needed to comply with all environmental laws. A Reclamation grants officer will collaborate with the project sponsor to prepare the appropriate financial assistance agreement for signature by Reclamation and the project sponsor.

- (2) Requests for Reclamation to Review an Independently Completed Investigation or Study. As explained in § 404.25 of the Rule, requests for Reclamation to review an independently completed investigation or study must be submitted directly to the local Reclamation office; project sponsors are not required to submit a statement of interest in response to a FOA. The request must include the independently completed investigation or study and a cover letter addressing the eligibility and applicable prioritization criteria (described in §§ 404.6, 404.7, and 404.13 of the Rule and Paragraph 7 of this D&S). Reclamation's process for reviewing an independently completed investigation or study is as follows:
 - (a) **Acknowledge Receipt.** Upon receipt of an independently completed investigation or study for review, the receiving office will provide written acknowledgement of its receipt to the project sponsors along with a stated timeframe to assess completeness.
 - (b) **Determine Whether the Independently Completed Investigation or Study is Eligible for Review.** The receiving office will review the request and make a determination as to whether the project sponsor and the independently completed investigation or study meet the eligibility criteria described in §§ 404.6 and 404.7 of the Rule and applicable prioritization criteria described in § 404.13 and Paragraph 7 of this D&S, and will request that the regional and Program coordinators concur with that determination. Independently completed investigations or studies will be reviewed as they are submitted and will not be collectively ranked by the ARC.
 - (c) **Notify Applicants of Status.** The receiving office will notify the project sponsors in writing whether the independently conducted investigation or study is eligible for review under the Program. In this notification, the receiving office will identify any applicable non-Federal cost-share required to conduct the review as described in Paragraph 8.B.(4) and will state whether Federal appropriations are available to cover Reclamation's share of the review costs. If Federal funds are not available, the receiving office will notify the project sponsor that Reclamation can conduct the review only if the project sponsor contributes funding for the full cost of the review. Reclamation will not reimburse the project sponsor for contributed funds.

Directives and Standards

(d) **Enter into Financial Assistance Agreement.** If a cost-share is required to complete the review, Reclamation and the project sponsor will enter into the appropriate agreement setting forth the terms applicable for the funded activity. The agreement will include, but is not limited to cost-share requirements and the responsibilities of the parties. A Reclamation grants officer will collaborate with the project sponsor to prepare the appropriate financial assistance agreement for signature by Reclamation and the project sponsor.

(e) Conduct Review.

- (i) Determine whether the Independently Completed Investigation or Study is Complete and Ready for Review. Reclamation will review the independently completed investigation or study within 90 days from the date it is received by Reclamation to determine whether it contains all of the required information and is therefore complete and ready for a technical adequacy review in accordance with § 404.43 (investigations) and § 404.48 (studies) of the Rule. If the independently completed investigation or study is determined to be incomplete, Reclamation will request that the project sponsor make the necessary revisions at its own expense and resubmit the corrected investigation or study. Reclamation will also notify the project sponsor that they may instead choose to prepare a full proposal in response to the next available FOA to correct the deficiencies using Program funding, or withdraw the investigation or study from the Program.
- (ii) **Review for Technical Adequacy.** If the independently completed investigation or study is determined to be complete, Reclamation will conduct a review for technical adequacy in accordance with the requirements in Paragraph 9.B.(2)(b) of this D&S.
- (iii) Review Environmental Information Contained in an Independently Completed Feasibility Study. Reclamation will review the environmental information contained in an independently completed feasibility study to determine whether it is sufficiently complete for Reclamation to prepare an environmental assessment and a Finding of No Significant Impact, as part of the NEPA compliance process, if that level of analysis is determined to be appropriate. If the environmental information is incomplete, Reclamation will follow the process described in Paragraph 6.B.(2)(e)(i) to provide an opportunity for the project sponsors to correct the deficiencies. If Reclamation determines that an environmental impact statement (EIS) will be required for the proposed project, Reclamation will inform the project sponsors that they may prepare a full proposal to request that Reclamation conduct an EIS,

Directives and Standards

or request funding to have the EIS prepared by a contractor selected by Reclamation.¹ The full proposal will then be ranked against all other proposals during the next FOA cycle.

- 7. **Prioritization Criteria.** In general, projects that will provide water primarily for domestic uses will receive higher priority consideration than projects designed to provide a substantial amount of water for municipal and industrial uses.² The criteria described in Paragraphs 7.A. through 7.C. will be used to evaluate requests for assistance. The additional criteria described in Paragraph 7.D. will be included at the discretion of the Policy Director. Scoring weights will be assigned to the criteria and published in the FOA.
 - A. The extent to which the proposal demonstrates an urgent and compelling need for a rural water supply project, for domestic, municipal, and industrial uses, due to present or projected future:
 - (1) shortages of water supply, and/or
 - (2) violations of drinking water standards, and/or
 - (3) inadequacies in the infrastructure available to distribute water for domestic, residential, and municipal uses in sufficient quantities and pressures to protect public health and safety.
 - B. The extent to which the proposal demonstrates that the rural water supply investigation or study will incorporate a regional or watershed perspective, as defined in § 404.2 of the Rule, in examining future water supply needs and solutions to those needs which take advantage of economies of scale to meet the needs of a geographically dispersed community or group of communities.
 - C. The extent to which the proposal demonstrates that an investigation or study will address the rural water supply needs of an Indian tribe or tribes.

¹Reclamation cannot lawfully adopt an EIS that has been prepared without Reclamation's prior involvement because of the many inherently Federal roles and responsibilities associated with the EIS process (see 43 CFR 1506.5 (c) and 43 CFR 46.200).

²For the purposes of this Program only, eligible municipal and industrial uses include supplying drinking water for livestock, some commercial livestock operations (e.g., confined feeding or brooding, etc.), and irrigation for noncommercial purposes of vegetation other than crops. "Vegetation other than crops" includes but is not limited to lawns and ornamental shrubbery used in residential and commercial landscaping, golf courses, parks, and other developed recreational facilities. However, projects designed to provide a substantial amount of water for these uses will receive lower priority consideration.

Directives and Standards

- D. Other criteria, including but not limited to one or more of the following factors:
 - (1) the extent to which the proposal demonstrates that an investigation or study includes strategies to improve water use efficiency; reduce water demands; and minimize water losses; reduce energy use and increase energy efficiency; and use or produce renewable energy;
 - (2) the extent to which the proposal demonstrates that an investigation or study incorporates innovative approaches that effectively address water supply problems and needs, either by applying new technology or by employing a creative administrative or cooperative solution;
 - (3) the extent to which the proposal demonstrates that project sponsors need financial assistance with the planning of a rural water supply project as demonstrated by readily available local and regional economic indicators;
 - (4) the extent to which the proposal demonstrates that the assistance provided by Reclamation for a rural water supply investigation or study does not duplicate assistance available from other existing Federal programs and authorities;
 - (5) the extent to which the proposal demonstrates that the assistance provided by Reclamation for a rural water supply investigation or study will complement other existing Federal programs and authorities and promote coordinated Federal involvement in the planning and construction of the entire project;
 - (6) the extent to which the proposal demonstrates that an investigation or study will help meet applicable requirements established by law; and
 - (7) the extent to which the proposal demonstrates that an investigation or study is identified as a priority by state, tribal or local governments.

8. Cost-Sharing.

A. In General. The Rule contains a detailed description of the cost-sharing requirements for investigations and studies funded under the Program in §§ 404.30 to 404.40. In summary, § 404.30 of the Rule provides that, subject to available appropriations, Reclamation will pay 100 percent of the cost of conducting an appraisal investigation up to \$200,000 and requires the project sponsor to contribute 50 percent of any investigation costs exceeding \$200,000. Regarding feasibility studies, § 404.30 of the Rule provides that Reclamation will pay 50 percent of the study costs and requires the project sponsor to pay the remaining 50 percent of the study costs.

- B. Identification of Costs Subject to Cost-Sharing Requirements.
 - (1) Costs Incurred in Conducting Appraisal Investigations and Feasibility Studies. Reclamation is responsible for determining the specific costs to be subject to cost sharing for a particular investigation or study and documenting those costs in an appropriate financial assistance agreement. In general, all costs directly associated with an investigation or study will be subject to the cost-sharing requirements described in §§ 404.30 to 404.40 of the Rule, including, but not limited to:
 - (a) all costs directly related to conducting the investigation or study, including costs incurred by Reclamation and the project sponsor or contractors;
 - (b) the cost to perform all required environmental analyses including compliance with NEPA, National Historic Preservation Act (NHPA), and state and federal regulatory requirements;
 - (c) the cost of performing a design, estimating, and construction (DEC) review, value engineering analysis, and report certification for feasibility studies, if applicable; and
 - (d) all costs for Reclamation to review investigations and studies, including costs for providing any additional information or making corrections, and to prepare appraisal and feasibility reports.
 - (2) Administrative and Program Costs. In general, all costs that are not directly associated with an investigation or study, including costs associated with Program implementation and administration shall be paid for by Reclamation without requiring any non-Federal cost-share contributions. Reclamation's administrative costs of complying with financial reporting requirements and reporting on the status of individual investigations and studies will be added to the Federal share of the investigation or study cost, but will not be cost-shared by the project sponsor.
 - (3) **Existing Infrastructure.** The costs to construct existing infrastructure will not be counted as part of the non-Federal cost-share of the study. Reclamation will not reimburse the project sponsor for any costs incurred to plan, design, or construct existing project infrastructure.
 - (4) Cost-Sharing Requirements for Reclamation's Review of Independently Completed Appraisal Investigations or Feasibility Studies.
 - (a) **Independently Completed Appraisal Investigations.** Contingent upon the availability of funds, Reclamation will use Federal appropriations or contributed funds to pay 100 percent of the cost (up to \$200,000) incurred by

Directives and Standards

Reclamation to review an independently completed investigation (without assistance under the Program) submitted for review by a potential project sponsor and the cost for Reclamation to prepare an associated appraisal report. If the cost exceeds \$200,000, the potential project sponsor will be required to cost-share 50 percent of the amount exceeding \$200,000. In the absence of sufficient Federal appropriations to perform these functions, Reclamation is authorized to accept funds from the potential project sponsor pursuant to the Sundry Civil Expenses Act for 1922 (Pub. L. 66-389; 43 U.S.C. 395 (Contributed Funds Act)). However, Reclamation will not reimburse the project sponsor for the contributed funds from current year or future appropriations.

- (b) Independently Completed Feasibility Studies. The cost incurred by Reclamation to review an independently completed feasibility study (without assistance under the Program) submitted for review by a potential project sponsor and the cost to prepare an associated feasibility report will be cost-shared between Reclamation and the potential project sponsor on a 50/50 basis. If available, Reclamation will use Federal appropriations to pay for the Federal share of these costs. In the absence of sufficient Federal appropriations to perform these functions, Reclamation is authorized to accept funds from the potential project sponsor pursuant to the Contributed Funds Act. In general, the following shall be considered study costs to be cost-shared by Reclamation and the potential project sponsor:
 - the cost of Reclamation staff time to review the independently completed feasibility study and to request additional information, as needed;
 - (ii) the cost to review any environmental information submitted for possible use by Reclamation for NEPA, NHPA, Endangered Species Act (ESA), and other environmental compliance;
 - (iii) the cost of performing a DEC review, value engineering analysis, and report certification for feasibility studies, if applicable; and
 - (iv) the cost of preparing the feasibility report.
- (c) **Corrections.** If corrections or additions to an independently completed investigation or study are needed, Reclamation will instruct the project sponsor that the corrections may be made by the project sponsor at project sponsor's expense or an application may be submitted by the project sponsor in response to the next available FOA to correct the deficiencies through the Program.

- C. **Non-Federal Cost-Share Contributions.** Reclamation will only accept non-Federal cost-share for an investigation or study in the form of cash or in-kind services that Reclamation determines are necessary and reasonable to conduct and complete the investigation or study. See § 404.31 of the Rule.
- D. Inclusion of Federal (non-Reclamation) Loans as Part of the non-Federal Cost-Share Contribution. Reclamation will accept funds from Federal loans obtained by the project sponsor to pay for all or part of their cost-share contribution provided that the loan will be fully repaid with interest in accordance with the terms and conditions of the loan agreement.
- E. Reduction of the Non-Federal Cost-Share Contribution Required for an Investigation or Study. Sections 404.32 (appraisal investigations) and 404.34 (feasibility studies) of the Rule provide that Reclamation has the discretion to reduce the non-Federal cost-share if Reclamation determines that there is an overwhelming Federal interest in conducting the investigation or study, the non-Federal cost-share partner demonstrates financial hardship, and Reclamation consults with any other Federal agencies that are partners in the project and determines that a reduction in the non-Federal cost-share is appropriate.
 - (1) **Overwhelming Federal Interest.** The Policy Director will make a determination of whether an overwhelming Federal interest exists based on factors such as the programs and policies of the President and the Secretary of the Department of the Interior.
 - (2) **Financial Hardship.** Reclamation will request that project sponsors seeking an increased Federal cost-share follow the procedures in Appendix B to demonstrate that they are unable to pay all or a portion of their share due to financial hardship. Reclamation will request that project sponsors use readily available economic indicators and data that is representative of the study area, as listed below:
 - (a) median household income within the study area and the state, as determined by the American Community Survey data, released by the United States Census Bureau;
 - (b) family poverty level based on the average household size within the study area, as estimated by guidelines published annually by the Department of Health and Human Services, and compared to the state average; and
 - (c) the unemployment rate within the study area and the national average unemployment rate as determined by the United States Census Bureau in the American Community Survey data.
- F. Cost-Share for Communities with More than 50,000 Inhabitants. Sections 404.8 and 404.35 of the Rule provide that a community with a population in excess of

Directives and Standards

50,000 inhabitants may be part of an eligible rural water project if Reclamation determines that the community is a critical partner whose involvement substantially contributes to the financial viability of the proposed project. Reclamation will determine the cost-share for communities with a population greater than 50,000 based on the financial strength of the community by evaluating all applicable credit or bond ratings (e.g., ratings provided by services such as Moody's, Standard and Poor's, and Fitch) and the incremental study costs attributable to the community's participation in the investigation or study. The methodology that will be applied in making this determination is described in detail in Appendix C.

9. **Process for Reviewing Appraisal Investigations or Feasibility Studies.** Reclamation will undertake the following steps to review an investigation or study.

A. Review Schedule.

- (1) **Appraisal Investigations.** Reclamation has a total of 180 business days to complete its review of an appraisal investigation, whether completed under the Program or independently, which is comprised of 90 business days to determine whether the investigation is complete and 90 business days to complete a technical adequacy review and prepare and approve an appraisal report. See §§ 404.43 through 404.46 of the Rule.
- (2) **Feasibility Studies.** Reclamation has a total of 270 business days to review a feasibility study, whether completed under the Program or independently, which is comprised of 90 business days to determine if it is complete and 180 business days to conduct a technical adequacy review, prepare a feasibility report, and submit it to Congress. See §§ 404.48 through 404.52 of the Rule. This time period includes completing all necessary Reclamation reviews, but does not include any reviews conducted by the Department, the Office of Management and Budget (OMB), or other Federal agencies.
- (3) **Corrections.** The review schedules exclude the time required for the project sponsor to correct deficiencies or respond to Reclamation's requests for additional information.
- B. **Steps for Reclamation Review.** Reclamation will take the following steps to review completed investigations or studies:
 - (1) **Determining Whether an Investigation or Study is Complete and Ready to Review.** The study manager will review the investigation or study, determine whether it contains all of the required information and is therefore complete and ready for review in accordance with § 404.43 (investigations) and § 404.48 (studies) of the Rule, and will notify the project sponsor of the determination within 90 business days from the date the investigation or study is completed or received by Reclamation.

- (2) **Reviewing for Technical Adequacy.** The study manager will establish a team of technical experts to conduct the review of the investigation or study.
 - (a) **Appraisal Investigations.** Reclamation will review the investigation for technical adequacy, in accordance with the timeframe and criteria in § 404.44 of the Rule, to determine whether it is appropriate to proceed to a feasibility study.
 - (b) **Feasibility Studies.** Reclamation will review the study in accordance with the timeframe and criteria in § 404.49 of the Rule, to determine whether to recommend to Congress that the project be authorized for construction. The review for technical adequacy will include:
 - (i) A review of the study to determine whether it meets the criteria in § 404.49 of the Rule.
 - (ii) A review of all documentation of the analyses required to comply with NEPA, NHPA, and other environmental regulations.
 - (iii) A DEC review, if applicable. The regional director will identify feasibility studies to be submitted for independent oversight and review under the direction of the Senior Advisor, DEC, in accordance with RM Policy, *Independent Oversight of Design, Cost Estimating, and Construction*, FAC P10, and RM D&S, *Identifying Design, Cost Estimating, and Construction Projects for which Independent Oversight Review is Required, and Performing those Reviews*, FAC 10-01.
 - (iv) Value analysis, if applicable, to be conducted in accordance with RM Policy, *Reclamation Value Program*, CMP P05, and RM D&S, *Reclamation Value Program*, CMP 06-01.
- (3) **Addressing Corrections.** If the review team determines that the investigation or study requires additional work, the study manager will provide the project sponsor an opportunity to correct or supplement the investigation or study.
- (4) **Preparing the Report.** The study manager will prepare the appraisal or feasibility report and submit it to the regional director for approval and, as appropriate, for certification in accordance with Reclamation report certification requirements.

Directives and Standards

C. Approval of Appraisal or Feasibility Reports.

- (1) Appraisal Reports.
 - (a) **Review by Policy Director.** The regional director will submit the appraisal report to the Policy Director for review and approval. The Policy Director will review the report that is submitted by the regional director for compliance with RM Policy and D&S and also to ensure that there is consistency across Reclamation in the form, content, and quality of reports. The Policy Director will have a minimum of 15 business days to either approve the report or request that the appropriate regional director make changes or corrections and resubmit for review.
 - (b) **Notify Project Sponsor of Status.** The study manager will notify the project sponsor of the findings in the report once it is approved by the Policy Director. If the appraisal report recommends proceeding to a feasibility study, the study manager will work with the project sponsor to prepare a full study proposal. The proposal will be considered by the ARC during the next funding cycle.

(2) Feasibility Reports.

- (a) **Review by Directors.** The regional director will submit the feasibility report to the Policy Director for review and concurrence with the recommendations of the regional director. The Policy Director will have a minimum of 25 business days to review the report that is submitted by the regional director for compliance with RM Policy and D&S and to ensure that there is consistency across Reclamation in the form, content, and quality of reports. Once the review and requested revisions are complete, the Policy Director will transmit the report to the Commissioner along with a draft transmittal memorandum, for the Commissioner's approval signature.
- (b) **Review by the Commissioner.** If the Commissioner approves the feasibility report, the Commissioner will sign a memorandum transmitting the report to the Department.
- (c) **Review by the Department.** The Department will review the report and transmit it to OMB.
- (d) **Finalize Report.** Once approved by OMB, Reclamation will finalize the feasibility report.
- (e) **Notify Project Sponsor of Status.** The regional director will notify the project sponsor whether the feasibility report was approved by OMB.

- (f) **Notice of Availability of the Report.** The Policy Director will publish a notice in the *Federal Register* about the availability of the report. See § 404.52(d) of the Rule.
- (g) **Submit Report to Congress.** The Commissioner will prioritize and transmit approved reports to the Assistant Secretary for Water and Science for submission to Congress.
- 10. **Appraisal Investigation Standards.** The following are Reclamation's standards for preparing an appraisal investigation that are referenced in § 404.41 of the Rule. All investigations must adhere to these standards, including those conducted under the Program or independently. Appraisal investigations and appraisal reports are the basis for a decision on proceeding to a feasibility study and must be organized to lead decision makers and the public to the study's conclusions and recommendations.
 - A. Coordination and Consultation. The study manager and project sponsor must jointly develop and agree on a process to conduct appropriate consultation and coordination efforts with stakeholders and interested parties as follows:
 - (1) The public must be informed that the investigation is being conducted and be provided an opportunity to comment on the investigation and its findings and recommendations.
 - (2) Appropriate coordination and consultation with Federal, state, tribal, regional, and local authorities and entities must be conducted to ensure that the proposed project is not duplicative of other efforts and that technical expertise and existing data are utilized to the maximum extent possible. The coordination and consultation must ensure that all relevant previous studies, analyses, and information are considered and integrated into the investigation.
 - B. **Appraisal Investigation Content.** An appraisal investigation must be completed within 2 years of its initiation. Consideration of all of the prioritization criteria found in § 404.13 of the Rule must be integrated into the appraisal investigation. An appraisal investigation must address the following:
 - (1) **Introduction.** The introduction briefly describes the water supply problems, needs, and opportunities; the objectives, scope, and purpose of the investigation; the region, watershed, and study area; project sponsor and partners; and other previous or ongoing studies related to the problem being investigated, including any conclusions reached.
 - (a) Investigation objectives must be broadly defined to avoid dictating a specific or narrow range of alternatives.

- (b) The scope of the investigation must be scaled relative to the size, complexity, cost, and degree of controversy surrounding the proposed project, as referenced in § 404.29 of the Rule.
- (2) **Statement of Problems, Needs, and Opportunities.** A clear statement will be prepared regarding the present and future water supply problems, needs, and opportunities to be addressed. This statement will describe how the problems, needs, and opportunities were translated into planning statements and objectives as well as any constraints that were imposed on the alternatives identified in the appraisal investigation. The statement will address:
 - (a) the significance of the problem and its impact on domestic, municipal, or industrial water supply systems, as well as the benefits to be gained by the proposed project relative to taking no action;
 - (b) any threats to public health and safety caused by the existing water supply or system as well as the benefits to be gained by the proposed project;
 - (c) how the proposed project will incorporate a regional approach and meet the near and long-term water demands in the area, including the demand for domestic, municipal, and industrial water supplies, and the demand for incidental noncommercial livestock watering and noncommercial irrigation of vegetation, if any; and
 - (d) the current source of water supply and any new water supplies that would be used in the proposed project, including opportunities to treat and use low-quality or nonpotable water, water reuse-based supplies, and brackish and saline waters, through innovative and economically viable treatment technologies.
- (3) **Resources.** An inventory will be compiled of present and projected future resource conditions that will have a bearing on plan formulation to meet the identified problems, needs, and opportunities regarding the proposed project.
- (4) **Plan Formulation and Alternative Analysis.** Alternatives considered in resolving the identified problem or meeting needs or opportunities must be described, analyzed, and compared. A description of how alternatives would address study and program objectives must be included. In addition, the viability completeness, effectiveness, efficiency, and acceptability of each alternative must be assessed and described.
 - (a) **No Action Alternative.** The actions that would most likely be taken within the study area during the period of analysis (planning horizon) to address the identified problems, needs, or opportunities if the proposed project is not constructed must be described, including the estimated cost of those actions

- and the projected result of the No Action Alternative. The risks and uncertainties associated with this alternative must be addressed along with the implications if nothing is done.
- (b) **Viable Alternatives.** Alternatives that were considered, including the alternatives proposed for further analysis, to address the problem and meet the needs must be described in comparative detail using narrative, maps, drawings, and photographs, as appropriate. Descriptions of alternatives must cover structural and nonstructural elements, and for each alternative, the appraisal analysis involves:
 - the inclusion and assessment of measures to improve water use efficiency, reduce water demands, and minimize water losses; reduce energy use and increase energy efficiency; and use or produce renewable energy;
 - (ii) the identification and assessment of viable and practical water supplies and rights sufficient to meet the demand for water, including improvements to existing lower quality waters, and reuse;
 - (iii) the inclusion and assessment of measures to meet all or part of the demand for water through conservation;
 - (iv) a description of benefits for each alternative that will have a positive effect on public health and safety, meet existing and projected future water demand, and the environmental benefits attributable to the alternative, including the benefits of source water protection, described quantitatively when possible, or as a range;
 - (v) cost estimates that are reasonable and supported at an appraisal level of detail;
 - (vi) an evaluation of the ability of the project sponsor and partners to cost-share on the capital cost of the project and to pay 100 percent of the annual operating, maintenance, and replacement (OM&R) costs, and identification of costs that are based on comparable quantities of water supplied and population served for each alternative investigated;
 - (vii) a preliminary analysis of potential environmental, cultural resources, and social impacts of the alternatives that affect the potential for further study and project implementation; and
 - (viii)the identification of aspects of the alternative that apply a regional or watershed approach to promoting benefits, implementing integrated resource management, and enhancing water management flexibility.

- (c) **Nonviable Alternatives.** Alternatives that were considered and deemed nonviable must be identified and briefly described. The reason(s) that the alternatives were not considered viable and not further investigated must be clearly explained.
- (d) **Proposed Alternatives.** The viable alternatives that are proposed and recommended for development of a feasibility study must be identified, described, and compared.
- (5) **Recommendation.** The appraisal investigation must clearly describe at least one viable alternative in order to recommend that a feasibility study be conducted. If recommending a feasibility study, the alternatives to be examined must be described in detail. If no viable alternatives are identified, the project will not be studied further under the Program, and the report will document that finding.
- 11. **Appraisal Report.** The appraisal report will include Reclamation's finding as to whether it is appropriate to proceed to a feasibility study based on the criteria in § 404.44 of the Rule.
- 12. **Feasibility Study Standards.** The following are Reclamation's standards for preparing a feasibility study that are referenced in § 404.47 of the Rule. All studies must adhere to these standards, including those conducted under the Program or independently. Feasibility studies require a high level of analysis and detail on the engineering, hydrologic, geologic, economic, social, environmental, and financial implications of the proposed project and the alternatives evaluated. This includes a rigorous analysis based upon the Principles and Guidelines concurrent with a comprehensive analysis of environmental and cultural resources impacts in compliance with NEPA and NHPA, respectively. The requirements for completing a feasibility study under the Program are similar or identical to those required by Reclamation for other proposed projects. Another aspect of this Program is the requirement that the study demonstrate the beneficiaries have the capability to pay for domestic, municipal, and industrial water as part of the feasibility study. Feasibility studies, whether conducted or reviewed by Reclamation, will meet the requirements of RM D&S, *Feasibility Studies*, CMP 05-02, unless noted otherwise.
 - A. **Prerequisites.** Requirements prerequisite to obtaining assistance to conduct a feasibility study are described in detail in §§ 404.19 and 404.26 of the Rule. A feasibility study will not be undertaken unless an appraisal investigation and report have been completed and the appraisal report recommends that a feasibility study is justified.
 - B. Consultation and Cooperation. The study manager and project sponsor must jointly develop and agree on a process to conduct appropriate consultation and coordination efforts with stakeholders and interested parties as follows:
 - (1) The public must be informed that the study is being conducted and be provided an opportunity to comment on the study and its findings and recommendations.

- (2) Appropriate coordination and consultation with Federal, state, tribal, regional, and local authorities and entities must be conducted to ensure that the proposed project is not duplicative of other efforts and technical expertise and existing data are utilized to the maximum extent possible. The coordination and consultation must ensure that all relevant previous studies, analyses, and information are considered and integrated into the study.
- C. **Feasibility Study Content.** The scope of the feasibility study will be scaled relative to the size, complexity, cost, and degree of controversy surrounding the proposed project, as referenced in § 404.29 of the Rule. Consideration of all of the prioritization criteria found in § 404.13 of the Rule must be integrated into the feasibility study. A feasibility study must address the following:
 - (1) **Introduction.** The study must include the following introductory information:
 - (a) an identification of the project sponsor and any partners;
 - (b) a description of the study area and maps showing the proposed project area;
 - (c) a brief discussion of the appraisal investigation and any other prior studies related to the proposed project or that identify water supply problems, needs, and opportunities in the study area, including the conclusions reached;
 - (d) a discussion of how the proposed project incorporates a regional or watershed approach; and
 - (e) a discussion of how the proposed project incorporates water and energy conservation.
 - (2) **Resources.** An inventory will be compiled of present and projected future resource conditions that will have a bearing on plan formulation to meet the identified problems, needs, and opportunities regarding the proposed project.
 - (3) **Statement of Problems, Needs, and Opportunities.** A statement of the present and future water supply problems, needs, and opportunities that the proposed rural water supply project is intended to address will be prepared. This statement will describe how the problems, needs, and opportunities were translated into planning statements and objectives as well as any constraints that were imposed on the alternatives identified in the appraisal investigation. The statement will address:
 - (a) the significance of the problem and its impact on domestic, municipal, or industrial uses of the water resources and supplies and impacts on demand within the study area, region, or watershed;

- (b) any threats to public health and safety caused by the existing water supply or system and the benefits to be gained by the proposed project;
- (c) how the proposed project will meet the near- and long-term water demands in the area, including the demand for domestic, municipal, and industrial water supplies, and the demand for incidental noncommercial livestock watering and noncommercial irrigation of vegetation, if any; and
- (d) the current source of water supply, current water conservation and demand reduction practices, and any new water supplies that would be used in the proposed project, including opportunities to treat and use low-quality or nonpotable water, water reuse-based supplies, and brackish and saline waters, through innovative and economically viable treatment technologies.
- D. **Formulation, Evaluation, and Comparison of Alternative Plans.** Alternatives considered in resolving the identified problem or meeting needs or opportunities must be described, analyzed, and compared. A description of how alternatives would address the project objectives must be included. In addition, the viability, completeness, effectiveness, efficiency, and acceptability of each alternative must be assessed and described. The number and diversity of alternatives developed at this stage will determine the alternatives analyzed under NEPA. The feasibility study must describe each of the alternatives considered, including the following:
 - (1) **No-Action Alternative.** Describe the actions that would most likely be taken within the study area during the period of analysis (planning horizon) to address the identified problems, needs, or opportunities if the proposed project is not constructed, including the estimated cost of those actions and the projected result of the No-Action Alternative. The risks and uncertainties associated with this alternative must be addressed along with the implications if nothing is done.
 - (2) **Viable Alternatives.** Describe each of the alternatives (structural and nonstructural) that would accomplish the objectives to be addressed by the proposed project, including the preferred alternative, at a comparable level of detail. For each viable alternative considered in the feasibility study, including the preferred alternative, the following information must be included:
 - (a) Detailed descriptions of the structural and nonstructural features, including maps, drawings, photographs, and associated narratives.
 - (b) Identification and detailed descriptions of the project features that will improve water use efficiency; reduce water demands; and minimize water losses.

- (c) Identification and detailed descriptions of the project features that will reduce energy use and increase energy efficiency; and use or produce renewable energy.
- (d) Identification of viable and practical water supplies and rights to support the project needs, including improving existing lower quality waters, conservation, and reuse.
- (e) A description and economic analysis of the project costs and benefits, in accordance with the procedures set forth in the Principles and Guidelines for municipal and industrial supply projects.
- (f) A detailed, well-documented engineering project cost estimate, including nonconstruction costs and life cycle costs in accordance with RM Policy, Cost Estimating, FAC P09; RM D&S, Cost Estimating, FAC 09-01; RM D&S, Construction Cost Estimates and Project Cost Estimates, FAC 09-02; and RM D&S, Representation and Referencing of Cost Estimates in Bureau of Reclamation Documents Used for Planning, Design, and Construction, FAC 09-03. The cost estimate must be based on quantities and unit prices, and clearly identify costs for major structures, facilities, or other types of construction.
- (g) The projected long-term OM&R costs, including staffing levels.
- (h) Identification of the anticipated schedule for funding and construction of the project, including a breakout of Federal and non-Federal funding by year and a list of the anticipated project construction sequence, including all major milestones.
- (i) Identification of all design standards and methods used to determine location, size, and types of major facilities and appurtenances, including source water development; treatment, transmission, and distribution facilities; storage infrastructure; and treatment methods to maintain water quality.
- (j) Identification of the design life of the project used to define the water supply needs, which will be a minimum of 40 years, but will not exceed 100 years, for population projections and life cycle cost analyses, using the same design life to evaluate each alternative.
- (k) Analysis of the system hydraulics using an appropriate hydraulic model, including points of delivery, flow rates, pipeline plan layout, and hydraulic grade profiles.
- (l) A geology report that characterizes the general geologic conditions that exist throughout the project area in sufficient detail to determine the general

Directives and Standards

excavation and grading requirements, the likelihood of encountering problem soils or groundwater, and the availability of suitable fill materials and aggregate sources, as well as a seismic report if the project encompasses a seismically active area.

- (m) A description of any current water treatment processes being used and any proposed treatment process being considered, with the differences in construction and OM&R costs listed for each alternative.
- (n) Identification of the total power required for all project features and description of how the power will be delivered, including identification of the potential power providers and features to be constructed to supply the power, as well as a description of the extent to which the project will use renewable energy sources.
- (o) Description of opportunities for water conservation in the study area to reduce water use and water system costs, including demonstration technologies.
- (p) Identification of aspects of the alternative that apply a regional or watershed approach to promoting benefits, implementing integrated resource management, and enhancing water management flexibility.
- (3) **Nonviable Alternatives.** Each of the alternatives that were considered and determined to be nonviable will be described, and the reasons that each was not considered further will be stated.
- (4) **Recommended Plan.** The basis and rationale for selection of the preferred NEPA alternative, the National Economic Development (NED) Plan, and the recommended plan will be described. The NED Plan will be chosen as the recommended plan. Recommending a plan other than the NED will require a Secretarial exception as mandated in the Principles and Guidelines. A discussion and evaluation of areas of risk and uncertainty associated with the preferred alternative will also be provided.
- (5) **Environmental Compliance.** NEPA compliance and compliance with other applicable requirements, including the Fish and Wildlife Coordination Act, ESA, NHPA, and other related environmental and cultural resource laws, will be completed concurrently with the feasibility study. These requirements will be completed in accordance with applicable NEPA rules and regulations and RM D&S, *Cultural Resources Management*, LND 02-01, and will be integrated into the feasibility study.

- (6) **Legal and Institutional Requirements.** For each viable alternative, including the preferred alternative, the feasibility study must include:
 - (a) an analysis of any water rights or source water protection issues resulting from implementation of the proposed project;
 - (b) a discussion of legal and institutional requirements (e.g., contractual water supply obligations, Indian trust responsibilities, water rights settlements, regional water quality control board requirements, etc.) with the potential to affect implementation of the project;
 - (c) identification of permitting or regulatory compliance that may be needed, including ESA and Clean Water Act permits (401, 402, 404 permits), cultural resources investigations and mitigation actions, and any other local, state, Federal or tribal permits required;
 - (d) the availability of rights-of-way and land needed for any project facilities; and
 - (e) in the case of a project intended for Indian tribes and tribal organizations, an assessment of the extent to which the project addresses the goal of economic self-sufficiency.
- (7) **Capability to Pay.** In accordance with § 404.49 (d)(10) of the Rule, the project sponsor must be capable of paying at least 25 percent of the design and construction costs and 100 percent of the OM&R costs.
 - (a) Reclamation will use the factors described in § 404.39 of the Rule and the guidance provided in Reclamation Technical Memorandum EC-2009-02, Evaluating Economic and Financial Feasibility of Municipal and Industrial Water Projects, to evaluate the project sponsor's financial capability.
 - (b) Project infrastructure already constructed or under construction prior to the completion and approval of a feasibility study will be considered existing infrastructure. Non-Federal funds expended to construct existing infrastructure will not be considered when determining the recommended Federal cost-share for capital construction costs or the economic justification.
 - (c) In accordance with § 404.38 of the Rule, if the analysis shows that a tribe is unable to pay all or part of the construction costs apportioned to the tribe, Reclamation will recommend to the Secretary whether all or part of the cost should be deferred.

Directives and Standards

13. **Feasibility Report.** As provided in § 404.50 of the Rule, the feasibility report will include Reclamation's finding as to whether the proposed project is feasible and whether it should be authorized for construction. If Reclamation finds that the project is feasible and should be recommended for construction, the report will include an analysis of the project sponsor's capability to pay 100 percent of OM&R and at least 25 percent of construction costs, as well as any additional construction costs beyond 25 percent, as appropriate. Reclamation will make this determination using the criteria in § 404.39 of the Rule. For projects including Indian tribes, Reclamation will rely on the criteria in § 404.38 of the Rule to determine the appropriate non-Federal share of construction costs. The report will also include a determination of the appropriate Federal and non-Federal shares of construction costs, including the appropriate mix of grants and loan guarantees to cover the Federal share of the costs.