

Finding of No Significant Impact

Deer Flat Dam Upper Embankment Safety of Dams Project

PN-FONSI 06-06

Boise Project, Arrowrock Division, Idaho Snake River Area Office



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Deer Flat Dam Upper Embankment Safety of Dams Project

PN-FONSI 06-06

September 2006

Introduction

In accordance with the National Environmental Policy Act (NEPA) the Bureau of Reclamation (Reclamation) has prepared a Draft Environmental Assessment (EA) that evaluates the environmental effects of the Reclamation's proposed Deer Flat Dam Upper Embankment Safety of Dams Project.

The purpose of the project is to prevent failure of the Upper Embankment which would cause extensive property damage, potential loss of life, and loss of project benefits. Corrective action is needed due to internal erosion of embankment material currently occurring along the Caldwell Canal conduit and which has the potential to occur along the Nampa Canal conduit, both located within the Upper Embankment.

Deer Flat dams form Lake Lowell, an off-stream reservoir, located in a natural depression between the Snake and Boise Rivers. Water diverted from the Boise River at the Boise River Diversion Dam flows through the 40-mile-long New York Canal and into Lake Lowell. The total capacity of Lake Lowell is 173,100 acre-feet at full pool elevation 2531.2 feet. Irrigation water is released from Lake Lowell through four canal outlets. The Caldwell and Nampa Canal outlets are located in the Upper Embankment while the Lowline and North Canals are located in the Lower Embankment. Lake Lowell is operated by the Boise Project Board of Control.

Deer Flat National Wildlife Refuge (Refuge), established in 1909 and managed by the U.S. Fish and Wildlife Service, (USFWS) surrounds and includes Lake Lowell. Large numbers of wintering waterfowl use the Refuge. The reservoir and surrounding area support excellent warm water fishing, upland game bird and waterfowl hunting, boating, picnicking, wildlife viewing, swimming, and sightseeing.

Alternatives Considered and Recommended Action

A range of structural and nonstructural alternatives were developed to address the safety concerns at Deer Flat Dam Upper Embankment. Screening analysis resulted in two structural alternatives for the Caldwell Canal that were deemed reasonable and feasible and carried forward for more detailed analysis. Other structural alternatives were rejected early due to excessive cost, significant environmental impact, or because they

did not adequately address the safety concerns. A single alternative was developed for modification of the Nampa Canal outlet. This alternative was further revised during a Value Engineering exercise.

Two nonstructural alternatives were evaluated. These were 1) implementation of a reservoir operating level restriction and 2) abandonment of the Deer Flat Dam. Both of these were rejected because the project irrigation storage benefits would not be retained, and environmental impacts to the Refuge would be too great.

Two alternatives were analyzed in the EA: the proposed action and no action. Under the proposed action Reclamation will completely excavate and replace the Caldwell Canal conduit and partial excavation and installation of a sand filter on the downstream portion of the Nampa Canal conduit. In order to accomplish the work at the Caldwell Canal, Lake Lowell will need to be held at a lower pool level than normal during the fall and winter of the construction season. A new access road to the Refuge headquarters will also be constructed since access will be cut off during the safety of dams work.

Reclamation has selected the proposed action as the alternative to be implemented.

Consultation, Coordination, and Public Involvement

Reclamation developed a list of issues and concerns based on previous safety of dams work conducted at Deer Flat from 1990-1991 and through consultation and coordination with the Refuge. Idaho Department of Fish and Game and USFWS were also contacted for their input, and the project was discussed with IDFG via telephone.

Consultations with the Idaho State Historic Preservation Office (SHPO) pursuant to 36 CFR 800 regulations regarding protection of historic properties under Section 106 of the National Historic Preservation Act included a site visit and discussions and correspondence regarding impacts to historic resources and mitigation measures. A memorandum of agreement was jointly developed and executed with the Idaho SHPO on July 12, 2006 that stipulates mitigation measures.

The Draft EA was mailed to over 50 agencies, tribes, organizations and individuals for a 30-day comment period and was posted on Reclamation's Pacific Northwest Region website. Reclamation received comment letters from USFWS Snake River Basin Office, the Refuge, and Canyon County Highway District No. 4. The comment letters and Reclamation's responses to comments are attached. (See Attachments 1-3.)

The Draft EA served as the biological assessment for species listed under the Endangered Species Act (ESA) and was provided to USFWS to meet informal consultation requirements under Section 7 of ESA. Reclamation determined that the proposed action may affect, but is not likely to adversely affect bald eagles. USFWS concurred with this finding by memo on September 12, 2006 (Attachment 1).

Summary of Environmental Effects

<u>Lake Operations and Hydrology</u> – In order to accomplish the excavation of the Caldwell Canal outlet conduit the level of Lake Lowell will need to be lower than normal during the fall and early winter of the construction season. These levels are within normal operating ranges during moderately dry years and would be expected to occur approximately 50 percent of all water years based on Reclamation modeling studies.

<u>Water Quality</u> - Impacts will be limited to minor and localized increases in turbidity during the excavation of the emergency berm at Caldwell Canal. The lower reservoir pool is not expected to exacerbate water quality concerns at the lake during the fall/winter construction period.

<u>Cultural Resources</u> – The project will alter characteristics of the Upper Embankment that qualify it for inclusion in the National Register of Historic Places and have an adverse effect on the property. Reclamation has consulted with the SHPO and executed a memorandum of agreement that specifies mitigation measures Reclamation will undertake to minimize the impacts.

<u>Aquatic Species</u> – No measurable impact to gamefish populations or other aquatic species is expected.

<u>Vegetation</u> - Vegetation impacts will consist of approximately 2.5 acres of recently burned and revegetated sagebrush/grassland due to construction of the new Refuge access road and 3 acres of sparse, weedy sagebrush/grassland lost from embankment excavation. These impacts are minor compared to the abundance of these vegetation communities in the area. Areas disturbed during construction would be re-seeded with the exception of the Upper Embankment slope.

<u>Threatened and Endangered Species</u> - Reclamation has determined that the proposed action may affect but is not likely to adversely affect bald eagles, and USFWS has concurred with this determination (Attachment 1). The project would have no affect on the gray wolf or Idaho springsnail, which also occur in Canyon County.

<u>Transportation and Access</u> - Short-term road closures will occur during excavation of the Nampa Canal conduit requiring detours of up to 1.5 miles for nearby residents and commercial traffic. No comments were received by potentially affected residents. Haul routes will be designated to avoid paved County roads to the extent practical, and Reclamation will coordinate with Canyon Highway District No. 4 regarding signage and haul routes (Attachment 3).

<u>Noise</u> - Noise from construction equipment will be noticeable but not extremely bothersome for the approximately 20 residences near the construction area. Most of the noise will occur in the winter months when residents are not outside and have their windows closed.

<u>Recreation</u> – Only minimal short-term impacts will occur. Impacts will be limited to loss of fishing opportunity from the Upper Embankment, reduced cover for waterfowl hunters and loss of some open water for boaters in early fall.

<u>Indian Trust Assets</u> – No impacts to any Tribal rights to hunt and fish will occur. Impacts to water quality, fish, and wildlife will be minimal.

<u>Minority or Low-income Populations</u> – The proposed action would not affect these groups and therefore there was no discussion of effects in the Draft EA.

<u>Cumulative Impacts</u> – There are no present or reasonably foreseeable future actions that will have additive or interactive impacts on the environment in the project area. Development is gradually impacting some environmental parameters, but the timing, scope and details of development are unknown and unquantifiable.

Past safety of dams activities resulted in adverse effects to the dams' historic integrity, however mitigation measures developed and implemented jointly with the SHPO will avoid and minimize impacts to the extent feasible.

Changes to the Draft EA

Reclamation received three letters commenting on the Draft EA, none of which requested or required revision of the document. Therefore a final EA will not be prepared. The findings of this document are based on the Draft EA and the attached comments and responses.

Finding

Based on the analysis of the environmental impacts in the Draft EA and consultation with potentially affected agencies, Tribes, organizations, and the general public, Reclamation concludes that implementation of the proposed safety of dams project will not have a significant effect on the quality of the human environment or natural and cultural resources. The effects of the proposed action will be minor and localized. Therefore preparation of and environmental impact statement is not required.

Recommended:

Area Office Environmental Specialist

Snake River Area Office

Boise, Idaho

9/26/06

Approved:

Area Manager Snake River Area Office Boise, Idaho

Attachment 1

United States Department of the Interior

Snake River Fish and Wildlife Office 1387 S. Vinnell Way, Room 368 Boise, Idaho 83709 Telephone (208) 378-5243 http://IdahoES.fws.gov



SEP 1 1 2006

Memorandum

To:

Area Manager, Snake River Area Office, Bureau of Reclamation,

Boise, Idaho

RIVER AREA OFFICE BOISE, IDAHO

From: Supervisor, Snake River Fish and Wildlife Office, Fish and Wildlife

Service, Boise, Idaho

Subject:

Deer Flat Upper Embankment Safety of Dams-Canyon County, Idaho-

Concurrence and NEPA Comments

File # 1009.2000 2006-I-0893 and 2006-FA-0125

This is in response to the Bureau of Reclamation's (Bureau) memorandum dated July 25, 2006, and received on July 27, regarding the Deer Flat Upper Embankment Safety of Dams action. The first portion of this memorandum provides the Fish and Wildlife Service's (Service) concurrence, in accordance with section 7 of the Endangered Species Act of 1973, as amended (Act). The second portion of this memorandum provides our comments and recommendations for the draft Environmental Assessment (EA), provided in accordance with the National Environmental Policy Act, the Migratory Bird Treaty Act, and the Fish and Wildlife Coordination Act.

Endangered Species Act Consultation

The Bureau has determined, and the Service concurs, that the proposed action may affect but is not likely to adversely affect wintering and breeding bald eagles (*Haliaeetus leucocephalus*). Additionally, the Bureau has also determined that the project will have no effect to the gray wolf (*Canis lupus*), Idaho springsnail (*Pyrgulopsis idahoensis*), and slickspot peppergrass (*Lepidium papilliferum*). We acknowledge these determinations.

The Service notes that the yellow-billed cuckoo (*Coccyzus americanus*) was not discussed in the Assessment. The cuckoo is a candidate for listing, and was included on the county species list that the Service provided to the Bureau. Nesting has been described among the cottonwood and willow riparian areas of Lake Lowell (Kaltenecker, Beck, and Taylor 1999). We ask that the Bureau account for this species in future planning of projects in the Lake Lowell/Deer Flat area.

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Proposed Action

The Service acknowledges the Bureau's EA as the biological assessment (Assessment) for the proposed action. The Bureau proposes to correct safety deficiencies in the Deer Flat Upper Embankment Dam, located southwest of Nampa, Idaho. Activity components include the construction of a new permanent access road from the junction of Roosevelt and Indiana Avenues to the Deer Flat National Wildlife Refuge (Refuge) headquarters; sequenced adjustments of lake surface elevations; and the excavation, construction, and spoiling of materials to repair the embankment and the water control structures of the Upper Embankment Dam. These activities are scheduled in phases from approximately July 1, 2007 through May 1, 2008.

The Bureau has indicated on page 22 of the Assessment that the location, timing, and methodology of the proposed off-site sand and gravel excavation have yet to be determined. The effects of excavation activities have not been addressed by the Service in this memorandum. The Service requests that the Bureau complete their analysis of the off-site sand and gravel excavation prior to initiation of any construction activities. If the Bureau determines that the effects to listed species may change as a result of these activities, the Bureau should consider reinitiating consultation for the project.

Concurrence with Bureau Determinations

The Service concurs that the effects resulting from the proposed project are insignificant, and are not likely to adversely affect the bald eagle. Service concurrence with the Bureau's determination is based on the following rationales.

- 1. Construction is outside the buffer zones of all active bald eagle nest territories.
- 2. Bald eagle activities were monitored during emergency construction at the Upper Embankment Dam in 1991. Bald eagles did not appear to avoid the active construction, nor did they move to less disturbed areas. Perch habitats remained occupied at the Refuge headquarters (800 feet from the construction) before and during the construction activities.
- 3. Construction is visually buffered from the closest nest site by a low hill.
- 4. Construction is in an area that does not include concentrated winter roosts.
- 5. Pile driving is scheduled to avoid the breeding window for bald eagles and will only occur during daylight hours for 7 to 10 days.

Conservation Recommendations

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

 The Service recommends that the Bureau routinely observe bald eagle behavior during the construction period and document any behavioral modifications related to construction activities.

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2. The Service recommends that the Bureau implement the mitigation measures noted in the subsequent section. Implementation of the listed measures will add to our understanding of the health and function of the Lake Lowell ecosystem, and provide measurable enhancement to the associated fish and wildlife habitats, including those utilized by bald eagles.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification by the Bureau of the implementation of any of these conservation recommendations.

Conclusion

This concludes informal consultation under section 7 of the Act for the proposed Deer Flat Upper Embankment Safety of Dams project. If the project proposal addressed in this memorandum is modified, if environmental conditions change, or if additional information becomes available regarding the potential effects of the action on listed or proposed species, you should verify whether your determinations are still valid.

Comments and Recommendations on the Draft Environmental Assessment

Previous studies and analysis of activities at Lake Lowell have indicated that negative effects of summer and fall draw downs followed by subsequent refilling of the lake may be possible (Burch and King 2000; USFWS InLitt 1990; USFWS InLitt 1998). The following comments and recommendations are provided by the Service in accordance with the Fish and Wildlife Coordination Act, the Migratory Bird Treaty Act, and the National Environmental Policy Act. Please consider these recommendations during subsequent project mitigation planning and implementation.

DDT Exposure

The Service suggests that the Bureau implement measures to continue the ongoing efforts to understand DDT and its derivatives, and their impacts to fish and wildlife occupying Lake Lowell. Past studies of Lake Lowell have raised concerns regarding the presence of DDT and DDT derivatives in the lake bottom sediments (Burch and King 2000). The Lake Lowell portion of the Refuge receives regular use by migrating shorebirds, waterfowl, piscivorous wading and diving birds, and a wide array of avian and mammalian predators. The Service is concerned that the timing and level of the drawdown may concentrate specific groups of animals in habitats or with food sources that contain high levels of DDT and DDT derivative contamination. Therefore, the Service recommends the following to the Bureau.

- 1. Conduct systematic sediment sampling and analysis of Lake Lowell to determine the extent and concentration of DDT and DDT derivative contamination.
- 2. Evaluate the accessibility to areas of high DDT concentration by foraging shorebirds, waterfowl, and fish at various lake levels scenarios.
- Collect and analyze tissue samples (especially those parts that contain the largest amount of fats and oils) from fish, fish eating birds, and nesting waterfowl of Lake Lowell.

- 4. Determine whether or not DDT and DDT derivatives are bio-accumulating or bio-magnifying in the animals using Lake Lowell (U.S. Bureau of Reclamation 2005).
- 5. Conduct further studies of raptors and mammalian predators in the event that high concentrations of DDT are found in the tissue samples of fish, fish eating birds, and nesting waterfowl.

Mercury Exposure

The Service suggests that the Bureau continue the ongoing efforts to understand mercury concentrations and their impacts to fish and wildlife occupying Lake Lowell. Past reconnaissance studies of Lake Lowell have raised concerns regarding the presence of mercury in the water column (Burch and King 2000). Findings from these studies did not provide conclusive evidence as to the extent and concentrations of mercury in the lake system. Additional questions remain as to whether mercury concentrations, in the water column or as a precipitate to the lake bottom, shift in relation to algal respiration or pH changes resulting from algal and vegetative decomposition. The Service is concerned that water draw downs could concentrate animals into habitats, or with food sources, that contain harmful concentrations of available mercury. Therefore, the Service recommends the following to the Bureau.

- Collect and analyze twenty-four hour samples of the water column pH and monitor concurrent water column/lake bottom mercury concentrations (U.S. Bureau of Reclamation 2005).
- Collect and analyze fish tissue samples and determine whether or not harmful concentrations of mercury, especially methylated mercury, are present in these species.

Fish Die-Offs

The Service suggests that the Bureau work with the Idaho Department of Fish and Game to prepare a contingency plan to mitigate for any potential die-offs of fish that may result from the lake draw-down. The Service is concerned that proposed summer/fall drawdowns, combined with warmed shallow waters, high nutrient loads, algal bloom/die-off/decomposition, warmed sediments, and low dissolved oxygen, may lead to fish kills. A contingency plan would ensure that adequate fish stocks continue to be available for foraging species of piscivorous birds and mammals inhabiting the Refuge. The Service recommends that the Bureau make the necessary preparations to compensate for any potential fish die-off resulting from the proposed action.

Botulism Outbreaks

The Service suggests that the Bureau take necessary action to prevent potential outbreaks of botulism resulting from the proposed actions. Our records indicate that avian botulism outbreaks have occurred at Lake Lowell (USFWS InLitt 1990). These outbreaks have typically coincided with years of low summer/fall lake levels (<2,518 MSL). The botulism outbreaks are typically noticeable along the east side of the lake and south side of the New York Canal. The Service is concerned that proposed summer/fall drawdowns, combined with warmed shallow waters, high nutrient loads, algal bloom/die-off/decomposition, warmed sediments, and low dissolved oxygen, may lead to fish kills and trigger botulism outbreaks. The Service recommends that the Bureau provide daily cleanup and disposal of

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dead fish and animal carcasses along the waters edge of the lake to remove potential sources of botulism contaminated maggots (Friend and Franson 1999).

Nutrients and Bacterial Loading

The Service recommends that the Bureau continue to work cooperatively with the canal companies and adjacent landowners to improve fish and wildlife habitats by reducing the nutrient and bacterial loads received by Lake Lowell via irrigation return waters.

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Petroleum Exposure

The Service suggests that the Bureau protect fish and wildlife from exposure to petroleum products related to the use of heavy construction equipment. The Service recommends that the Bureau confine all fuel/lubricant storage and equipment refueling/staging tasks to areas where spills can be contained and are not be able reach surface and ground waters. Additionally, we recommend that the Bureau prepare and implement a spill response contingency plan and maintain the necessary containment and cleanup equipment at the work site.

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Introduced Species

The Service suggests that the Bureau incorporate measures to protect fish and wildlife habitats from conversion by exotic invasive species. We recommend that the Bureau implement an equipment cleaning and sanitation program to control the spread of exotic invasive species. Additionally, all exotic invasive species should be removed from proposed work and staging areas. The Service also requests that all disturbed areas be reestablished to native plant communities using seed and plant mixes that are compatible with current or future Refuge management objectives.

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Mosquito Transmitted West Nile Virus

West Nile virus has recently been reported from lands surrounding the project area. The Service recommends that the Bureau work with the Service, in coordination with the Refuge, to evaluate, and implement where consistent with management objectives, habitat improvements and structures that actively attract insect eating bats and birds to Lake Lowell. The Service is concerned that the proposed late summer/fall draw down of Lake Lowell may create pools of stagnant water, which could support the production of mosquito larvae. Birds and people at the Refuge can be exposed to the West Nile virus if bitten by an infected mosquito. Mosquito control with insecticide is one means of managing the risk of West Nile virus exposure. Unfortunately, non-species specific insecticides and larvicides can be harmful to people and the desirable insects/animals using the Refuge. Alternative means of effective mosquito control should be pursued at Lake Lowell whenever possible.

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Thank you for your continued interest in threatened and endangered species conservation. Please contact Bob Kibler of my staff at (208) 3798-5259 if you require additional information.

cc:

FWS-Deer Flat NWR, Nampa (Johnson) IDFG-SW Region, Nampa (Reinecker)

Literature Cited

- Burch S., King J. 2000. 1999 Lake Lowell water quality assessment, Deer Flat National Wildlife Refuge Planning Aid and Contaminants Study for U.S. Bureau of Reclamation, Snake River Area Office, Boise, Idaho 19 pp.
- Friend M., Franson J.C. Field manual of wildlife diseases, General field procedures and diseases of birds. U.S. Geological Survey Technical Report ITR 1999-001.

 Madison, Wisconsin. 440 pp.
- Kaltenecker G.S., Beck J.M., and Taylor D. 1999. Preliminary surveys of breeding birds, amphibians, reptiles, and resident mammals at Lake Lowell, Idaho, Spring/Summer 1998 Final Report. Prepared for the U.S. Fish and Wildlife Service Lower Snake River Field Office, Boise, Idaho. 12 pp. plus appendices.
- U.S. Bureau of Reclamation. 2005. Table A-1. Bald Eagle Conservation
 Recommendations. *In:* November 29, 2005 Decision Document concerning U.S.
 Fish and Wildlife Service Biological Opinion and Incidental Take Statement –
 Consultation for the Operations and Maintenance of 12 Bureau of Reclamation
 Projects in the Snake River Basin above Brownlee Reservoir March 2005. Pacific Northwest Region, Snake River Area, Boise, Idaho. Page 23.
- U.S. Fish and Wildlife Service InLitt. 1990. Deer Flat National Wildlife Refuge 1990 Disease Contingency Plan. Presented at June 25, 1990 Deer Flat Safety of Dams Project Meeting, Boise, Idaho.
- U.S. Fish and Wildlife Service InLitt. 1998. Planning Aid Memorandum prepared for the Bureau of Reclamation in response to a proposal to initiate a study of water quality of Lake Lowell. Boise, Idaho 13 pp.

Responses to USFWS Snake River Fish and Wildlife Office

Conservation Recommendations Under ESA

- 1. Bald Eagle Monitoring Reclamation does not plan to conduct a formal monitoring program to observe bald eagle behavior during construction, however we will maintain close communication with Refuge personnel regarding any behavior changes in bald eagles that they notice at or near the construction site. Any observation noted by Reclamation construction inspectors will be also noted. This would include avoidance of perching areas that are normally used, flushing of eagles from perching areas during various construction activities, and general absence or presence in and around the Upper Embankment. A report summarizing observations will be prepared by Reclamation and provided to USFWS.
- 2. Implement Mitigation Measures See responses to recommendations below.

<u>Comments and Recommendations in Accordance With Fish and Wildlife</u> Coordination Act, Migratory Bird Act, and NEPA

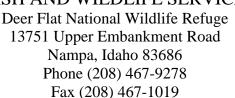
- 3. <u>DDT Exposure</u> We have not programmed funds to conduct any further DDT contamination studies at Lake Lowell. We would like to discuss the scope of these recommendations and priorities with USFWS prior to seeking funding for any further DDT work. We will be contacting you in the near future to arrange these discussions.
- 4. Mercury Exposure Reclamation is cooperating with the Idaho Department of Environmental Quality (DEQ) and Idaho Department of Fish and Game (IDFG), to conduct additional mercury studies associated with the development of a TMDL for Lake Lowell. These studies are scheduled to occur in late 2006 and will include the collection and analysis of fish tissue and water column samples for mercury as well water column pH. Reclamation does not anticipate collecting sediment samples, but we would like to discuss the scope of these recommendations further.
- 5. Fish Die Offs As indicated in Figure 7 on Page 11 of the Draft EA, the lake elevation required for construction would be lowest in September and October not the warmest months of the summer. During July and August the lake elevation would be fairly typical. As stated on Page 15, even the lowest lake levels during September and October are within the operating range of moderately dry years, and wind should adequately mix the shallower water to minimize oxygen poor areas. According to Refuge personnel, no significant fish die-offs have occurred during lake operation to even lower levels than what is proposed. Therefore, no contingency plan to acquire fish for restocking, except for normal annual stocking has been made. IDFG has annually stocked between 91,000 and 164,000 cutthroat fry and 6,000 and 13,000 channel catfish catchables the last three years, and it is expected that fish stocking would continue after completion of the project.

- 6. <u>Botulism Outbreaks</u> Refuge personnel have indicated that avian botulism has not been a problem in the past during similar or lower lake water levels than what is proposed. As stated above, significant fish kills have not occurred in the past nor are they expected to occur with the proposed lake operation.
- 7. Nutrients and Bacterial Loading The DEQ included Lake Lowell on their 2002 §303(d) list for excess nutrients and low dissolved oxygen. In response to this listing DEQ is currently developing a TMDL for nutrients, which will also address dissolved oxygen. The TMDL is scheduled to be completed in 2007. Reclamation is providing laboratory assistance to DEQ for TMDL related water quality monitoring, including nutrients. Following development of the TMDL, Reclamation intends to cooperate with DEQ to help develop an achievable TMDL implementation plan. It is anticipated that part of TMDL implementation will include strategies to reduce pollutant loading (nutrients, bacteria, and sediment) from all applicable sources.
- 8. <u>Petroleum Exposure</u> Reclamation's construction specifications will require stringent petroleum containment and spill prevention measures including approval of a Spill Prevention Control and Countermeasure Plan. Required measures will include containment berms, impermeable barriers, prohibition of underground storage, spill kits and training of personnel involved in fueling and servicing.
- 9. <u>Introduced Species</u> Reclamation will include language in the construction specifications requiring inspection and other measures to ensure aquatic invasive species are not introduced to Lake Lowell by equipment used in the water. It is not practical to inspect every vehicle used for construction on land, and there are several exotic invasive species already present in the construction area. However, Reclamation will assist the Refuge in control of any new noxious terrestrial weeds that may be introduced to the construction area during the next growing season following construction. Revegetation of disturbed areas will also help prevent the spread of invasive plants.
- 10. <u>Mosquito Transmitted West Nile Virus</u> At the water surface elevations proposed for construction, there would be no more stagnant pools than during normal operations. Stagnant areas are most prevalent at full pool when riparian vegetation is flooded. The low pool proposed for construction would be large open water areas subject to agitation by wind and not conducive to mosquito breeding. Reclamation is not involved in regular mosquito control on the Refuge. This is planned and controlled by Refuge personnel.

Attachment 2



United States Department of the Interior FISH AND WILDLIFE SERVICE



http://deerflat.fws.gov



TO: Area Manager, Snake River Area Office, Bureau of Reclamation

FROM: Refuge Manager, Deer Flat National Wildlife Refuge

SUBJECT: Comments on Draft Environmental Assessment, Deer Flat Dam Upper

Embankment Safety of Dams Project

Thank you for the opportunity to provide comments on this Draft EA. We have the following comments.

With the water level of Lake Lowell at 2518 feet elevation, the target for November 1 of the construction year, wintering waterfowl will have difficulty reaching all but the very edge of smartweed beds. Additionally, there will be little cover for waterfowl hunters. While we realize the construction will limit the water level that the Lake can be raised, the Refuge would like to see the Lake at the highest level possible.

As a clarification in section 3.5.1, the legislated purpose of Deer Flat National Wildlife Refuge is to provide a refuge and breeding grounds for migratory birds and other wildlife. The emphasis has been on wintering waterfowl.

The Snake River Fish and Wildlife Office has also provided comments and we concur with their comments and recommendations.

We will continue to work with the Bureau on this project and look forward to the Final EA and the completion of this project.

Please contact me, Elaine Johnson, at (208) 467-9278 if you need any further information.

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Responses to USFWS Deer Flat National Wildlife Refuge

- 1. As stated on page 11 of the Draft EA, the lake elevation would be at least 2518 if sufficient water in the Boise River and upstream reservoirs is available. Reclamation will work with the Boise Project Board of Control to provide an elevation higher than 2518 if water is available and icing conditions allow.
- 2. Comment noted.



Attachment 3

RECLAMATION AREA OFFICE BUISE, IDAHO
RECEIVED

CANYON HIGHWAY DISTRICT NO. 4

15435 HIGHWAY 44

CALDWELL, IDAHO 83607

CanyonH4@AOL.COM

TELEPHONE 208/454-8135

FAX 208/ 454-2008

AUD -3 06

Mr. Steve Dunn Bureau of Reclamation Snake River Area Office 230 Collins Road Boise, ID 83702

Re: Intersection at Indiana Avenue and Roosevelt Avenue

Dear Mr. Dunn:

I have a concern with the signage to be placed at the Indiana and Roosevelt Avenue intersection, where the new road to the refuge headquarters is going to be constructed. I ask that you work with our District Engineer on this project.

I also have a concern that the roads to be used for hauling rock to this project, will not be able to handle the additional heavy traffic. I'm afraid the trucks will break up the asphalt. Please contact me to discuss plans for the project, so we can work together.

Thank you.

Casey Bequeath

Director

Sincerely.

CB/jl

Class BOT

Project 1978

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FLDR # 5077

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Response to Canyon Highway District No 4.

- 1. Reclamation will work closely with Canyon Highway District No. 4 (District) to ensure that adequate signage is placed at the Indiana and Roosevelt intersection and in all other transportation-related aspects within the District.
- 2. Haul routes are designed to minimize heavy truck traffic over District paved roads. Reclamation will contact the District to discuss haul routes prior to designating these routes for the contractor.