

# East Canyon Reservoir Water Intake Structure Final Environmental Assessment and Finding of No Significant Impact

PRO-EA-08-003  
PRO-FONSI-08-004

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**U.S. Department of the Interior  
Bureau of Reclamation  
Provo Area Office  
Provo, Utah**

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**PRO-FONSI-08-004**

**FINDING OF NO SIGNIFICANT IMPACT**

**East Canyon Reservoir Water Intake Structure Environmental Assessment  
Weber Basin Project  
Morgan County, Utah**


**United States Department of the Interior  
Bureau of Reclamation  
Upper Colorado Region  
Provo Area Office  
Provo, Utah**

Recommended by:

  
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9/2/09  
Date

Concur:

  
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9/2/09  
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Approved by:

  
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Bruce C. Barrett  
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9/2/09  
Date

## **Finding**

The Bureau of Reclamation has determined that authorizing Summit Water Distribution Company (SWDC) to construct a Lake Tap water intake structure at East Canyon Reservoir will not have a significant impact on the quality of the human environment, and that an environmental impact statement is not required. This decision was based on a thorough review of public comments received during the public review process and the environmental effects of alternatives described in Chapter 3 of the East Canyon Reservoir Water Intake Structure Environmental Assessment (EA). This decision is in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508), and the Department of the Interior regulations for implementation of NEPA, 43 CFR Part 46.

## **Decision**

Reclamation has decided to authorize SWDC to construct the proposed Lake Tap water intake structure at East Canyon Reservoir. All authorizations or permits (Section 1.4 of the EA) and environmental commitments (below) will be strictly implemented by SWDC. All agreements will be signed by parties involved and submitted to Reclamation for review prior to any surface disturbance or construction activities on private and Federal lands.

The water intake structure will be constructed on the west side of the reservoir, and the necessary pumping station, pipelines, powerline, substation, and booster pump station will be constructed in order to convey water to an existing 30-inch pipeline built by SWDC to the existing Jeremy Ranch water treatment plant. Up to 12,500 acre-feet per year will be delivered via this pipeline to Park City/Snyderville Basin area. Of this water to be developed, 5,000 acre-feet will come from a long-term lease agreement with Davis and Weber Counties Canal Company (DWCCC), approximately 2,000 acre-feet will come from existing shares held by SWDC, and 5,500 acre-feet could come from additional water acquisitions from the Weber Basin Project or DWCCC. In addition to the 12,500 acre-feet of project water, SWDC will voluntarily dedicate 2 cfs of the pipe capacity for non-consumptive water deliveries to help improve the East Canyon Creek fishery.

Lake Tap water intake construction will involve a large diameter vertical shaft that is connected to East Canyon Reservoir with a lateral (horizontal) tunnel. The preferred location for the Lake Tap structure is approximately 1/3 mile south of East Canyon Dam on the West Side bank of the reservoir. The lake tap structure will consist of a 15 to 20 foot diameter vertical shaft drilled at the edge of the reservoir roughly 160 feet deep. The lateral tunnel will be drilled at the bottom of the vertical shaft due east into the bottom of the reservoir. A 48-inch pipe will be extended through the lateral tunnel into the reservoir.

In order to obtain a consistent supply of water, the intake will be placed at elevation 5,565 feet which corresponds to half a foot above the top of dead pool and 12 feet below the top of inactive storage. The intake will be screened and a minimum of 15 feet off the reservoir bottom. No riparian habitat will be permanently displaced as a result of the project. Approximately 4.9 acres

of upland habitat will be permanently displaced to install the structures.

## **Reasons for the Decision**

A finding of no significant impact is based on the following:

1. The proposed action will have no adverse effect on such unique characteristics as cultural resources, wilderness areas, wetlands, and riparian areas.
2. The environmental effects of the proposed action are neither controversial nor do they involve unique or unknown risks.
3. The proposed action will have no adverse effect on species either currently listed or proposed for listing as candidate, endangered, or threatened species, and no adverse effect on designated critical habitat for these species.
4. The proposed action does not threaten to violate Federal, state, or local laws or requirements imposed for protection of the environment.

Reclamation has analyzed the environmental effects, public comments, and the alternatives in detail and believes that the preferred action alternative best meets the purpose and need described in the EA.

## **Public Involvement**

Preparation of the EA included public involvement activities throughout the planning process. The public scoping process, to contact and solicit comments from interested parties, was initiated in June 3, 2008, with a scoping letter mailed to over 100 municipalities, organizations or agencies considered to have an interest in the proposed action. The draft EA was sent to over 70 municipalities, organizations and agencies (who indicated during scoping that they would, like to remain on the list) and was made available on the internet for a 30-day public review period. During the 30-day comment period a public meeting was held in Morgan, Utah, on January 13, 2009, to present a summary of the proposed action and answer questions, as well as receive written comments. Reclamation received nine comment letters on the draft EA.

All comments received were reviewed and considered in preparing the final EA. Revisions to the draft EA were made as appropriate in response to comments. The project file in the Provo Area Office contains the comment letters and documentation on how comments were considered, as well as a complete description of all public involvement activities.

## **Summary of Environmental Impacts**

The expected environmental effects of the preferred action alternative are described in Chapter 3 of the EA. The environmental analysis is directed toward impacts to water resources; Weber Basin Project operations; respective water rights; water quality; public safety, access, and transportation; recreation; visual resources; socioeconomics; cultural resources; paleontological resources; wetlands and vegetation; wildlife resources; and threatened, endangered and sensitive

species. The environmental analysis indicates that the impacts will be temporary, short-term, and insignificant.

## **Environmental Commitments**

Reclamation is obligated to ensure fulfillment of the environmental commitments prescribed to mitigate or eliminate impacts resulting from implementation of the preferred action alternative, described below and in Chapter 4 of the EA. These environmental commitments will be implemented as an integral part of the proposed action. The implementation and effectiveness of these environmental commitments will be closely monitored by Reclamation. This monitoring will ensure incorporation of mitigation requirements in all construction contract specifications, as appropriate, and compliance with environmental commitments required by Reclamation.

1. Standard Best Management Practices (BMPs)--Applicable State, County, and/or Standard Reclamation BMPs will be applied during construction activities to minimize environmental effects, reduce disturbance and mobilization of soils and sediments. These practices will be implemented by SWDC. Such practices or specifications include report on public safety, dust abatement, air pollution, noise abatement, water pollution abatement, waste material disposal, erosion control, archaeological and historical resources, vegetation, and wildlife.

Following construction, the affected area will be restored to its prior condition as much as practical, and monitored for 10 years to assure recovery of the area. Disturbed sediments in the reservoir will be monitored in the water column with a turbidity meter prior to, during and following construction of the intake. Initial operation of the intake will not begin until turbidity in the withdrawal zone of the intake has returned to preconstruction levels, with an increase of no more than 10 nephelometric turbidity units (NTU).

2. Additional Analyses--If the proposed action were to change significantly from that described in the EA because of additional or new information, such as drawing down the reservoir to low levels (beyond normal operations), or if other spoil, gravel pit, or work areas are required outside the project area as analyzed in this EA, additional environmental analysis including cultural and paleontological analyses will be conducted by Reclamation as necessary.
3. Before beginning construction activities, SWDC will obtain from the U.S. Army Corps of Engineers, a 404 Permit, Clean Water Act of 1977 (P.L. 217), and from the Department of Natural Resources, a State Stream Alteration Permit. These permits will include discharges of dredged or fill material into the waters of the United States, including wetlands. Such activities associated with this project could include cofferdams, disposal sites for excavated material or construction material sources, and rebuilding dam embankments. The conditions and requirements of the 404 Permit will be strictly adhered to SWDC. SWDC will fully mitigate any loss of jurisdictional wetland with appropriate in-basin, in-kind mitigation as determined in

consultation with the U.S. Army Corps of Engineers and the State of Utah, and as required for obtaining a Corps 404 Permit and a State Stream Alteration Permit.

4. A Utah Pollutant Discharge Elimination System Permit will be obtained by SWDC from the State of Utah before any discharges of water, if such water is to be discharged as a point source into East Canyon Reservoir or East Canyon Creek above and below the dam. Appropriate measures will be taken to ensure that construction-related sediments will not enter the stream either during or after construction. Construction within or near streams will be restricted from occurring during trout spawning periods.
5. A Water Quality Certification and a Storm Water Discharge Permit will be obtained by SWDC if required--Under authority of the Clean Water Act; construction permits will be required from the Utah Division of Water Quality a Section 401 Water Quality Certification and a Section 402 Storm Water Discharge Permit.
6. Water Quality Monitoring--The Weber Basin Water Conservancy District (WBWCD) has a well defined, ongoing water quality monitoring program of the Weber River system, which includes an assessment of water quality conditions and trends upstream and downstream of East Canyon Reservoir. The Utah Division of Water Quality also has an ongoing monitoring program on East Canyon Creek and East Canyon Reservoir to determine if their TMDL targets are being met. Monitoring done prior to implementation of the proposed action will represent baseline water quality conditions. If monitoring identifies adverse water quality impacts resulting from implementation of the proposed action when compared to baseline conditions, SWDC will take appropriate steps to offset and mitigate project impacts.
7. Cultural Resources-- Any person who knows or has reason to know that he/she has inadvertently discovered possible human remains on Federal land, he/she must provide immediate telephone notification of the discovery to Reclamation's Provo Area Office archaeologist. Work will stop until the proper authorities are able to assess the situation onsite. This action will promptly be followed by written confirmation to the responsible Federal agency official, with respect to Federal lands, and, with respect to tribal lands, to the responsible Indian tribe official. The Utah State Historic Preservation Office and Native American tribal representatives will be promptly notified by the Provo Area Office archaeologist. Consultation will begin immediately. This requirement is prescribed under the Native American Graves Protection and Repatriation Act of 1990 (43 CFR Part 10); the National Historic Preservation Act of 1966 (36 CFR 800); and the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470).

The above process is listed on a "yellow card," to be placed in the cabs of heavy equipment used during construction of the proposed project. This card will be distributed to the equipment operators and verbal direction and description of possible inadvertent discovery scenarios will be given at a preconstruction meeting

by the Provo Area Office archaeologist prior to any ground-disturbing activity.

8. Construction Activities Confined to Previously Disturbed Areas--Construction activities will be confined to previously disturbed areas, to the extent practicable, for such activities as work, staging, and storage; gravel pit; waste areas; and vehicle and equipment parking areas. Concrete trucks will be cleaned at a predetermined area approved in advance by Reclamation.
9. Riparian Area—Construction activities will avoid the riparian area located on Figure 2.1B, and any other areas identified by the U.S. Army Corps of Engineers and Reclamation biologist as high functional value wetlands and important wildlife habitat (three areas have been flagged with blue flagging). All work in this area will only occur in upland areas or preferably in the existing road and berm at these sites. Prior to construction activities, a Provo Area Office biologist and project construction personnel will meet on-site and identify areas to be avoided. Any riparian area that does not revegetate appropriately as expected will be mitigated by SWDC. Removal of cottonwood trees and snags will be avoided.
10. Construction Activities--All winter construction activities occurring within ½ mile of any bald eagle roost site will be restricted to hours between 9:00 a.m. and 4:00 p.m. from November 1<sup>st</sup> to March 31<sup>st</sup> and into April, if necessary, until all bald eagles have left the area.
11. Immediately prior to any vegetation removal, the area will be surveyed by Reclamation, Provo Area Office biologist to determine whether active migratory bird nests and young are present. Active nests must be left untouched until the young have fledged.
12. Greater sage-grouse are present within the project area. The proposed construction of an above ground power line will likely increase the available perching sites for raptors and ravens which prey on these birds. Therefore, all power poles should be constructed with raptor and raven perch and nest-deterrent devices. Sage-grouse accomplish breeding and brood rearing activities from March through June. If sage-grouse leks (breeding areas) are found near the project area prior to or during construction, construction activities will be avoided during this time period.
13. Fish Flow--SWDC has entered into an agreement with the Utah Division of Wildlife Resources (UDWR) as part of the proposed action. The agreement contains measures designed to protect and enhance fishery values in East Canyon Creek set by the UDWR at achieving minimum stream flows above the Reservoir in East Canyon Creek of 6.0 cfs. Under the agreement, SWDC is contractually committed to respect minimum stream flows in East Canyon Creek by ceasing all surface diversions under vested water rights when flows in the creek are at or below 6.0 cfs. The agreement also provides for use of 2 cfs of the pipeline capacity to deliver non-consumptive water rights held by UDWR to augment the natural stream flow in East Canyon Creek to maintain the fishery in the creek during periods of





critical low flow. The effect of such release will be to augment existing low flows and lower water temperatures for the affected reaches of the creek. Prior to delivery of 2 cfs to East Canyon Creek packed column degassing structures are to be installed and operated by UDWR. A monitoring plan will be developed and implemented by UDWR which will monitor water quality and photo-document aquatic habitat in reaches where the 2 cfs is delivered to East Canyon Creek. The Utah Division of Water Quality (UDWQ) is to be consulted in the development of this plan.

14. Entrainment of reservoir fish-- The water intake structure will be designed as not to entrain fish. The intake will be located a minimum of 15 feet above the reservoir bottom. The velocity of water passing through the intake screen will not exceed 0.5 feet per second (fps) during the maximum flow rate.
15. Pump Station Design--The pump station and other permanent structures will be designed to blend in with the existing environment. The new pump station will be designed to reflect the traditions of historic architecture in the area. The pump station design plans must be reviewed and approved by WBWCD and Reclamation prior to construction.
16. Public Access--Construction sites will be closed to public access. Temporary fencing, along with signs, will be installed to prevent public access. WBWCD and SWDC will coordinate with landowners or those holding special permits and other authorized parties regarding access to or through the project area.
17. Private land authorization and agreements for the entire project must be obtained by SWDC prior to any surface disturbance to construct facilities on Federal lands. All environmental commitments will be strictly adhered to by SWDC, coordinating with Reclamation and WBWCD as appropriate. Copies of all agreements and permits necessary for the project must be submitted to Reclamation prior to project initiation.
18. Disturbed Areas--All areas disturbed by construction of the project will be smoothed, shaped, seeded, contoured, and rehabilitated to as near their pre-project construction condition as practicable. After completion of the construction and restoration activities, disturbed areas will be seeded at appropriate times with weed-free native seed mixes with an appropriate complement of forb species. The composition of seed mixes and seeding methodology will be coordinated and approved by Reclamation biologists prior to seeding. Weed control on all disturbed areas, rights of way, and all project features will be the responsibility of SWDC during the life of the project.
19. Nonpoint source reduction-- SWDC will inform and educate its water users and customers concerning nonpoint source pollution and the importance of maintaining and improving water quality within the watershed through annual newsletters and other methods.