## Chapter 4 - Environmental Commitments

The following environmental commitments will be implemented as an integral part of the proposed action.

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 nephlometric 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 as necessary.
- 3. Before beginning construction activities, SWDC will obtain from the USACE, 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 USACE 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 DWQ a Section 401 Water Quality Certification and a Section 402 Storm Water Discharge Permit.
- 6. Water Quality Monitoring--The 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 DWQ 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 archeologist. 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 USACE 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 (determined by Reclamation biologist) 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 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 will 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 powerline 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 constriction, construction activities will be avoided during this time period.

- 13. Fish Flow--SWDC has entered into an agreement with the 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 DWQ 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