

March 17, 2006

Dear Reader:

The Draft 2005 Annual Report for the Utah Reclamation Mitigation and Conservation Commission is available for your review and comment on the Commission's website at <http://www.mitigationcommission.gov>.

The Draft Annual Report describes project progress through September 30, 2005, including updated financial information in Appendix A, Financial Supplement. The final 2005 Annual Report will be released to the general public around June 1, 2006, and will provide the basis for development of the Commission's 2006 Mitigation Plan.

For comparison purposes, the 2004 Annual Report will remain available on the website as part of the 2005 Mitigation Plan. It can be downloaded by clicking on the "Mitigation Plan" link on the web page referenced above. Printed copies of these reports can be made available after March 31; however it is our hope that the review and publication processes can be completed primarily through electronic communication.

Please provide any comments no later than May 1, 2006, to Diane Simmons at urmcc@uc.usbr.gov or by regular mail at the Commission's mailing address at 102 West 500 South, Suite 315, Salt Lake City, UT, 84101.

Thank you for your consideration.

Sincerely,



Michael C. Weland
Executive Director

Draft Annual Report 2005



UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

The Utah Reclamation Mitigation &
Conservation Commission

Draft Annual Report
2005

Table of Contents

Introduction	iii
Provo River/Utah Lake Watershed	1
Acquisition of Instream Flows and High Flow Study	1
June Sucker Recovery	2
Stream Restoration	3
Diversion Dam Modifications	3
Public Access and Facilities Development	4
Water Quality Improvements	4
WCWEP & Daniels Replacement Pipeline.....	4
Provo River Restoration Project.....	5
Angler Access and Facilities Development.....	5
Fish and Riparian Habitat Restoration	5
Highway-Related Deer Mortality Reduction	6
Upper Provo River Reservoir Stabilization.....	6
Washington Lake Campground.....	7
Utah Lake Fish Management	7
Utah Lake Wetland Preserve.....	7
Utah Lake Drainage Basin Mitigation Commitments.....	8
Utah Lake Recreation Facilities	9
Big Game Crossings/Terrestrial Habitat Conservation	9
Diamond Fork Watershed	11
Diamond Fork Area Assessment.....	11
Aquatic and Riparian Habitat Restoration-Sixth Water	11
Aquatic and Riparian Habitat Restoration-Diamond Fork.....	11
Water Temperature Study	12
Recreation Facilities in Diamond Fork	12
Diamond Fork Campground.....	13
Acquisition of Angler Access.....	14
Diamond Fork System Mitigation.....	14
Strawberry/Duchesne Watershed	15
Angler Access and Related Facilities.....	15
Uinta Basin Replacement Project Mitigation.....	15
Duchesne River Area Canal Mitigation	16
Strawberry Aqueduct & Collection System Wetland Mitigation	17
Fishery and Aquatic Resources Management.....	18

Strawberry/Duchesne Watershed cont.

Strawberry Area Assessment, Watershed & Wildlife Habitat Restoration 18
Sage Grouse Conservation and Recovery 19
Wildlife Habitat Acquisition 19
Reduced Flow Study/Instream Flow Management 20
Modify Diversion Structures 20
Recreation Improvements 21
Fish Habitat Improvements Program 21
Watershed Stabilization, Wildlife Enhancement & Access Management 22

Great Salt Lake Watershed 23

Great Salt Lake Wetlands Acquisition 23
Restoration of Agency Management Areas 24
Restoration & Management of Commission-Acquired Properties 24
Wetland Preservation Strategies 24

Jordan River Watershed 27

Jordan River Wetland Acquisition 27
Restoration and Management of Natural Areas 28
Support Jordan River Natural Areas Management Planning 29
Albion Basin Acquisitions 30

Table 1. Jordan River Funding Reallocation 30

Statewide Program 31

Fish Hatchery Restoration and Construction 31
Sensitive Species Inventory & Database 32
Stream and Riparian Restoration Enhancement 33
Small Watershed and Small Dam Improvements 33
Native Cutthroat Trout Restoration 34
Wetlands Ecosystem Education Plan (WEEP) 34
Native Fish Studies 35

Appendix A Financial Supplement: Fiscal Year 2005

Appendix B List of Acronyms

Introduction

Welcome to the draft 2005 Annual Report of the Utah Reclamation Mitigation and Conservation Commission. The Utah Reclamation Mitigation and Conservation Commission (the Commission) was authorized under the Central Utah Project Completion Act of 1992 (CUPCA). That law set terms and conditions for completing the Central Utah Project (CUP), which diverts, stores and delivers large quantities of water from numerous Utah rivers in the Colorado and Bonneville basins to help meet ever-increasing needs of Utah's citizens.

The Commission, organized in July 1994 as an agency in the executive branch of the Federal government, is charged with planning, coordinating and funding implementation of the environmental mitigation and conservation program mandated by CUPCA. CUPCA requires the Commission to implement its mitigation program concurrently with completion of CUP water development features.

The Commission focuses on riparian, wetland and other wildlife habitat restoration in several key watersheds in central Utah. These watersheds are the Provo River/Utah Lake, Strawberry/Duchesne, Diamond Fork and Great Salt Lake watersheds. The Commission may also implement a few projects throughout the state that address conservation or restoration of fish and wildlife resources lost to CUP.

In accordance with CUPCA, the Commission adopts a comprehensive plan that establishes its program priorities for a five-year period. The plan must undergo a comprehensive review every five years to ensure statutory mitigation requirements are met. The first Mitigation and Conservation Plan was adopted in 1996 and a comprehensive revision was conducted in 2001. The next comprehensive review is scheduled for 2006.

This document contains a report of project progress through September 2005. As such, this document includes highlights of the Commission's accomplishments during fiscal year 2005, and briefly introduces a few proposed program and project changes that will be addressed in the 2006 Plan. Appendix A provides financial information through September 30, 2005 for fiscal year 2005.


CUPCA directs the Commission to focus on four key factors to implement its Plan: an ecosystem approach, public involvement, measures based on best available scientific knowledge, and partnerships. Projects are carried out through contracts and agreements with local, State and Federal natural resources agencies, Tribal governments, universities, and nonprofit organizations in Utah. The Commission is authorized to spend approximately \$170 million (1991 dollars) (somewhat less than 10% of the approximately \$2 billion authorized for the CUP) to carry out the mitigation program. Annual funding depends on congressional appropriations.

This draft Annual Report, as well as many of the studies and decisions referenced in this document, are available on the Commission's website at www.mitigationcommission.gov.

The following is organized into watersheds primarily affected by the Bonneville Unit of the Central Utah Project. Listed program elements represent specific actions the Commission has taken since 1994 (when the Commission was created) to meet CUPCA mitigation obligations.

Provo River/Utah Lake Watershed

Lower Provo River

-  **Acquisition of Instream Flows and High Flow Study** Acquire and provide additional instream flows in the lower Provo River; study problems of high flows in the river.

Implementation to Date & Future Actions The Commission is working with the Central Utah Water Conservancy District (CUWCD) to acquire water rights in the lower Provo River. To date the CUWCD and Commission have acquired about 3,300 acre feet of water. A change application was filed that allows just over 1,000 acre feet to be used for instream flow purposes. This was accomplished during 2002.

Change applications¹ have not yet been filed on the other lower Provo River shares, so additional instream flows have therefore not been realized. Given competing demands and increased cost of water since passage of CUPCA, it is unlikely that funding authorized for purchasing water will be sufficient to fulfill the statutory goal of establishing a 75 cfs instream flow. Since 1994, the Commission and District have endeavored to acquire water and water rights; but, to date only approximately 3,300 acre-feet have been acquired from willing sellers. No additional water or water rights were acquired in 2005.


Recognizing the increasing cost and decreasing availability of water rights on the willing seller market to achieve this objective, the Commission believes that providing minimum instream flows of 75 cfs will not be achievable solely through purchase of water rights. The Commission, CUWCD and Department of the Interior have therefore incorporated the objective of providing minimum instream flows of 75 cfs into the planning for the Utah Lake Drainage Basin Water Delivery System (ULS). The ULS Final Environmental Impact Statement (EIS) was issued September 30, 2004. Records of Decision were issued December 22, 2004 and January 27, 2005. Constructing and operating the ULS Proposed Action will provide an average of 16,000 acre-feet of supplemental water annually to be delivered to Utah Lake via the lower Provo River and will help accomplish the goal of providing a 75 cfs minimum instream flow in the lower Provo River.²

¹The water has been acquired through the purchase of shares in several mutual water companies. Changing the use of this water from irrigation to instream flows requires approval by the water company. This approval has not yet been obtained on most of the shares acquired from various canal companies and is under negotiation.

²ULS will provide supplemental water for the lower Provo River in years when water is conveyed from Strawberry Reservoir to Utah Lake for purposes of making the CUP exchange to Jordanelle Reservoir, as part of the Municipal and Industrial System. This supplemental flow supply would be available in about 70% of the years. More information is available on the supplemental flow pattern in the Bonneville Unit Definite Plan Report 2004 Supplement, Water Supply Appendix, Volume 5, Chapter 6, Table P-8b-ii.

The Commission will contribute \$15 million of (fiscal year 2005) authorization under Section 302(a) of CUPCA, plus additional funds to be allocated under Section 202(c) of CUPCA, toward payment of the proportionate share of the cost of those specific ULS facilities used to deliver instream flow water. Approximately \$2.1 million of authorization will remain available for purchase of water rights, if they become available.

Regarding the *high flow study*, in 2004 the Commission and CUWCD completed the first phase of a comprehensive study to determine relationships among flow levels and aquatic habitat and other geomorphic and ecological functions on the Provo River System. The study area extends from Jordanelle Dam downstream to Utah Lake. Data developed from the study will be used to assess CUP operation effects on aquatic habitats. Study results were used in the National Environmental Policy Act (NEPA) analysis to assess potential impacts of ULS alternatives. No additional work was performed in 2005.

 **June Sucker Recovery** Support development of the June Sucker Recovery Implementation Program and help fund implementation of the June Sucker Recovery Plan. Develop an education program that focuses on the June sucker.

Implementation to Date & Future Actions In 1995, the Commission funded the U.S. Bureau of Reclamation to conduct studies required under the U.S. Fish and Wildlife Service's 1994 Biological Opinion.³ In 1996 and 1997, the Commission cost-shared with the U.S. Bureau of Reclamation, U.S. Department of the Interior, Central Utah Water Conservancy District and Provo River Water Users Association for the second and third year of studies. The Commission contributed \$166,000 toward completion of those studies.

Additionally, studies funded under the Commission's Utah Lake Fish Management program element are primarily directed at June sucker. In May, 1994 the Commission signed its first agreement with the Utah Division of Wildlife Resources to fund such studies.

The Commission participated with the June Sucker Flow Workgroup to redraft the June Sucker Recovery Plan, for which a final document was approved by the U.S. Fish and Wildlife Service in June 1999. The Commission is also a significant partner and participant in the June Sucker Recovery Implementation Program (JSRIP).⁴ In its 1999 Record of Decision for the Diamond Fork System, the Commission and other joint lead agencies committed to support development and implementation of such a program.

³This Biological Opinion was required in partial fulfillment of the environmental review process for the Deer Creek Reservoir/Jordanelle Reservoir Operating Agreement. The U.S. Fish and Wildlife Service issued a Biological Opinion on the Provo River Project in 1994 under authority of the Endangered Species Act. The Biological Opinion found that operation of the Provo River Project may jeopardize continued existence of the June sucker. A reasonable and prudent alternative was identified for the Provo River Project. The alternative required the Federal government to provide minimum instream flows during a 3-year period and to complete studies during the 3-year period to define various flow-related aspects of June sucker life history requirements and habitat needs.

⁴The Recovery Implementation Program is expected to provide 1) identification of all threats to June sucker, not just Provo River spawning and nursery flows; 2) reasonable certainty of meeting the goals for participants; and, 3) shared recovery by all stakeholders. Participants include the U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, Mitigation Commission, Utah Department of Natural Resources, Central Utah Water Conservancy District, Provo River Water Users Association, Provo Reservoir Water Users Company, and an environmental/outdoor interests representative.

The JSRIP is ongoing. The Commission has contributed an estimated \$1,330,000 directly to the JSRIP program toward recovery of the June sucker. The Commission's funds have been used primarily for June sucker brood stock development and management.

Several other Commission program elements support restoration of habitats and otherwise contribute to programs that also may benefit June sucker recovery. To date, the Commission has committed about \$7,000,000 to these other programs. See sections of this report discussing the following program elements: *Acquisition of Instream Flows and High Flow Study*; *Utah Lake Fish Management*; *Stream Restoration and Diversion Dam Modification*; and *Fish Hatchery Restoration and Construction*.

Stream Restoration Plan and implement stream restoration projects along the lower Provo River.

Implementation to Date & Future Actions Lower Provo River stream restoration is part of the June Sucker Recovery Plan. A study of potential habitat improvement alternatives, initiated under the June Sucker Recovery Implementation Program, was completed in 2002. Additional studies are ongoing to determine feasibility of habitat alterations in the lower Provo River for June sucker spawning, incubation and rearing.

In its 2005 Plan, the Commission announced its intent to reprioritize and commit funds and staff resources to the analysis, planning and implementation of potential projects to restore habitat in the lower Provo River in close coordination with the JSRIP over the next five years. This has been implemented. Part of this effort is to acquire lands needed for restoration of spawning tributaries for the June sucker. The Commission initiated preliminary title work, appraisals, and negotiations for several parcels in 2005 adjacent to or including potential spawning tributaries. Negotiations to acquire needed lands are expected to be complete early in 2006.




June sucker habitat re-establishment project area map showing study area reach designations. Source: "June Sucker Habitat Enhancement Alternatives in the Lower Provo River and its Interface with Utah Lake Final Report, June 2002"


Diversion Dam Modifications Plan and implement diversion dam modifications along the lower Provo River.

Implementation to Date & Future Actions A study to evaluate diversion dams on the lower Provo River for potential modification was completed in 2002, and the report is available from the Commission. No diversions have yet been modified, but planning began in 2004 on a

project that will modify or remove the Fort Fields Diversion structure located in the reach designated as critical habitat for the June sucker on the lower Provo River. NEPA analysis is expected to be complete in 2006. In 2005, the Commission developed a partnership with the Central Utah Water Conservancy District and Department of the Interior to rehabilitate, modify or replace other diversion structures on the Provo River downstream of Murdock Dam. Planning began in 2005, with NEPA scheduled to begin in 2006. On the ground work is anticipated late in 2006.


 **Public Access and Facilities Development** Acquire and/or develop and improve public access and facilities along the lower Provo.

Implementation to Date & Future Actions Funds were obligated in 2005 for appraisals and land acquisition. The Commission will implement this element in concert with the *Stream Restoration* and *June Sucker Recovery* program elements in the lower Provo River watershed to support an integrated approach to habitat restoration and public access.

 **Water Quality Improvements** Implement water quality improvement measures along the lower Provo River.

Implementation to Date & Future Actions Water quality measures on the lower Provo River, affected by the operation of the hydroelectric plant on Deer Creek Reservoir, were put in effect in 2003. Measures included entrainment of additional air into releases through hydroelectric turbines in the dam outlet to increase dissolved oxygen concentrations in discharged water. This measure is ongoing annually by dam operators.

Middle Provo

 **WCWEP and Daniels Replacement Pipeline** Implement Wasatch County Water Efficiency Project (WCWEP) and the Daniels Replacement Pipeline Project, which will restore stream flows in 26 miles of streams in the Strawberry Valley.


Implementation to Date & Future Actions CUPCA authorized construction of this project by the Central Utah Water Conservancy District, in cooperation with Department of the Interior, Daniels Irrigation Company and Wasatch County Special Service Area No. 1. Under CUPCA, the Commission was authorized to contribute funds, which had also been authorized for the Commission to acquire water rights in the Daniels area for constructing WCWEP, if WCWEP and Daniels Replacement Pipeline Projects were integrated. The Final Environmental Impact Statement for the WCWEP and Daniels Replacement Pipeline Project was issued November 22, 1996. The Commission and Department of the Interior each issued records of decision in March 1997 that integrated the two projects.

An agreement between the Commission and the District was signed in March 1997, in which the District agreed to assume all responsibility for construction, operation, maintenance and repair of the project, thus relieving the Commission of liability for long-term operation and

maintenance of the Daniels Replacement Pipeline, the project feature that allows for stream mitigation to occur in the upper Strawberry River system.


The District entered into contracts for WCWEP construction in 1998 and work was completed in 2001. Streamflows were restored to the upper Strawberry River and tributaries in 2001 and 2002. The Commission assisted the District in dam removal and wetland creation from formerly-used irrigation reservoirs in the upper Strawberry River drainage in 2002. Rehabilitation of removed portions of the canals and headcuts created during the 100+ years of Daniels Diversion operation was completed in 2003. This project achieved 9,225 out of the required 34,090 mitigation credits (27%) for the Strawberry Aqueduct and Collection System Aquatic Mitigation Plan.

Provo River Restoration Project

 **Angler Access and Facilities Development** Complete angler access requirements along the middle Provo River as part of the Provo River Restoration Project (PRRP). Develop and implement plans for angler access and similar recreational facilities in partnership with concerned entities along the middle Provo River.

Implementation to Date & Future Actions Acquisition of angler access and property for the PRRP has been underway for several years. The Bureau of Reclamation and Commission have purchased about 95 percent of the acreage needed; the U.S. Bureau of Reclamation had previously acquired about 200 acres. Public access is available to about 10 miles along the river; access is still needed along less than one mile. The Commission will use authorization of CUPCA Section 309(a)(4) as needed to complete acquisitions for the PRRP.

Access to the middle Provo River corridor will be provided from seven angler-access parking areas. Six of the seven sites have been constructed and the last site is scheduled for construction in 2006. All of the angler-access parking areas include restrooms, trash pickup and information displays, and two or three sites will include accessible fishing platforms. The Education and Interpretation program element will be completed in 2006 with construction of two additional display kiosks (three total).

 **Fish and Riparian Habitat Restoration** Restore riparian and fish habitat along the middle Provo River in accordance with the Riverine Habitat Restoration Alternative described in the PRRP Record of Decision. Additionally, modify diversion dams to bypass instream flows and cooperate with the U.S. Bureau of Reclamation to complete wetland mitigation measures for the Municipal and Industrial System.

Implementation to Date & Future Actions The Final Environmental Impact Statement for the PRRP was issued in December 1997 and a Record of Decision was signed by the Commission on February 23, 1998. Department of the Interior issued its Record of Decision on April 1, 1998. The Riverine Habitat Restoration Alternative (the Proposed Action) was selected.

Baseline monitoring of riparian habitat, physical features, sensitive species, neotropical migratory birds, and related studies are underway. Construction of a pilot project upstream of



May 2005 runoff flows through a middle Provo River section restored downstream of Midway Lane in Midway, Utah. Photo by Tyler Allred.

the new Highway 40 river crossing was completed in 1999. The pilot project reconstructed about a mile of main Provo River channel, 2 miles of secondary channel, and numerous wetland features. In 2000, river restoration between

Highway 40 and River Road was completed. In 2001, work began on a 2-mile reach, which was completed in early 2002. Crews reconstructed about 0.9 miles of river upstream of the pilot project in 2002. In 2003, work began on the river from Midway Lane down to the Heber Valley Railroad crossing. This reach was completed late in 2004 and included the extension of Spring Creek, a tributary of the Provo River. Also in 2004, about 0.5 miles of river downstream of the Heber Valley Railroad trestle were restored.

In 2005, restoration began on a 1 ¾ mile segment located downstream of River Road. About 1/2 of the project was completed by the end of fiscal year 2005. Provo River Restoration Project construction is anticipated to be completed by summer, 2007.

Upper Provo

Highway-Related Deer Mortality Reduction Identify and implement permanent solutions to mitigate for deer mortality caused on highways around Jordanelle Reservoir.

Implementation to Date & Future Actions The Commission had budgeted \$1 million during this plan period to complete this mitigation measure; however, consultation with the Utah Division of Wildlife Resources and U. S. Fish and Wildlife Service resulted in a joint decision to cease evaluating at-grade “deer crosswalks” on U.S. Highway 40 as a viable mitigation measure. The Commission, U.S. Fish and Wildlife Service, and Utah Division of Wildlife Resources have determined the most appropriate solution for mitigating impacts to deer and other big game is through off-site mitigation. The Utah Division of Wildlife Resources identified high priority big game ranges in the area for acquisition and subsequent management for wildlife habitat values. Contacts were made with willing sellers in 2005, and appraisals were ordered. Negotiations will continue and are expected to be successfully completed in 2006.

Upper Provo River Reservoir Stabilization Stabilize lakes in the upper Provo River Drainage.

Implementation to Date & Future Actions Each of the 12 lakes in the upper Provo River drainage were rehabilitated and stabilized between 1994 and 1999. Trails and other recreational facilities were also constructed.

Washington Lake Campground Construct campground and trail head at Washington Lake.

Implementation to Date & Future Actions The Forest Service prepared an Environmental Assessment and Finding of No Significant Impact (FONSI) in 1992. The Commission adopted the Forest Service's Environmental Assessment and issued its own FONSI in 1997. Construction of Washington Lake Campground began in July of 1997 and was completed in September of 1999. The campground opened in the summer of 2000.

Utah Lake

Utah Lake Fish Management Develop an aquatics resource management plan for Utah Lake and support measures to aid recovery of the Utah Lake ecosystem.

Implementation to Date & Future Actions The Commission has committed more than \$415,000 since 1994 to fund Utah Lake fish management plan studies for native species and sport fish needs. Measures to aid June sucker recovery and other Utah Lake ecosystem components will be based on study recommendations. In 2005, the Commission funded \$90,000 of creel surveys conducted by Utah Division of Wildlife Resources on Utah Lake.



Utah Lake Carp Removal Study for the June Sucker Recovery Program. Photo courtesy of the *Daily Herald*.

Utah Lake Wetland Preserve Establish the Utah Lake Wetland Preserve in Goshen Bay and Benjamin Slough near Utah Lake.

Implementation to Date & Future Actions The Utah Lake Wetland Preserve is being established and, in accordance with requirements of CUPCA, will be managed by the Utah Division of Wildlife Resources to protect migratory birds, wildlife habitat, and wetland values. The Utah Lake Wetland Preserve Land Acquisition and Protection Plan was completed in 1995. An Environmental Assessment and Finding of No Significant Impact for establishing the Preserve were finalized in May of 1996.

The Commission and numerous partners executed a Memorandum of Agreement (MOA) in December 1996. This MOA identifies responsibilities and coordination among parties to the agreement - The Nature Conservancy, Utah Division of Wildlife Resources, U.S. Department of the Interior, Bureau of Reclamation, Bureau of Land Management, and Fish and Wildlife Service - for future acquisitions and management at the Utah Lake Wetland Preserve. The core of the Preserve's Goshen Bay unit has been the priority acquisition area. Core properties tie into properties owned by other state and federal agencies that were cooperators during development of the Utah Lake Wetland Preserve Plan.

The Preserve contains about 21,750 acres. About 14,592 acres are under management of project cooperators (Mitigation Commission, 5,923 acres; Bureau of Land Management, 4,150



North end of Wride's Pond, located in the Benjamin Unit of the Utah Lake Wetland Preserve viewed from the south. This photo is typical of how Wride's pond looks during early spring. Wride's pond commonly experiences flooding during late winter/early spring in years when the surrounding valley experiences heavy snowfall or extended periods of rain. When flood events coincide with migration events, the area experiences heavy seasonal use by migratory species including Pintail, Mallard, Green-wing teal, Gadwall, Canada Geese, Avocet, Black-necked stilt, Sandhill Crane, and White Pelicans.

acres; State of Utah, 4,500 acres; and Utah County, 19 acres). The rest is privately owned. After two years with relatively few land acquisitions, new Department of the Interior procedures for obtaining appraisals were implemented that allowed progress to resume; property was acquired from a handful of land owners in 2005, on a willing seller basis, totaling more than 300 acres.

Development of a Preserve Plan, which will assure management in accordance with CUPCA and substantive requirements of the National Wildlife Refuge System Administration Act of 1966, continued in 2005. Based on the final plan (anticipated in 2006 or 2007) an operation and management agreement among Department of the Interior, U.S. Fish and Wildlife Service, Utah Division of Wildlife Resources and the Commission will be developed.

 **Utah Lake Drainage Basin Mitigation Commitments** Mitigate negative impacts to fish and wildlife caused by the Utah Lake Drainage Basin Water Delivery System.


Implementation to Date & Future Actions The Central Utah Water Conservancy District, Department of the Interior, and Commission initiated informal scoping for the Utah Lake Drainage Basin Water Delivery System (ULS) with a public open house on September 28, 2000. A public scoping meeting regarding water needs and assessments was conducted in October 2001. Planning continued throughout 2003. A Final Environmental Impact Statement was issued on September 30, 2004, and Records of Decision issued December 22, 2004 and January 27, 2005. The Commission is responsible for carrying out environmental mitigation measures committed to during the environmental analysis. Commitments include:


- ≈ Continue to acquire water shares from irrigation companies to provide flows in the lower Provo River to meet the 75 cfs target flow. [ongoing]
- ≈ Provide 3,300 acre-feet of irrigation company shares of water to flow unregulated toward the 75 cfs target flow in the lower Provo River. [ongoing]
- ≈ Provide 10 acres of the 85 acre Mona Springs Wetland Unit which was acquired for protection of the wetlands complex for mitigation of 1.03 acres of non-jurisdictional permanent wetland loss and 0.27 acres of temporary wetland impacts. [complete]

-
- ≈ Initiate a study to determine the feasibility of providing fish passage or removing the Fort Field Diversion Dam on the lower Provo River for June sucker spawning and rearing; implement if feasible. [complete; NEPA analysis in progress]
 - ≈ Monitor Ute ladies'-tresses orchid in Spanish Fork Canyon for a number of years (to be determined jointly by the District, Mitigation Commission and Fish and Wildlife Service) similar to the pre-operation study in Diamond Fork. [ongoing]

 - ≈ If post-operation monitoring results in measured parameters exceeding pre-set critical values for Ute ladies'-tresses orchid populations in Spanish Fork Canyon, management guidelines presented in the 1999 Diamond Fork Biological Opinion may be implemented to compensate for impacts. [ongoing]

 - ≈ To offset potential impacts on leatherside chub, Joint-Lead Agencies will support the Utah Division of Wildlife Resources in evaluating population and habitat status, or determining threats and/or identifying conservation actions that could protect and where appropriate enhance leatherside chub habitat. [survey of Diamond Fork began in 2005]

 **Utah Lake Recreation Facilities** This is a new program element the Commission has adopted to expend remaining authorized funds (\$852,800 as of October 1, 2004) for recreation improvements around Utah Lake (CUPCA Section 312(a)). This program element is directed at utilizing this authorization to replace, modify, expand or construct recreation facilities directly associated with efforts to restore riverine and floodplain habitats of the lower Provo River, or Lower Hobble Creek, at or near its interface with Utah Lake. Like the *Stream Restoration* and *Public Access and Facilities Development* elements already described, this program element is being merged with efforts that support implementation of the June Sucker Recovery Implementation Program for the lower Provo River, lower Hobble Creek and Utah Lake.

 **Terrestrial Habitat Conservation** This is a new program element the Commission has adopted. Section 305(b) of CUPCA authorized the Commission to construct big game crossings and wildlife escape ramps along various Wasatch Front canals in Utah County that were expected to be used as part of the Irrigation & Drainage System of the Bonneville Unit. However, the Utah Lake System Final Environmental Impact Statement Proposed Action would not utilize any of these canals as Bonneville Unit facilities. Additionally, such measures have not proven to be necessary on the canals, or at least as high a priority as other actions the Commission could take to conserve wildlife habitat and big game populations. The Commission is reallocating this authorization (about \$1.1 million as of October 1, 2004) to other mitigation that will provide greater benefit to such resources, such as acquisition and/or restoration of sagebrush-steppe vegetative communities along the southern Wasatch Front. No acquisitions were made in 2005, due to funding limitations.

Diamond Fork Watershed

- **Diamond Fork Area Assessment** Evaluate the Diamond Fork watershed to identify desired resource conditions and achieve objectives.

Implementation to Date & Future Actions The Area Assessment, completed in September 2000, identified resources at risk of, and current and historic resources and resource conditions, operating outside a properly functioning condition, as well as opportunities to correct trends away from a properly functioning condition. These opportunities provide the foundation for Commission and Forest Service restoration and mitigation projects in Diamond Fork.

- **Aquatic and Riparian Habitat Restoration - Diamond Fork** Develop a monitoring program to measure responses to flow changes produced by the completed Diamond Fork System. Develop an aquatic and riparian habitat restoration plan for Diamond Fork from Diamond Fork pipeline outlet to the Spanish Fork River.

- **Aquatic and Riparian Habitat Restoration - Sixth Water** Develop (and implement as appropriate) an aquatic and riparian habitat restoration plan for Sixth Water from the West Portal to the Sixth Water Aqueduct.

Implementation to Date & Future Actions The Commission funded the Forest Service to develop a conceptual aquatic and riparian habitat restoration plan. The Forest Service assessed baseline conditions, including channel pattern, geology and riparian vegetation, and completed a draft preliminary restoration plan. This plan makes recommendations for aquatic and riparian habitat structural and hydraulic improvements within the Sixth Water riverine system. As part of restoration planning and prior to committing any funds to on-the-ground projects, the Commission will develop a monitoring program to evaluate responses of stream and riparian conditions to new reduced flow regimes produced by completion of the Diamond Fork water delivery system.

The Forest Service also developed a conceptual aquatic and riparian habitat restoration plan for Diamond Fork with Commission funding. The planning area extends from Monks Hollow to the Spanish Fork River. The plan defined a range of alternative solutions for Diamond Fork Creek restoration considering potential interactive effects of the Diamond Fork Pipeline, plans for completing the CUP via an irrigation project (mid- to late-1990s), and watershed management objectives. The conceptual plan identifies factors that created undesirable conditions and makes recommendations for management, structural and hydrologic changes to rehabilitate the system. During plan development, the Commission worked closely with the Forest Service, consultants, and other resource agencies.

The Sixth Water and Diamond Fork conceptual restoration plans developed in the mid-1990s were predicated on completing the then-designed Diamond Fork System and the now-abandoned Spanish Fork Canyon–Nephi Irrigation System, thereby completing the Bonneville Unit. However, because the previously planned Monks Hollow Dam and Reservoir were not built, and instead the Utah Lake Drainage Basin Water Delivery System was conceived,

evaluated and approved in September 2004, the conceptual restoration plans are in need of re-analysis.

In the 1999 Record of Decision for the Diamond Fork Project, the Commission committed to develop a monitoring program to evaluate responses of stream and riparian conditions to reduced flow regimes produced by the now completed Diamond Fork System. This planning effort was initiated late in 2004 and will carry on for the next several years. Several monitoring/assessment efforts were conducted in 2005 for this program. The



The Diamond Fork Outlet (left/center) is used to make supplemental instream flow releases into Diamond Fork Creek; the facility also will release flows in excess of the Diamond Fork Pipeline capacity (560 cfs), into Diamond Fork Creek. The Diamond Fork Group Campground will be constructed on this site in 2006.

Commission proposes an adaptive approach to monitoring and then implementing stream and riparian restoration measures in the Sixth Water and Diamond Fork corridors. Some on-the-ground projects may be carried out during the first few years of Diamond Fork System operations, when and where exceptional conditions require immediate intervention. Examples might include areas acquired for mitigation and restoration on terraces above the current active floodplain that had been cleared and applied to agricultural production in prior years.

- **Water Temperature Study** Develop and implement a water quality and water temperature monitoring program in Diamond Fork as identified in the 1984, 1990, and 1999 NEPA documents for the Diamond Fork water delivery system.

Implementation to Date & Future Actions The Commission, Department of the Interior, Fish and Wildlife Service, Utah Division of Wildlife Resources, and Central Utah Water Conservancy District agreed in 1997 that water quality monitoring was still a valid environmental commitment. The Commission entered into a cooperative agreement with the Central Utah Water Conservancy District to implement the program in 1997 and at that time added additional water quality parameters to be monitored. Monitoring continued through 2001, at which time the need for continued monitoring of certain parameters was evaluated and found to be unnecessary. Monitoring of several parameters (e.g. temperature, dissolved oxygen, pH etc.) occurs regularly and continued through 2005. With construction of the Diamond Fork System complete, monitoring needs were reviewed and adjusted to meet post-construction conditions by adding monitoring sites.

- **Recreation Facilities in Diamond Fork** Construct recreation facilities compatible with conservation of natural resources.

Implementation to Date & Future Actions The 1988 Definite Plan Report for the Bonneville Unit identified construction of recreation facilities in Diamond Fork as a project feature of the

Diamond Fork System. In October 2000, the Spanish Fork Ranger District of the Uinta National Forest and the Mitigation Commission drafted a Conceptual Recreation Master Plan to update and reaffirm project recreation components. The Conceptual Recreation Master Plan tiered off the Diamond Fork Area Assessment that made Diamond Fork resource management recommendations. Conceptual Recreation Master Plan elements and status are as follows:

Replace the Diamond and Palmyra Campgrounds. Group-site Campground. (See program element described below.) Construction of the new campground was completed in 2000. As part of the decision to reconstruct the Diamond and Palmyra Campgrounds it was also decided to relocate group-site facilities to a more appropriate location.


Day-Use Areas and Trailhead Improvements. The Spanish Fork Ranger District completed construction of a day-use area at Red Ledges and trailhead improvements at Monks Hollow, Dry Canyon, Three Forks and Sawmill Hollow.

Angler-Access. Parking areas for angler-access have been constructed at 11 sites from Spanish Fork to Monks Hollow and restrooms are available at 7 sites from Diamond Fork Campground to Sawmill Hollow.

Dispersed Camping Management. Dispersed camping has been closed from Spanish Fork to Sawmill Hollow. Dispersed camping sites above Sawmill Hollow have been inventoried and closed where resource damage is occurring or hardened to prevent future resource damage.

Education and Interpretive. The Spanish Fork Ranger District has developed an education and interpretive program as part of the Diamond Campground. Additional education and interpretive opportunities will be evaluated.

The Commission is reallocating remaining unexpended funds, if any, from this program to restoration planning, implementation and monitoring in Diamond Fork and Sixth Water, and/or to willing seller acquisitions of desirable wildlife habitats in Diamond Fork and Sixth Water.

-  **Diamond Fork Campground** Rehabilitate the existing campground in Diamond Fork.
Construct new group site campground.

Implementation to Date & Future Actions The Spanish Fork Ranger District of the Uinta National Forest and the Commission issued decisions in December 1998 to rehabilitate and combine the existing Diamond and Palmyra campgrounds, yet reduce the capacity by approximately 33 percent. Construction on the Diamond Fork campground began in September 1999 and was completed in the summer of 2000. Individual campsites and loops within the 100-year flood plain were moved to a higher terrace to protect riparian vegetation and facilitate future stream restoration efforts. Sections of the campground impacting wild turkey roosting habitat were closed and reclaimed. Group-site facilities were removed from the campground in order to be reconstructed in a more suitable location.


Planning for the group-site facility began in the fall of 1999. Due to delays in completion of the Diamond Fork Tunnel and Pipeline caused by collapse of the tunnel in 2001, planning for the

group-site campground was also delayed. A draft environmental assessment was issued in May 2003 and a revised draft was issued in August 2004, which evaluates environmental effects of potential group-site locations. The Commission and Forest Service issued their Decision Notices in November and December 2004, respectively. The selected group-site is a heavily disturbed area in the vicinity of Monks Hollow. Final designs were prepared and the project was put out for bid late in fiscal year 2005. Construction is anticipated to begin in late Spring 2006 and be complete by Winter 2006.

 **Acquisition of Angler Access** Acquire contiguous public access on lower Diamond Fork and develop appropriate facilities.

Implementation to Date About 7 acres of land along Diamond Fork remains to be acquired from private property owners; however, additional upland habitat adjacent to riparian areas could be acquired if an owner indicated willingness to sell and appropriate funding were identified.

The Commission and Bureau of Reclamation developed an interim management agreement with the U.S. Forest Service to conduct initial management-related improvements such as fencing and weed control. Progress continued in 2005 with construction of gates and fences to minimize trespass grazing, and weed control. A new agreement is anticipated to be negotiated in 2006.

 **Diamond Fork System Mitigation** Implement mitigation measures required by completion of the Diamond Fork System.

Implementation to Date Mitigation commitments will be implemented as identified in the Record of Decision of the 1999 Final Supplement to the 1984 Environmental Impact Statement for the Diamond Fork System. The Final Supplement and Record of Decision were issued in 1999. Following a Value-Engineering review of the decision, several minor modifications were identified that reduced environmental impacts and construction costs. The Commission, Central Utah Water Conservancy District, and Department of the Interior prepared an environmental assessment to evaluate impacts of these modifications.

A decision was made in August 2000 to adopt the environmental assessment's Proposed Action Modifications. The Commission's environmental commitments consist of: monitoring Ute-ladies' tresses following project construction; supporting development and implementation of June Sucker Recovery Implementation Program; and, monitoring stream channel responses to altered flow regimes following completion and operation of the Diamond Fork tunnel and pipeline. The Commission coordinated a multi-agency group in 2005 to coordinate, plan, and implement monitoring and mitigation over the next five years.

Strawberry/Duchesne Watershed

- **Angler Access and Related Facilities** Acquire public access and develop operating agreements, small parking areas and other facilities on the West Fork, North Fork and main stem of the Duchesne River, the middle and lower Strawberry River, Currant Creek and Rock Creek. Develop maps and other useful guides.

Implementation to Date & Future Actions The 1988 Aquatic Mitigation Plan for the Strawberry Aqueduct and Collection System (SACS) of CUP's Bonneville Unit identified acquisition of approximately 51 miles of stream access on the Duchesne, West Fork Duchesne, Currant Creek, Strawberry River and Rock Creek to provide partial mitigation for lost angling opportunities resulting from construction and operation of the Strawberry Aqueduct and Collection System. Angler access was to be acquired where instream flows were provided.

This angler access acquisition program element is nearly complete. During 2005, the Commission and Bureau of Reclamation completed acquisitions of two reaches of angler easement along the Duchesne River. Remaining acquisitions include a one-mile reach on the Strawberry River below Soldier Creek Dam, and four reaches on the main stem of the Duchesne River totaling approximately 1.4 miles.

The primary focus of the angler-access program is now shifting from acquisition to management. Efforts will be focused on implementing Operating Agreements, including environmental compliance, removing debris from acquired properties, installing fencing, weed control and constructing parking areas.

- **Uinta Basin Replacement Project Mitigation** Implement fish and wildlife mitigation features of the Uinta Basin Replacement Project.

Implementation to Date & Future Actions The Uinta Basin Replacement Project, which was authorized by Section 203 of the Central Utah Project Completion Act, is located within Duchesne County near the towns of Altamont, Upalco, and Roosevelt, within the Uinta Basin of northeastern Utah. The Central Utah Water Conservancy District is implementing the Project. The Commission is responsible for mitigating project impacts to fish, wildlife and wetland habitats. Funding for mitigation measures is provided under Title II of CUPCA through the U.S. Department of the Interior. The Final Environmental Assessment was prepared by the District and was signed by the Department of the Interior in October 2001. Project construction began in 2003.

The Project's purpose is to provide additional early and late season irrigation water, provide municipal and industrial water supplies, and to modify and operate water management facilities for environmental purposes. This involves stabilizing thirteen high mountain lakes within the High Uintas Wilderness Area, constructing the new Big Sand Wash Feeder Diversion Structure and Pipeline, enlarging Big Sand Wash Reservoir, constructing a new Big Sand Wash-to-Roosevelt Pipeline, modifying the Moon Lake Dam outlet works, and implementing fish and wildlife mitigation and enhancement features. Environmental needs include fishery resources

that are depressed by widely fluctuating streamflows, dry damming, and recurring instream activities such as rebuilding irrigation diversions, channelization, and bank stabilization.

The Commission issued a Decision Notice and Finding of No Significant Impact in February 2004 for implementing fish and wildlife mitigation features of the Uinta Basin Replacement Project. These mitigation features are as follows:

High Mountain Lakes Stabilization. Stabilization of thirteen high mountain lakes will provide constant lake water levels year-round. Nine of these lakes (Bluebell, Drift, Five Point, Superior, Water Lily, Farmers, East Timothy, White Miller, and Deer) are located in the in the Upper Yellowstone River watershed and four (Brown Duck, Island, Kidney and Clements) are in the upper Lake Fork watershed. Consequently, streamflows originating in these upper watersheds will return to natural hydrologic runoff patterns, wilderness fishery and recreational values will be restored within the High Uintas, and operation and maintenance impacts will be eliminated in the wilderness area.

Survey data was collected and design work initiated in 2005 on the four lakes in the upper Lake Fork watershed and on three lakes in the Yellowstone watershed. Construction work in the upper Lake Fork drainage cannot begin until Big Sand Wash Dam is completed and has successfully passed filling criteria (2007). Stabilization of six out of nine lakes in the Yellowstone drainage cannot begin until the Roosevelt Pipeline is completed (2008 or 2009).



Looking into gate control chamber showing completed valve installation on Moon Lake Dam outlet works. When complete in 2006, this will facilitate release of instream flows from the Dam.

Moon Lake Outlet Works Modifications. Modifications began on the Moon Lake Dam outlet works to facilitate the release of instream flows. Under the current operation, no water is released from Moon Lake Dam from October to April. Modifications will be completed in 2006. Gaging instruments will be installed on the outlet works and in the reservoir, and were installed in 2005 on the Yellowstone Feeder Diversion and the Canal Diversion.


Habitat Mitigation and Monitoring. The Commission is responsible for wetlands mitigation and long-term maintenance and monitoring of the mitigation site. The Commission identified an alternate site for the wetland mitigation and initiated planning for the project in 2005. The alternate site will be integrated with an existing wildlife management area owned and managed by the Utah Division of Wildlife Resources. Wetland and

wildlife values are expected to be substantially greater than those at a site previously selected just downstream of the new Big Sand Wash Dam.

 **Duchesne River Area Canal Wetland Mitigation** Address initial management concerns on the 1,090-acre wetland mitigation parcel on the lower Duchesne River.

Implementation to Date & Future Actions A 1,090-acre parcel of land on the lower Duchesne River, now referred to as the “North Riverdell property,” was acquired by the Bureau of Reclamation in the late 1980s as wetland mitigation for the Duchesne River Area Canal Rehabilitation Project (DRACR), a component of the Starvation Collection System, Bonneville Unit, CUP. The North Riverdell properties were to be managed by the U.S. Fish and Wildlife Service as part of the Ouray Wildlife Refuge. However, the U.S. Fish and Wildlife Service was unable to provide management of these lands as originally planned. In 1996, the Department of the Interior and Bureau of Reclamation provided funding to the Bureau of Indian Affairs to repair water conveyance facilities, and water deliveries were then made to the wetland areas. Long-term management of the parcel is now being evaluated in two of the four alternatives being described and analyzed in the Lower Duchesne River Wetlands Mitigation Project Draft Environmental Impact Statement (LDWP DEIS).


The Department of the Interior issued a separate draft environmental assessment early in 2002 that described alternative measures to secure and/or develop water supplies for the North Riverdell parcel. These improvements, if implemented, will be necessary regardless of whether the North Riverdell property is managed as part of the LDWP (see below), or whether it is managed as a stand-alone mitigation project for the DRACR program. A Final EA and decision on the North Riverdell water system improvements may be completed in 2006.

 **Strawberry Aqueduct and Collection System Wetland Mitigation** Protect, restore and enhance wetlands along the lower Duchesne River corridor as mitigation for SACS wetland impacts.

Implementation to Date & Future Actions The construction and operation of SACS had impacts downstream of the Strawberry and Duchesne River confluence, particularly affecting wetlands and other resources of the Ute Indian Tribe. In addition, there were other commitments made to the Ute Indian Tribe in the 1960s that promised development of six waterfowl management areas.

Under a cooperative agreement with the Commission and Department of the Interior, the Ute Tribe developed a feasibility study for protecting, restoring or developing wetlands in selected portions along a 45-mile corridor of the lower Duchesne River, from Bridgeland to Ouray, Utah. The study recommended four broad options, out of which one would be implemented in lieu of the earlier plan developed by the Bureau of Reclamation and Bureau of Indian Affairs, which the Ute Indian Tribe had never endorsed. Based on the feasibility study, the Commission, Department of the Interior and Tribe entered into an agreement in 1998 for the Tribe to conduct additional investigations and NEPA analysis, and to implement the mitigation project. NEPA scoping occurred in 2001 and the LDWP DEIS was released for public review and comment in November 2003.

Planning continued in 2005 as modifications to the draft alternatives were evaluated. A Final Environmental Impact Statement is anticipated in 2006. The mitigation project will satisfy Federal requirements to provide wetland/wildlife benefits to the Ute Indian Tribe for impacts associated with construction and operation of the Central Utah Project.

 **Fishery and Aquatic Resources Management** Determine fish management and habitat restoration needs at Strawberry Reservoir and tributaries.


Implementation to Date & Future Actions Strawberry Valley fisheries studies were conducted between 1994 and 2000. The studies included an evaluation of natural reproduction occurring in Strawberry Reservoir and its tributaries, food supply and its ability to support the fishery, and reservoir community dynamics. The studies determined that reservoir-reared cutthroat trout have better survival and growth rates than stream-reared cutthroat trout. A summary of these studies was distributed in 2001 and is available from the Commission.

An aquatic habitat mapping study was completed in 1997, providing an updated bathymetric map of the reservoir with precise stage-volume relationships. Also, in 1997, a predator study component was added to the ongoing productivity study to allow better understanding of target fish species patterns of use. This understanding should lead to more cost-effective stocking and management of Strawberry Reservoir fisheries.

A study was initiated in the fall of 1997 and completed in July 2000 that evaluated potential impacts of reservoir level fluctuations on survival and productivity of game fish and undesirable non-game species. It was linked with earlier work on aquatic habitat mapping and production and survival of game fish in the reservoir to provide an integrated evaluation of the physical and biological implications of reservoir fluctuations on productivity and water supply. Study reports have been completed and also are available from the Commission.

An electric weir and related safety features were installed at the egg-taking station to allow effective fish collection and egg taking from kokanee and cutthroat trout on the Strawberry River.

Future expenditures under this program element will be coordinated with efforts to restore aquatic habitats in the Strawberry Valley watershed (see the following program element). Specifically, remaining authorizations of 307(3) (\$1,058,000) and 307(4) (\$951,300) will be committed toward stream, riparian and watershed restoration with priority on the upper Strawberry River drainage.

 **Strawberry Area Assessment, Watershed and Wildlife Habitat Restoration** Based on an Area Assessment, cooperate with U.S. Forest Service to identify future projects for watershed, wildlife habitat and tributary restoration.

Implementation to Date & Future Actions The Commission and Forest Service completed the Strawberry Valley Area Assessment in November 1997. The Area Assessment identified current and historic resource conditions and where resources are operating outside of a properly functioning condition. Areas most at risk were identified. Commission-funded restoration and mitigation projects in the Strawberry Valley will be based on addressing the fish and wildlife resources that have been put at risk as a result of federal Reclamation projects.

The Uinta National Forest Service followed-up on the Area Assessment in April 2004, with the release of the *Strawberry Watershed Restoration Report*, which identified specific actions

necessary to restore various habitats and ecological functions in the Strawberry Reservoir Watershed. Over the next planning period, the Commission proposes to work cooperatively




Strawberry River

with the U.S. Forest Service and its many other partners to evaluate the report and identify actions that help achieve or complement existing mitigation, or conservation projects for which the Commission has authorization. Actions would be implemented over the next five years, following NEPA analysis and other required public review processes.


The Commission funded a small remediation project in 2005 on the upper Strawberry River to address down-cutting that was occurring in a relocated stream channel constructed by the Forest Service and Bureau of Reclamation as part of the WCWEP/ Daniels Replacement Project (middle Provo River program element). The Commission, Forest Service, Utah Division of Wildlife Resources and others began a cooperative effort in 2005 to look at the upper Strawberry River as a potential restoration area for the future, as identified by the *Strawberry Watershed Restoration Report*.

The Commission funded a small remediation project in 2005 on the

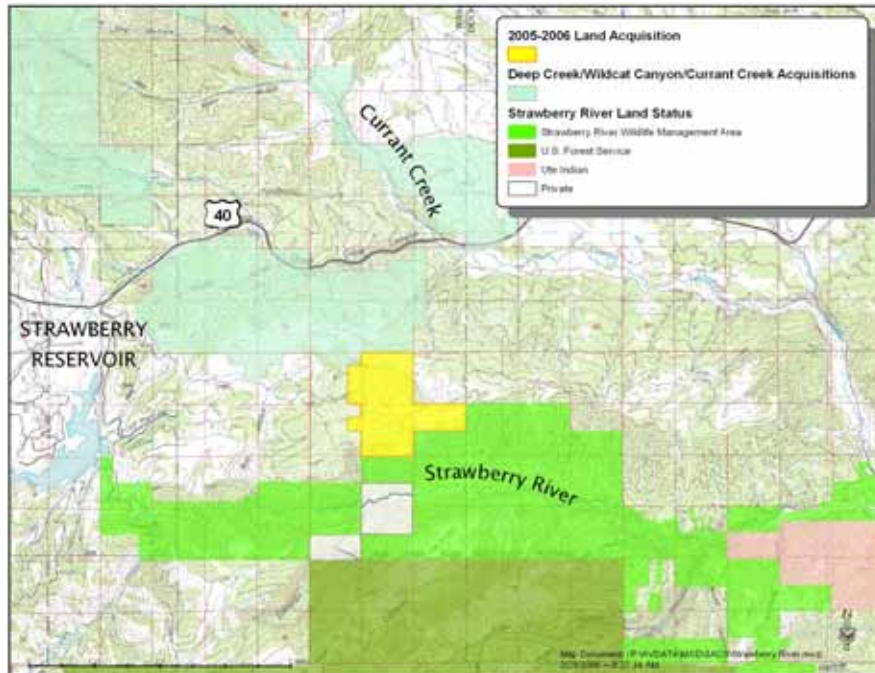
-  **Sage Grouse Conservation and Recovery** Determine factors leading to or perpetuating the decline of the sage grouse in Strawberry Valley. Support corrective measures as they are identified.

Implementation to Date & Future Actions The first Commission-funded project based on the Area Assessment was a series of sage grouse studies. Sage grouse were identified in the Area Assessment as operating outside of a properly functioning condition and at risk. Based on this assessment, the Commission funded Brigham Young University to conduct studies of sage grouse in Strawberry Valley to specify causes for their decline. The Commission participated in funding this study because the enlargement of Strawberry Reservoir inundated four out of five historic leks (displaying and breeding areas).

Additional participants in the studies include the Utah Division of Wildlife Resources, U.S. Fish and Wildlife Service, and U.S. Forest Service. Sage grouse studies continued through 2005. Information gained is being used to develop a recovery strategy. Other conservation activities accomplished in 2005 include a nest predation study, translocation of sage grouse to the Strawberry Valley, and predator control (conducted by USDA Wildlife Services).

-  **Wildlife Habitat Acquisition** Develop partnerships to acquire high priority big game habitat in Strawberry River, Currant Creek and adjacent drainages.

Implementation to Date & Future Actions Approximately 24,000 acres of big game winter range have been acquired by the Bureau of Reclamation in the Currant Creek watershed as



mitigation for the CUP Bonneville Unit. The Commission acquired an additional 300 acres in Currant Creek drainage in 2001. Approximately 1,800 acres were acquired near the middle section of Strawberry River in 2002, as partial mitigation for losses of angler access and for wildlife habitat impacts caused by the CUP. The Commission has identified a willing-seller acquisition that complements existing CUP mitigation lands and objectives (see map). The 1,720 acre parcel connects

two CUP mitigation areas: the Wildcat Canyon Wildlife Management Area and the Strawberry River Wildlife Management Area. When acquired, critical big game and sage grouse habitats will be protected and improved, and the habitats will be connected. Negotiations to purchase the property were concluded successfully in 2005, and the property will be purchased early in fiscal year 2006.

Reduced Flow Study/Instream Flow Management Determine flow regime necessary to sustain riparian communities on South Slope of the Uintas affected by SACS.

Implementation to Date & Future Actions In 2001, the Commission and Brigham Young University completed the third and final year of a study of reduced stream flows effects on riparian and aquatic habitats in streams affected by SACS.⁵ This study was coordinated with the Interagency Aquatic Biological Assessment Team (IABAT) and others. The report was completed in 2001. A second report was completed in early 2002. A third report was initiated that has not yet been completed.

Modify Diversion Structures on the Duchesne and Strawberry Rivers Modify diversion structures in cooperation with the Central Utah Water Conservancy District (CUWCD), Duchesne County Water Conservancy District and other local water users.

⁵The primary objectives for the study were:

- (1) Identify impacts on riparian areas from reduced flows affected by construction and operation of SACS;
- (2) Recommend instream flow regimes to best accomplish riparian health (vegetative recruitment, aquatic wildlife) and stream channel stability and maintenance, in addition to fish habitat protection, on the four major stream segments affected by the stream flow agreement;
- (3) Identify and rank strategies for managing available Stream Flow Agreement storage water and water available from Daniel's Replacement Project to meet riparian health, stream channel stability and maintenance, and aquatic resources needs on the six streams affected by SACS which are not protected by the Stream Flow Agreement; and,
- (4) Identify and recommend mitigation opportunities that also provide alternatives to increasing stream flows.

Implementation to Date & Future Actions A comprehensive evaluation of eligible diversion structures was initiated in the summer of 1997 and completed in 1998 by the CUWCD and Commission consultants. The U.S. Fish and Wildlife Service, Utah Division of Wildlife Resources, U.S. Bureau of Reclamation, U.S. Forest Service and others analyzed the data and made recommendations to the Commission regarding priority projects.

The Commission, CUWCD, and Duchesne County Water Conservancy District entered into an agreement to begin rebuilding diversions in 1999. Four projects were selected on a pilot project basis. Construction was completed on two projects located on the Duchesne River in 2001. A third, the Pioneer Diversion, was finished in 2002. A programmatic environmental assessment was completed in 2003 to address the remainder of the program.

Four additional projects (two on the Duchesne River and two on the Strawberry River) were initiated in 2004. Construction of the two Duchesne River projects was completed in 2004 and 2005. The Farm Creek Diversion was rebuilt in 2004. In 2005, the WPPB Diversion was reconstructed on the Duchesne River, and it now combines water diversions from five previously-used diversions. Irrigation water diverted at WPPB is delivered to each of the participating canal systems through pipelines constructed as part of the project. The four no longer used diversions will be removed in 2006.

Designs and engineering work was completed for the two projects on Strawberry River, but implementation is on hold until issues are resolved regarding rights-of-way. The Commission will attempt to identify additional sources of funds to complete remediation of the other diversion dams that were investigated for this project in 1998 and in the 2003 NEPA document.




Newly constructed WPPB diversion on the Duchesne River

Recreation Improvements Expand public recreation access, information and facilities with priority on SACS mitigation requirements.

Implementation to Date & Future Actions This program element continues in concert with developing Operating Agreements for angler access corridors. Preliminary draft operating agreements for the West Fork of the Duchesne River and Currant Creek have been prepared.

Fish Habitat Improvements Program Repair, replace or remove selected fish habitat improvement structures installed as partial mitigation for SACS.

Implementation to Date & Future Actions Seventy-three miles of stream habitat improvements have been installed in the Uinta Basin, successfully mitigating for about 6,115 angler days (6,115 angler days is 75% of the stated angler day objective of 8,150 angler days). Mitigation of 3,675 angler days remains. Completion of the Provo River Restoration Project will provide the remaining 3,675 angler days of required mitigation for fish habitat improvements.

 **Watershed Stabilization, Wildlife Enhancement, and Access Management** Stabilize watershed with priority to mitigation properties, improve wildlife habitat and manage area-wide access.

Implementation to Date & Future Actions Through an interagency agreement, the Commission funded the U.S. Forest Service to mitigate impacts to soil, fish habitat and water quality caused by abandonment of the Currant Creek Feeder Canal from tributaries above Currant Creek Reservoir to Co-op Creek in Strawberry Valley. Between 1997 and 2002, a major headcut was remediated on Pass Creek, five drainages were put back into their natural channels (South Fork Currant Creek, Left Fork Currant Creek, Tut Creek, Pass Creek, Smith Basin), and several wetlands were stabilized in Smith Basin. The project is completed.

The Utah Division of Wildlife Resources completed a survey of CUP mitigation lands near Currant Creek in 2005 to identify problems with erosion, road management, access, and similar situations. A large beaver dam on Currant Creek has expanded in recent years, effectively blocking vehicular access to Big Dry Hollow, a side drainage of Currant Creek. This is a main artery for access to public mitigation lands and adjacent National Forest System lands. The Commission will explore potential solutions to this problem in 2006, in cooperation with Utah Division of Wildlife Resources and others.

Great Salt Lake Watershed

Great Salt Lake Wetlands Acquisition

Support acquisition of vital properties. These properties may include lands adjacent to Federal and State management areas, local government holdings, or private conservation group holdings that will be managed for wetland functions and wildlife values.

Support National Audubon Society efforts on the South Shore Ecological Preserve.

Support The Nature Conservancy's efforts around the Great Salt Lake and particularly in the Layton-Kaysville Area.

Implementation to Date & Future Actions The Commission is working with partners to acquire important wetland and upland habitats primarily around the eastern and southern shores of the Great Salt Lake. Since 1994, 1,844 acres have been acquired in these areas with Commission funds. The purchases complement other area acquisitions, some made by The Nature Conservancy (TNC) and National Audubon Society, and some by private entities for wetland mitigation banking.

The Commission and TNC have partnered to preserve valuable habitat particularly in the Layton-Kaysville area, where TNC has established the Great Salt Lake Shorelands Preserve.

The Preserve is an undiked natural landscape located on the eastern periphery of the Great Salt Lake and consists of approximately twelve contiguous shoreline miles and nearly 3,400 acres. The Commission has acquired 1,101 acres within the Preserve.



Great Salt Lake - Eastern Shore

The Commission also formed a partnership with National Audubon Society to create the South Shore Ecological

Reserve. The Reserve includes approximately 8,000 acres on the south and east shore of the Great Salt Lake. Much of this area has already been acquired by entities with a need to mitigate wetland impacts and a desire to develop an area reserved for wetlands and avian wildlife, particularly shorebirds. Kennecott Utah Copper and the Salt Lake Airport Authority acquired approximately half the area for their respective mitigation needs.


Tucked in the northwestern area of the Reserve is a 2000-acre relatively undisturbed remnant of the historic delta of the Jordan River. National Audubon Society received a donation of about

1,300 acres in the delta area. In addition, the National Audubon Society made some land trades and the Commission has acquired 743 acres of property and 750 shares of water. National Audubon Society, The Nature Conservancy, Commission, and a private landowner completed negotiations on purchase of a flooding easement on more than 500 acres within the Reserve in 2005, after many years of effort. The purchase is expected to close early in 2006. Plans to deliver water to and through the easement will be developed in 2006.


 **Restoration of Agency Management Areas** Support restoration, enhancement and rehabilitation of State and Federal-managed wetlands adjacent to the Great Salt Lake.

Implementation to Date & Future Actions Activities at State and Federally managed areas have provided restored habitat for migratory birds, increased water control to enhance water delivery to the units managed for migratory birds, and improved recreation access. In 1998, State and Federal cooperators completed restoration measures underway since 1994 with Commission funds. Among the accomplishments are: an access road and parking lot providing access to Bear River Bay on the north end of the Great Salt Lake; 26 foot bridges, over 11 miles of dikes, 18 miles of boundary fence and more than 6 miles of gravel placed on area roads at four waterfowl management areas (Timpie Springs, Farmington Bay, Ogden Bay and Howard Slough); low dikes and ditches at Locomotive Springs Wildlife Management Area; construction of dikes and canals at Bear River Migratory Bird Refuge; and restoration and enhancement of wetland and wildlife values at Salt Wells and Blue Springs Habitat management areas on the north end of the Great Salt Lake.

Many improvements also provide access to managed wildlife areas for hunting and viewing during appropriate times of the year. Some areas have interpretive or other informational provisions to promote general understanding of the Great Salt Lake ecosystem.

 **Restoration and Management of Commission-Acquired Properties** Initiate agreements with appropriate entities to address immediate and long-term management needs of Commission properties to protect and enhance values.

Implementation to Date & Future Actions The Commission has interim management agreements with the Utah Division of Wildlife Resources, National Audubon Society, and The Nature Conservancy to provide initial stewardship activities on Commission-owned properties contiguous with the Farmington Bay Waterfowl Management Area, Great Salt Lake South Shore Reserve and Great Salt Lake Shorelands Preserve. The Commission will continue to fund activities to address immediate needs including fencing, fence repair, area clean-up and weed control, as well as longer term baseline surveys to help determine existing resource values and identify opportunities for future management.

 **Wetland Preservation Strategies** Develop and implement strategies that will contribute to the perpetual conservation of wetland functions and values through planning, management agreements and strategic partnerships. Support Davis and Box Elder Counties in implementing their respective Wetland Conservation Plans. Support development of wetland plans in other strategic areas.

Implementation to Date & Future Actions The vision of a wetland and upland corridor along the Great Salt Lake shoreline, preserved for resident wildlife and migratory shorebirds, is the desired future condition the Commission set in its first Plan. The Commission is partnering with many government organizations, landowners, conservation groups, agencies and others to help make it a reality.

The Commission helped accomplish a major local planning effort in Davis County with The Wetlands Conservation Plan: A Plan for Protection of the Great Salt Lake Wetlands Ecosystem in Davis County. The Plan was accepted by the Commission in January 1997 and by the Davis County Commission in November 1997. The Plan helped identify acquisition priorities and provided important background for the subsequent Davis County Shorelands Plan. The Shorelands Plan is being implemented by each city in Davis County using innovative concepts such as transfer of development rights to protect important wetlands.

The Commission funded a similar planning effort in Box Elder County. The Box Elder County Comprehensive Wetlands Management Plan was completed in August 1999. The Plan was adopted by the Box Elder County Commission in August 1999 and accepted by the Commission in November of 1999. The key Wetlands Plan recommendation - to develop a Special Area Management Plan (SAMP) for the Brigham City and Perry City area - is to be developed by Box Elder County and the cities through a grant from the U.S. Environmental Protection Agency.


Through the SAMP process, there is the opportunity to look at a contiguous area and collectively (with the public and landowners) determine those areas most important for wetlands protection and those more suitable for development. The SAMP will include strategies to mitigate financial impacts to wetland owners where the desired outcome is wetlands protection.

Drawing from the experiences in Davis and Box Elder counties, the planning process has been refined to also map wetlands and develop SAMPs for Tooele County and Salt Lake County wetlands at risk to development. In Tooele County, mapping and a Functional Assessment have been completed, and a SAMP and General Permit from the U. S. Army Corps of Engineers are expected in 2006.

In Salt Lake County, the Commission partnered with Envision Utah to first develop a Great Salt Lake South Shorelands Plan. Work on detailed mapping and a Functional Assessment was completed in 2005. Based on the outcome of the Shorelands Plan, work is continuing with Salt Lake City to finalize a Special Area Management Plan and General Permit for the areas where wetlands are most at risk to development.

Following completion of these ongoing efforts, the Commission does not plan to fund counties or other groups to undertake additional wetlands preservation planning near the Great Salt Lake.

Jordan River Watershed

 **Jordan River Wetland Acquisition** Fund critical wetland acquisition, primarily in Salt Lake County. Guide acquisition priorities through project proposals for West Jordan, South Jordan, and the south valley.

Expend funds for projects in south valley areas, South Jordan and West Jordan upon assurance that other project proposal elements will be implemented.

Implementation to Date & Future Actions A 70.8 acre acquisition was completed along the Jordan River in 1996. This parcel is adjacent to wetland mitigation property owned by Salt Lake County and is anticipated to eventually tie to property owned by the State of Utah. With these three parcels, a corridor on the east side of the river from about 12300 South to 14600 South would be protected for wetland and wildlife habitat values. A Tri City (Draper, Bluffdale and Riverton) planning group identified this open space area for wetland and wildlife values.

A 44-acre parcel on the north side of 10600 South in South Jordan was acquired by the Commission in 1997. In 1999, a second parcel (about 17 acres) was acquired by the Commission on the south side of 10600 South in South Jordan. In 2000, a conservation easement was donated to the Commission on about 35 acres along the Jordan River and adjacent to the second parcel. In 2001, about 17 acres were purchased along the Jordan River between 9800 South and 10000 South.

These parcels link with other undeveloped parcels. Great Salt Lake Audubon owns about 12 acres within the project area. Work continues with adjacent landowners in this area to accomplish a natural area corridor from about 9800 South to 11400 South.

In 1998, a 22-acre parcel was acquired in the West Jordan Project area. In 2000, an additional 31 acres were acquired by the Commission. West Jordan has purchased additional properties that will tie into their plan for open space, trails, wetlands protection and wildlife habitat from about 6500 South to 9000 South. West Jordan City has entered into an agreement with the U.S. Army Corps of Engineers (Section 206 Environmental Restoration program) to restore the project area. Studies have been conducted to determine the cost and feasibility of various restoration alternatives. Planning and design of the restoration has been completed and construction is anticipated to begin in 2005.

The Commission is pleased with the success achieved by the municipalities and many conservation partners along the Jordan River, particularly the Trust for Public lands, Great Salt Lake Audubon Society, Tree Utah, and Salt Lake County; and believes that the Commission's investments and participation in planning has provided an important and timely catalyst in the efforts by many organizations and individuals to conserve wildlife values within the Natural Areas remaining along the Jordan River. However, it has been the Commission's experience over the last few years that increasing demand for recreational open space along the Jordan River no longer presents significant opportunities to preserve substantial wildlife habitat that

would satisfy the requirements for Federal mitigation. Therefore, the Commission is terminating its program of land acquisition along the Jordan River corridor.

The Commission will remain committed to restoration efforts on those Natural Areas it has already acquired, and to working with local communities and organizations to find long-term management solutions for the Jordan River Natural Areas the Commission has already helped establish. About \$400,000 of authorization remains available to fund completion of ongoing activities through fiscal year 2006, after which time any unexpended funds will also be reprogrammed to other projects in proportion with the allocations shown in Table 1 (Page 30).

In 2005, remaining funding authorization for wetlands acquisition, fish and riparian habitat improvement and recreation features along the Jordan River corridor was reallocated to other program elements that are higher priorities (e.g. 1988 Definite Plan Report requirements) and/or areas where substantial and continual progress can be made, such as the middle and lower Provo River, Strawberry Aqueduct and Collection System mitigation, along the south and east shores of the Great Salt Lake, and other projects. See Table 1 at the end of this section for a detailed description of the reallocation of funds.

 **Restoration and Management of Natural Areas** The Commission will remain involved in restoration of natural areas on the three projects already underway on Commission-owned or partially-owned lands

Implementation to Date & Future Actions The Commission has been involved since 1994 in planning and implementing habitat restoration and Jordan River corridor management with various partners.

The Commission's properties along the Jordan River near 10600 south support Great Salt Lake Audubon (GSLA) restoration projects along the Jordan River. Funds to restore acquired properties are being provided by the U.S. Fish and Wildlife Service through the Sharon Steel Natural Resource Damage Claim Settlement. One parcel connected to the GSLA project has been acquired; the Commission, GSLA and U.S. Fish and Wildlife Service developed an agreement to identify roles in project planning and use of Commission-acquired lands. To date, over 25,000 seedlings have been installed on Commission-owned lands within the project area. In 2004, these seedlings were maintained by activities such as weed control and irrigation. The Commission will continue to seek an agreement with an entity for long-term management of the properties for wildlife habitat values in the next few years.

The Commission also completed a memorandum of understanding with the Utah Department of Transportation (UDOT) to restore wetlands on the parcel the Commission acquired in 1996 along the Jordan River at 12600 South. At the time, UDOT was developing wetlands to mitigate I-15 project impacts. By November 1997, UDOT had removed unwanted structures and exotic vegetation, planted native species, contoured the area and restored wetland function to most of the site. UDOT also installed a pump to use Commission water rights from the Jordan River to maintain hydrology for the area. This will continue to enhance avian and terrestrial wildlife use of the area, as well as restore wetland values. UDOT contributed funds to a long-term endowment to off-set the cost of managing the area for wetland values in


perpetuity. The Commission is looking to develop an agreement with an entity for long-term management of the properties for wildlife habitat values in the next few years.

West Jordan City has purchased additional properties that will complement their plan for open space, trails, wetlands protection and wildlife habitat from about 6500 South to 9000 South. West Jordan City has entered into an agreement with the U.S. Army Corps of Engineers (Section 206 Environmental Restoration program) to restore the project area. Planning and design of the restoration has been completed and construction is anticipated to begin in 2005.

The Commission will work cooperatively with West Jordan City and others to allow the federal lands it acquired to be incorporated into this restoration project.

In 2001, about 0.5 acres on the north side of 10600 South was sold to UDOT to allow widening of 10600 South. Construction was completed in 2002. In 2002, a right-of-way easement was granted to Utah Power and Light to install an underground power line. Compensation for the right-of-way consisted of mechanical removal of Russian olive trees followed by herbicide treatment of the stumps. Treatment was completed early in fiscal year 2003.

In 2005, remaining funding authorization along the Jordan River corridor was reallocated to areas where substantial and continual progress can be made, such as along the south and east shores of the Great Salt Lake, the middle and lower Provo River, Strawberry Aqueduct and Collection System mitigation, and other projects.

 **Support Jordan River Natural Areas Management Planning** The Commission is limiting its involvement in planning efforts to those affecting the Commission's three project areas along the Jordan River.

Implementation to Date & Future Actions A number of municipalities and agencies have plans for open space areas along the Jordan River to be managed for their natural values. The designation "Jordan River Natural Areas Conservation Corridor" (JORNAC) was created to give a common identity to these special lands, including those of the Commission, within the Jordan River corridor. This corridor would not be contiguous the length of the river, but would provide habitat for riparian species and require similar management goals and objectives.

A report that identifies these existing and potential natural areas, as well as recommendations for their management, was completed in September 2000. This Report was developed in cooperation with the National Audubon Society, U.S. Fish and Wildlife Service, Salt Lake County and other state and local interests.

The Jordan River Natural Areas Forum was created in 2001 to implement Report recommendations. Forum members include state, local and federal entities as well as private non-profit organizations. The Commission's initial involvement in the Forum bolstered other Jordan River acquisition and restoration work. Through the Forum's efforts to educate a diverse audience, ranging from children to government officials about the natural values of the river, pursue acquisition of the remaining natural areas on the river, and help coordinate restoration

activities, among other projects, the Commission’s restoration projects will have less chance of becoming isolated islands in an urban corridor.

The Commission supports the original concepts of the Forum, but will no longer be a participant. The Commission is limiting its involvement in planning efforts to those affecting its three project areas along the Jordan River.

The Commission supports the original concepts of the Forum, but will no longer be a participant. The Commission is limiting its involvement in planning efforts to those affecting its three project areas along the Jordan River.

Albion Basin Acquisitions Support cooperative efforts to accomplish watershed protection in Albion Basin.

Implementation to Date & Future Actions The Commission supported efforts to work with the U.S. Forest Service, the non-profit Friends of Alta, and local governments to accomplish acquisitions in the Albion Basin watershed since 1995. The Forest Service and Friends of Alta acquired several lots in Albion Basin in 1997 and 1998. Again, in 2002, the Friends of Alta were able to purchase a number of Albion Basin lots with funds provided by the Commission. The Commission has completed its involvement in this program. Funds appropriated under CUPCA Section 313(b) that were not expended for Albion Basin land acquisitions remain available for expenditure under the “Statewide - Small Watershed and Small Dam Improvements” program element.

TABLE 1

FY 2005 MITIGATION PLAN FUNDING REALLOCATION [CUPCA Section 301(f)(2)]

Title III Summary of Funding Reallocations

FUNDING REALLOCATION	From:	Sec. 311 (a)	Sec. 311 (b)	Sec. 311 (C)	Sec. 311 (d)(1)	Total
		Jordan River Fish Habitat Improvement:	Jordan River Riparian Habi Development	Jordan River Wetlands Acquisition	Jordan River Rec. Facilities Salt Lake Co.	
To:	FY 2005 Authorization Available to Transfer	1,704,100	1,105,200	3,797,900	705,800	7,313,000
	Sec. 307(1) Fish Habitat Restoration Jordanelle to Deer Cr	1,500,000	500,000			2,000,000
	Sec. 311(d)(2) Provo / Jordan River Rec. Facilities (UT / WA Co.)				705,800	705,800
	Sec. 315 Angler Access Jordanelle to Deer Creek			1,500,000		1,500,000
	Sec. 315 Strawberry Angler Access			1,500,000		1,500,000
	Sec. 306(a) Wetlands Around Great Salt Lake			797,900		797,900
	Sec. 307(2) Fish Habitat Restoration: Streams in Utah	204,100				204,100
	Sec. 309(a)(4) Additional Recreation and Angler Access		605,200			605,200
	Authorization Transferred	1,704,100	1,105,200	3,797,900	705,800	7,313,000

Section 301(f)(2) of the Central Utah Project Completion Act: Reallocation of Section 8 Funds. - Notwithstanding any provision of this act which provides that a specified amount of section 8 funds available under this Act shall be available only for a certain purpose, if the Commission determines, after public involvement and agency consultation as provided in subsection (g)(3), that the benefits to fish, wildlife, or recreation will be better served by allocating such funds in a different manner, then the Commission may reallocate any amount so specified to achieve such benefits: Provided, however, That the of the United States Fish and Wildlife Service for any reallocation from fish or wildlife purposes to recreation purposes of any of the funds authorized in the schedule in section 315.

Statewide Program

Fish Hatchery Restoration and Construction Support fish hatchery production to assist meeting warm-water and cold-water fish production and stocking needs for Utah reservoirs in the CRSP-affected areas, and to augment native fish populations as appropriate.

Implementation to Date & Future Actions A Fish Hatchery Production Plan was developed in 1995 and revised in 1998 that describes Commission-funded actions over a ten-year period for hatchery improvements in Utah.⁶ The following is the status on those improvements:

The Commission and Utah Division of Wildlife Resources entered into a cooperative agreement to reconstruct the Kamas State Fish Hatchery. Construction began in September 1998 and is complete. The hatchery was dedicated in July 2001. Over 1.3 million rainbow, cutthroat and brook trout, as well as grayling, weighing 131,335 pounds were stocked from the new Kamas Hatchery in 2002. In 2003, 134,733 pounds were stocked. In 2004, and in 2005, 125,017 and 144,439 pounds were stocked, respectively. The new hatchery is a great success.

Using design parameters similar to those applied at Kamas Hatchery, construction of the new Fountain Green Hatchery began in 2001 and was completed in 2002. Over 700,000 Bonneville cutthroat trout eggs (Bear Lake strain) were moved to the new facility at that time. The majority of the fish were stocked in Strawberry Reservoir. The new hatchery was dedicated in June of 2003. Production in 2003 was 1,888,639 trout weighing 145,970 pounds. In 2004 and 2005, 147,530 and 191,154 pounds were produced and stocked, respectively.

National Environmental Policy Act (NEPA) analysis for constructing the Big Springs Ute Tribe Fish Hatchery was completed through a draft Environmental Assessment on December 31, 2003. Comments were received and incorporated into a final document in 2004. Final design and construction are pending decisions on Tribal staffing and funding.



Construction at Whiterocks State Fish Hatchery, September 2005

NEPA analysis for reconstructing the Whiterocks State Fish hatchery was completed in 2004. The record of decision to do a partial reconstruction of the existing Hatchery was issued April 30, 2004. Design of the new hatchery is complete, and construction began in September, 2005.

NEPA analysis for an Interim June Sucker Hatchery was completed and the decision to add a recirculating facility to the existing June sucker building at the Utah Division of Wildlife

⁶The Fish Hatchery Production Plan was mandated by CUPCA (Section 313(c)) to identify long-term needs and management objectives for hatchery production. The Plan has been updated by the Hatchery Workgroup, incorporating Mitigation and Conservation Plan priorities, feasibility report information, stocking assessment report results and the UDWR stocking policy. An Environmental Assessment and Finding of No Significant Impact was released in April of 1998.

Resources' Fisheries Experiment Station in Logan, Utah was made in 2004. Final design was completed in 2005, and construction began in September, 2005. The project is expected to be complete in March, 2006.

In fiscal year 2006, the Commission will provide funding to completely rebuild Whiterocks State Fish Hatchery (identified as Phase 2 in the Fish Hatchery Production Plan), and to add raceway covers at Fountain Green State Fish Hatchery. The Commission will pursue a project with the U.S. Fish and Wildlife Service to install low-head oxygenation equipment at Jones Hole National Fish Hatchery to increase production there.

- **Sensitive Species Inventory and Database** Support a statewide survey of sensitive fish, wildlife, invertebrate and plant species and develop a centralized, shared database. Develop methods to help users obtain information from the database, as well as provide information to the database.

Implementation to Date & Future Actions

Commission funds have been used to help develop Utah Division of Wildlife Resource's (UDWR) biodiversity information database. Sensitive⁷ vertebrate, invertebrate, and plant species information now exists in a central database that is continually updated and widely available. UDWR released an updated sensitive species list (December 18, 2003) and has updated the database to reflect changes made at that time.

For 130 sensitive vertebrate species and 154 sensitive invertebrate species, database information includes: taxonomic comments, subspecies, discussions, status as identified by several agencies, Natural Heritage ranking (global and state ranks), abundance notes, range in Utah, habitat requirements in Utah, trends, threats, special considerations inventory needs, and county of occurrence maps. In addition, the central database also contains 4,178 detailed sensitive vertebrate species occurrence records and 872 detailed sensitive invertebrate species occurrence records.



Screen shot of web interface to the Utah Division of Wildlife Resource's Utah Conservation Data Center with access to the Sensitive Species Database


⁷“Sensitive” species are defined as being state threatened, endangered and sensitive or as federally listed and some otherwise rare species.

For 435 sensitive plant species, database information includes: taxonomic comments, status as identified by several agencies, Natural Heritage ranking (global and state ranks), and county of occurrence maps. In addition, the central database also contains 4,627 detailed sensitive plant species occurrence records.

Reports published under the project include: “Inventory of Sensitive Vertebrate and Invertebrate Species: A Progress Report”; “Endemic and Rare Plants of Utah: An Overview of Their Distribution and Status”; “Rare, Imperiled, and Recently Extinct or Extirpated Mollusks of Utah: A Literature Review”; “The Bats of Utah: A Literature Review”; “Endemic and Rare Plants of Utah: An Overview of Their Distribution and Status”; “Vertebrate Information compiled by the Utah Natural Heritage Program, A Progress Report, 2003”; and, “Plant Information Compiled by the Utah Natural Heritage Program: A Progress Report, December 2005”.


Inventory work for both plant and animal sensitive species is ongoing. UDWR issued a vertebrate progress report in 2003 and a plant progress report in 2005. Initial database for a plant tracking list is now complete. Initial database work for mollusks and odonates is complete, but because of the extremely large number of invertebrate groups, initial work for all invertebrates will likely never be complete. The database was converted to a new management system (Biotics) in 2004, which is vastly improved and can store much more information.

This has been a positive partnership for the Commission. Funding authorization for the inventory and survey database is nearly expended. The Commission anticipates that funding for this program will be fully expended after 2006.


 **Stream and Riparian Restoration Enhancement** Support stream and riparian restoration to enhance aquatic systems and acquisition of stream reaches and angler access.

Implementation to Date & Future Actions Many of the Commission stream and riparian restoration projects are in specific watersheds; however, some will be conducted on a statewide basis because they meet Commission priorities. The Commission supports projects designed to restore ecosystem health and function to aquatic and riparian areas and public access to enjoy recreational opportunities.

Activities under this program element have occurred within the Bonneville Unit area established as a priority by the Commission for the first planning periods. The Commission will continue this priority emphasis on streams in the Bonneville Unit area and on streams already associated with a Commission project, especially the Provo River Restoration Project. The Commission reallocated \$809,000 of funding authority formerly identified for Jordan River fish habitat rehabilitation (CUPCA Section 311(a) - \$204,100) and riparian habitat rehabilitation (CUPCA Section 311(b) - \$605,200) to this program element in 2005.


 **Small Watershed and Small Dam Improvements** Support restoration-and-conservation-related improvements to small dams that meet the Commission’s priorities and one or more of the Commission’s objectives as stated in its Mitigation and Conservation Plan.

Implementation to Date & Future Actions Funding for small dam improvements was provided in 1994 and 1995. No new work has been initiated since 1996 following adoption of the first Mitigation Plan, which removed this element as a priority during the initial 5-year planning period. This program element remained a low priority and was not funded for 2005.

 **Native Cutthroat Trout Restoration** Support native cutthroat trout restoration projects that are compatible with Commission priorities and Conservation Agreements and Strategies.

Implementation to Date & Future Actions Both the original Colorado River and Bonneville Cutthroat Trout Conservation Strategies have been signed by all participants and the Commission. Identification of suspected remnant populations of native cutthroat trout is ongoing, using a combination of geographic, meristic and DNA analyses. Procedure manuals and databases were developed and are continually updated.

Genetic and physical or meristic analysis is continuing on sampled cutthroat populations to determine the amount of introgression with rainbow trout and nonnative Yellowstone cutthroat trout. Conservation strategies for the Colorado River and Bonneville cutthroat trout are being revised. The Commission is also participating in efforts to develop a standardized rangewide database for the two subspecies. In fiscal year 2005, the Commission identified two on-the-ground cutthroat trout conservation projects that will be funded in 2006. One is a project to eradicate non-native trout from the West Willow Creek drainage in northeastern Utah, and reintroduce native Colorado River cutthroat trout. The other is a project to improve habitat for Bonneville cutthroat trout on small streams of the Goshute Indian Reservation in western Utah.

 **Wetlands Ecosystem Education Plan (WEEP)** Support development of a message and implementation plan that meets Commission goals and objectives in educating people about the Greater Great Salt Lake Wetland Ecosystem, and cooperate with Utah State University in the construction of Blood's Pond as part of a wetlands education and interpretive facility at the Utah Botanical Center in Kaysville, Utah.

Implementation to Date & Future Actions In 1995, to help identify direction and need, the Commission funded a Needs Assessment and Conceptual Plan for Interpretive Recreation and Education for the Greater Great Salt Lake Wetlands Ecosystem. This report identified a gap between the level of importance placed on wetlands and wetlands awareness and opportunities available to satisfy those needs. To help address this, the Commission helped fund and participated in developing a wetlands education plan.

The geographic scope of the planning project comprises the wetland ecosystem associated with the area from Cache Valley, down the Bear River, along the shore of the Great Salt Lake, up the Jordan River, through Utah Lake and up the Provo River to Jordanelle Reservoir.

The Final Plan, completed in January 2001, identifies diverse audiences, important messages, and message delivery ideas appropriate for each audience, and has been used as intended by various agencies and organizations as the basis for developing wetland education programs.



Utah Botanical Center and wetlands ponds in Kaysville, Utah.

The Commission funded design and construction of portions of Utah Botanical Center's proposed wetlands education facilities in 2005. Construction is expected to be completed in 2006.

The Utah Botanical Center has also assumed responsibility for managing WEEP, now known as the Utah Wetlands Interpretive Network.

 **Native Fish Studies** Where relevant to Commission project planning or implementation, support studies or monitoring of native fish and/or habitats.

Implementation to Date & Future Actions The Commission is participating in ongoing revisions of the Conservation Agreements and Strategies for both least chub and spotted frog, and is also participating in the management plan for leatherside being written by the Utah Division of Wildlife Resources (UDWR).

Additional commitments to study leatherside populations and/or to mitigate and conserve leatherside populations in Utah are new environmental commitments associated with the Utah Lake Drainage Basin Water Delivery System (ULS). The Commission funded Utah Division of Wildlife Resources to initiate surveys of leatherside habitat and populations in Diamond Fork in 2005.

The Commission and UDWR have secured habitat for least chub and spotted frog in Juab County through acquisition and management of a spring/wetland complex. Funding has been provided for current research on development of intensive culture techniques for least chub and leatherside, based on recommendations of the related technical teams and/or researchers. No additional acreage of the spring/wetlands complex was acquired in 2005; negotiations will continue in 2006.

Appendix A

Financial Supplement: Fiscal Year 2005



UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

Appendix A

2005 Draft Annual Report Financial Supplement

The Financial Supplement to the 2005 Annual Report reports the Commission's financial status by program element as of September 30, 2005.

All funding authorized by CUPCA for use by the Commission is indexed (increased to adjust for inflation). The amount of the annual indexing is determined by published indices for engineering costs. Indexing is applied only to the remaining un-appropriated balance within an authorization. The amounts shown in this financial supplement reflect indexing; therefore, amounts allocated to a specific authorization may in some cases appear to exceed the original amount authorized by CUPCA.

Please note that committed funds may not equal expenditures in some cases. More detailed financial information not included in this appendix, including obligation amounts and expenditure amounts, is available from the Commission through quarterly financial reports and in our annual plan update, both of which are available upon request.

During fiscal year 2005, the Commission began promoting more efficient and timely reimbursement processes with its cooperators. Interagency agreements with federal partners are processed using the Department of Treasury's Intra-Governmental Payment and Collection [IPAC] system on a monthly basis. The Commission has been promoting the Department of Treasury's Automated Standard Application for Payments [ASAP] system to request reimbursement for our non-federal partners. ASAP is a recipient-initiated payment and information system designed to provide a single point of contact for the request and delivery of Federal funds. Several of the major programs have been instituted using ASAP on a monthly basis; additional partners will be converted to monthly ASAP reimbursements in 2006.

Utah Reclamation Mitigation and Conservation Commission
Financial Supplement: Fiscal Year 2005 Draft Annual Report

PROVO RIVER / UTAH LAKE	Original Authority [1991]	1 Ceiling Transfers FY 1994 - FY 2005	2	Committed Funds FY 1994 - FY 2005	3	Balance & Indexed Remaining Auth [2005]	4
LOWER PROVO RIVER							
Acquisition of Instream Flows	15,000,000	0		3,879,956		17,437,644	
Instream Flow / High Flows Study	500,000	0		534,000		86,205	
June Sucker Recovery	1,177,000	0		1,303,231		130,074	
Stream Restoration	975,000	0		160,000		1,224,120	
Diversion Dam Modifications	4,000,000	0		70,946		5,888,054	
Public Access and Facilities Development	65,000	0		0		65,000	
Water Quality Improvements	25,000	0		0		25,000	
MIDDLE PROVO RIVER							
WCWEP and Daniels Replacement Pipeline <i>Provo River Restoration Project</i>	10,500,000	800,000	a	10,602,385	a	0	
Angler Access and Facilities Development	12,581,000	20,983,187	abc	35,003,562		1,179,949	
Fish and Riparian Habitat Restoration	6,547,800	9,184,884	cd	15,490,130		1,230,041	
PRRP Education and Interpretation	130,000	0		109,306		0	
UPPER PROVO RIVER							
Highway-Related Deer Mortality Reduction	0	1,150,990	d	437,105		953,704	
Upper Provo River Reservoir Stabilization	5,000,000	(1,900,400)	b	3,423,348		0	
Washington Lake Campground	0	1,760,000	d	1,773,390		0	
UTAH LAKE							
Utah Lake Fish Management	500,000	0		275,062		522,568	
Utah Lake Wetland Preserve	16,670,000	0	a	12,954,461		8,486,009	
Utah Lake Drainage Basin Mitigation Commitments	2,847,219	0		352,068		3,711,500	
Utah Lake Recreation Facilities	1,968,000	(1,545,000)	b	0		1,036,200	
Terrestrial Habitat Conservation	750,000	0		0		1,139,500	
Subtotal Provo River / Utah Lake	79,236,019	30,433,661		86,368,951		43,115,568	
DIAMOND FORK							
	Original Authority [1991]	Ceiling Transfers FY 1994 - FY 2005		Committed Funds FY 1994 - FY 2005		Balance & Indexed Remaining Auth [2005]	
Diamond Fork Area Assessment	40,000	0		40,000		0	
Aquatic and Riparian Habitat Restoration - Diamond Fork	1,230,000	0		231,820		1,528,500	
Aquatic and Riparian Habitat Restoration - Sixth Water	1,500,000	0		238,880		1,955,620	
Water Temperature Study	100,000	0		103,779		17,721	
Recreation Facilities in Diamond Fork	299,000	0		124,159		341,041	
Diamond Fork Campground	2,950,000	0		3,550,000		0	
Acquisition of Angler Access	2,414,000	(165,200)	b	2,414,000		0	
Diamond Fork System Mitigation	50,000	0		0		50,000	
Subtotal Diamond Fork	8,583,000	(165,200)		6,702,638		3,892,882	
DUCHESNE / STRAWBERRY							
	Original Authority [1991]	Ceiling Transfers FY 1994 - FY 2005		Committed Funds FY 1994 - FY 2005		Balance & Indexed Remaining Auth [2005]	
Angler Access and Related Facilities	7,131,000	2,255,169	c	8,678,223		1,015,582	
Uinta Basin Replacement Project Mitigation	0	7,027,248		2,410,570		4,605,678	
Duchesne Area Canal Wetland Mitigation	160,000	0		5,000		222,400	
SACS Wetland Mitigation	7,927,000	0		1,583,067		10,037,633	
Fishery and Aquatic Resources Management	850,000	0		795,446		0	
Strawberry Area Assessment, Watershed & WHR	3,450,000	0		370,184		5,295,521	
Sage Grouse Conservation & Recovery	700,000	0		479,587		193,233	
Wildlife Habitat Acquisition	1,700,000	0		745,900		1,000,000	
Instream Flow Management	400,000	0		270,594		207,966	
Modify Diversion Structures	0	2,619,665	d	2,569,566		50,099	
Recreation Improvements	80,000	0		0		80,000	
Fish Habitat Improvement Programs	245,000	0		248,693		0	
Watershed Stabilization, Wildlife Enhancement & Access Mgmt	2,350,000	0		316,200		3,392,675	
Subtotal Duchesne / Strawberry	24,993,000	11,902,082		18,473,030		26,100,786	

**Utah Reclamation Mitigation and Conservation Commission
Financial Supplement: Fiscal Year 2005 Draft Annual Report**

GREAT SALT LAKE	Original Authority [1991]	Ceiling Transfers FY 1994 - FY 2005	Committed Funds FY 1994 - FY 2005	Balance & Indexed Remaining Auth [2005]
Great Salt Lake Wetlands Acquisition	11,028,000	(2,292,100) bc	9,806,488	1,187,739
Restoration of Agency Management Areas	1,300,000	0	1,360,684	0
Restoration and Management of Commission Acquired Property	240,000	0	180,207	40,000
Wetland Preservation Strategies	1,375,000	0	1,327,477	15,000
Subtotal Great Salt Lake	13,943,000	(2,292,100)	12,674,856	1,242,739
JORDAN RIVER	Original Authority [1991]	Ceiling Transfers FY 1994 - FY 2005	Committed Funds FY 1994 - FY 2005	Balance & Indexed Remaining Auth [2005]
Jordan River Wetland Acquisition	6,980,000	(5,342,900) bc	3,141,435	366,600
Restoration & Management of Natural Areas	2,385,985	(3,515,100) c	1,770	41,215
Support Jordan River Natural Areas Management Plan	24,015	0	22,000	0
Albion Basin Acquisitions	225,596	0	217,521	0
Subtotal Jordan River	9,615,596	(8,858,000)	3,382,726	407,815
CRSP / STATEWIDE	Original Authority [1991]	Ceiling Transfers FY 1994 - FY 2005	Committed Funds FY 1994 - FY 2005	Balance & Indexed Remaining Auth [2005]
Fish Hatchery Restoration and Construction	22,800,000	0	16,032,831	12,777,299
Sensitive Species Inventory and Database	1,500,000	0	1,615,677	149,913
Stream and Riparian Restoration Enhancement	4,693,200	0	3,000	7,687,422
Small Watershed and Small Dam Improvements	3,774,404	0	1,216,154	3,974,200
Native Cutthroat Trout Restoration	475,000	0	360,345	213,680
Wetlands Ecosystem Education Plan	117,000	0 b	115,971	0
Subtotal Statewide	33,359,604	0	19,343,977	24,802,515
FINANCIAL SUMMARY	Original Authority [1991]	Ceiling Transfers FY 1994 - FY 2005	Committed Funds FY 1994 - FY 2005	Balance & Indexed Remaining Auth [2005]
Provo River / Utah Lake	79,236,019	30,433,661	86,368,951	43,115,568
Diamond Fork	8,583,000	(165,200)	6,702,638	3,892,882
Duchesne / Strawberry	24,993,000	11,902,082	18,473,030	26,100,786
Great Salt Lake	13,943,000	(2,292,100)	12,674,856	1,242,739
Jordan River	9,615,596	(8,858,000)	3,382,726	407,815
Statewide	33,359,604	0	19,343,977	24,802,515
Total	169,730,219	31,020,443	146,946,178	99,562,304
COMMISSION FUNDING				
Title III Funding	145,316,000	0	(146,946,178)	84,051,304
Section 201, 1988 Definite Plan Report Funding	24,414,219	11,540,748	0	15,511,000
Title IV Funding	0	16,860,030	0	0
Section 203(a)(5) Funding	0	2,619,665	0	0
DOI: WCWEP/ DRP	0	0	0	0
Total	169,730,219	31,020,443	(146,946,178)	99,562,304

NOTES:

- 1 Original Mitigation Authority is found in the Central Utah Completion Act of 1992 [P.L 102 575]
- 2 Reallocations are authorized by CUPCA Section 301(f) and are summarized as follows:
 - a Title IV Discretionary Funds Used on Projects:
 - Fiscal Year 1999: \$800,000 WCWEP / DRP
 - Fiscal Year 2000: \$3,856,000 PRRP Angler Access and Facilities Development; \$1,180,000 Utah Lake Wetland Preserve
 - Fiscal Year 2001: \$5,653,100 PRRP Angler Access and Facilities Development
 - Fiscal Year 2002: \$350,000 PRRP Fish and Habitat Restoration; \$1,922,600 SACS Angler Access and Related Facilities

Utah Reclamation Mitigation and Conservation Commission
Financial Supplement: Fiscal Year 2005 Draft Annual Report

NOTES:

- b Reallocations implemented through the July 2000 Mitigation and Conservation Plan:
 - \$8,245,600 Increase for PRRP Angler Access and Facilities Development
 - (\$1,900,400) Decrease for Upper Provo River Reservoir Stabilization
 - (\$165,200) Decrease for Acquisition of Angler Access [Diamond Fork]
 - (\$3,090,000) Decrease for Great Salt Lake Wetlands Acquisition
 - (\$1,545,000) Decrease for Jordan River Wetland Acquisition
 - (\$1,545,000) Decrease for Utah Lake Recreation Improvements

 - c Reallocations implemented through the July 2005 Mitigation and Conservation Plan:
 - \$2,105,200 Increase for PRRP Angler Access and Facilities Development
 - \$2,909,900 Increase for PRRP Fish and Riparian Habitat Restoration
 - \$1,500,000 Increase for Strawberry Angler Access & Related Facilities
 - \$797,900 Increase for Great Salt Lake Wetlands Acquisition
 - (\$3,797,900) Decrease for Jordan River Wetland Acquisition
 - (\$3,515,100) Decrease for Jordan River Restoration and Management of Natural Areas

 - d Programs established pursuant to CUPCA
 - \$1,227,600 established for Middle Provo River Diversion Dams and combined in PRRP Fish and Riparian Habitat Restoration
 - \$1,151,000 established for Highway-Related Deer Mortality Reduction
 - \$1,800,000 established for construction of the Washington Lake Campground
 - \$2,619,665 established from CUWCD under Section 203(a)(5) to Modify Diversion Structures
- 3 Committed Funds include appropriations that have been obligated and/or expended under each program element
- a DOI paid \$1,343,200 during fiscal year 2000 under WCWEP / DRP authorization.
- 4 Balance & Indexed Remaining Authority includes (a) the Original Authority [\$1991], (b) + or - Reallocations, (c) Less Appropriations (d) Less Section 314(c) transfers, (e) Plus indexing increases and (f) plus funds that have been appropriated but not yet obligated.

Appendix B

List of Acronyms



UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

Appendix B

List of Acronyms

The following is a list of abbreviations used in this Report.

Abbreviation	Full Title
CFS	Cubic Feet per Second
CUP	Central Utah Project
CUPCA	Central Utah Project Completion Act
CUWCD	Central Utah Water Conservancy District (District)
CRSP	Colorado River Storage Project
DOI	Department of the Interior
DPR	Definite Plan Report
DRP	Daniels Replacement Pipeline
EA	Environmental Assessment
EIS	Environmental Impact Statement
FONSI	Finding of No Significant Impact
GGSLWE	Greater Great Salt Lake Wetland Ecosystem
GSL	Great Salt Lake
GSLA	Great Salt Lake Audubon
JORNAC	Jordan River Natural Areas Conservation Corridor
JSRIP	June Sucker Recovery Implementation Program
LDWP	Lower Duchesne Wetlands Mitigation Project
MOA	Memorandum of Understanding
NEPA	National Environmental Policy Act
PRRP	Provo River Restoration Project
ROD	Record of Decision
SAMP	Special Area Management Plan
SACS	Strawberry Aqueduct and Collection System

TNC	The Nature Conservancy
UBRP	Uinta Basin Replacement Project
UDWR	Utah Division of Wildlife Resources
UDOT	Utah Department of Transportation
ULS	Utah Lake Drainage Basin Water Delivery System
ULWP	Utah Lake Wetland Preserve
USBR	United States Bureau of Reclamation
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USFS	United States Forest Service
UWIN	Utah Wetlands Interpretive Network
WCWEP	Wasatch County Water Efficiency Project
WEEP	Wetlands Ecosystem Education Plan