

Chapter 1

Purpose and Need

1.1 Purpose of the Environmental Assessment and Introduction

This document is an Environmental Assessment (EA) for Restoration of the Provo River through the Victory Ranch (Proposed Action). The owners of the Victory Ranch are proposing rehabilitation of the Provo River and associated habitat from the bridge on SR 32 east of the Jordanelle Reservoir, upstream to 1000 East in Francis, Utah, a distance of 5 miles. In the 1940s, the U.S. Bureau of Reclamation (Reclamation) obtained easements along the Provo River to flood certain land and to construct dikes to contain high flows that come from diverting the Weber and Duchesne Rivers. Therefore, Reclamation authorization is required in order to implement the Proposed Action. Before such authorization can occur, Reclamation must prepare an EA pursuant to the National Environmental Policy Act (NEPA) and the Council on Environmental Quality's and Department of Interior's regulations implementing NEPA to determine whether the Proposed Action would have a significant effect on the quality of the human environment.

Victory Ranch owns or controls most of the land along the 5 miles of river above Jordanelle with the exception of a parcel at the south end of the project owned by the LDS Church and two small areas locally known as Lemon's Grove and Trout River Ranch. The location of the Victory Ranch Resort is shown on Map 1. Land ownership along the Provo River and Reclamation easements are shown in Map 2. The boundary area of the Proposed Action is also shown on Map 2.

This EA examines the Proposed Action, the No Action Alternative and cumulative impacts that could occur as a result of other past, present or future projects in the area. The EA provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement (EIS) or a Finding of No Significant Impact (FONSI). The EA and FONSI are intended to satisfy disclosure requirements of NEPA and will serve as the NEPA compliance document for the Proposed Action. An EIS would be required if the EA determines that implementing the Proposed Action would result in significant impacts. This EA is also intended to serve as the Biological Assessment under the provisions of Section 7 consultation requirements of the Endangered Species Act, 16 USC 1531-1544.

This chapter describes the background, history, previous environmental documentation, and purpose and need of the Proposed Action.

Map 1 – This file is too large for viewing on-line. Please contact Beverley Heffernan (801) 379-1161, in Reclamation's Provo Area Office to obtain a copy on CD.

Map 2 – This file is too large for viewing on-line. Please contact Beverley Heffernan (801) 379-1161, in Reclamation's Provo Area Office to obtain a copy on CD.

1.2 Background and History

Historically, the Provo River in the project area offered good fish and wildlife habitat. This was due, in part, to an unregulated and unaltered river. Bends in the river provided deep pools for fish and dense streamside forest habitat for many species of birds and other wildlife. This river habitat was first altered in 1932 with the completion of phase 1 of the Weber/Provo Canal to import 210 cfs of water from the Weber River to the Provo River. This canal was enlarged in 1948 to a capacity of 1000 cfs, allowing diversion of the Weber River's high flows into the Provo River for storage in Deer Creek Reservoir. With this input, flooding on the Provo River increased dramatically.

In 1954, the Duchesne Tunnel was completed which diverts high flows from the Duchesne River into the Provo River. Following completion of this diversion, flooding along the Provo River was again increased dramatically with approximately 600 cfs added during high flows. By simply subtracting the high flows from the Weber and Duchesne diversions using peak flow records at the gage near Hailstone just below Victory Ranch, the estimated 2-year flood without the Weber and Duchesne water would be 931 cfs and with the added water it is 2,431 cfs (600 cfs from the Duchesne and 1,000cfs from the Weber).

To control flooding, Reclamation initiated a flood control project including channel realignment, channel enlargement, dike construction and repair, and purchase of flood easements. The objective of these projects was to increase channel capacity to 3,000 cfs between the Duchesne Tunnel to the Weber/ Provo Canal, and to increase channel capacity to 4,300 cfs between the Weber/Provo Canal and Deer Creek Reservoir.

The Provo River Water Users Association (PRWUA) performs annual maintenance work in the channel of the Provo River, reworking cobble to maintain channel capacity at some locations, reworking channels near diversion headworks to keep them functional, and reinforcing downstream toes of diversion dams to prevent undercutting by upstream-migrating headcuts caused by excessive shear stress and associated sediment transport.

In 1993 the Jordanelle Dam was completed. With its completion, high flows in the Provo River between Jordanelle and Deer Creek Reservoirs were greatly reduced. In 1999, the Provo River Restoration Project through Heber Valley was initiated by the Utah Reclamation Mitigation and Conservation Commission as mitigation for the Central Utah Project.

1.3 Purpose and Need

The Proposed Action would respond to the following need: To improve the condition and function of the 5-mile section of the Provo River that runs through the Victory Ranch property by moving the inflow of the Weber/Provo Canal approximately one mile downstream and by creating space, continuity and complexity currently lacking due primarily to past practices of diking and dredging.

The purposes served by the Proposed Action are:

1. Reduce the headcuts caused by excessive shear stress and reduce associated sediment transport down stream to the Rock Cliffs State Park.
2. Improve and protect fish and wildlife habitats, including spotted frog habitat.
3. Mitigate some of the impacts of high flow diversions to the Provo River.
4. Reduce maintenance required for flood control and irrigation diversions.

Also, the project applicant wishes to support recreational demand for fly fishing by Victory Ranch Resort patrons.

1.4 Authorizing Actions, Permits and Licenses

Construction and operation of the Proposed Action would require various contracts and agreements that would be negotiated by Victory Ranch with Reclamation, private companies, and individuals. Victory Ranch would need to obtain various approvals, permits, and licenses from Wasatch County and state and federal regulatory agencies. This section summarizes these requirements. Table 1-1 lists the contracts and agreements needed for construction and operation of the Proposed Action.

Table 1-1 Contracts and Agreements Needed by Victory Ranch for the Proposed Action	
Contract or Agreement	Purpose
Bureau of Reclamation	To authorize modification of the Weber/Provo Canal and flood control features on the Provo River through Victory Ranch
Farm Management Company	To purchase, lease or obtain an easement for River Restoration on land not currently owned by Victory Ranch
Ted Cahoon	To purchase, lease or obtain an easement for Weber/Provo Canal relocation on land not currently owned by Victory Ranch

Table 1-2 lists the federal, state and local permits and licenses required and the agencies or departments that administer them.

Table 1-2 Permits and Approvals Required by Victory Ranch for Proposed Action		
Agency/Department	Permit/Approval	Required for
Federal agencies		
U.S. Army Corps of Engineers	Individual Permit (Clean Water Act, Section 404)	Discharge of dredge/fill into waters of the United States, including wetlands
U.S. Fish and Wildlife Service	Section 7 Consultation (Endangered Species Act, 16 USC 15311544)	Ensure Endangered Species Act compliance
Bureau of Reclamation	License	For construction of proposed river restoration elements
State Agencies		
Department of Natural Resources Division of Water Rights	Stream Channel Alteration permit (Utah Code Annotated Section 73329)	Change in river or stream (including roads, bridge or pipeline construction across a streambed)
Utah Division of Wildlife Resources	Consultation	spotted frogs
Department of Environmental Quality Division of Water Quality	General construction activity stormwater permit	Stormwater discharge associated with construction activities
	401 Certification (Clean Water Act, 33 USC 1342, as the project requires U.S. Army Corps of Engineers 404 permit	Discharge into waters and wetlands (see U.S. Army Corps of Engineers Section 404 Permit)
Utah State Historic Preservation Office	Section 106 Consultation (National Historic Preservation Act, 16 USC 470) A MOA may be needed, parties to be determined.	Historic, architectural, archaeological or cultural characteristics of properties that meet National Register criteria
Utah Department of Transportation	Right-of-way and encroachment permit	Construction of acceleration and deceleration lanes at project entrance
Utah Occupational Safety and Health Administration	Construction permit	Worker safety and health

Table 1-2 (continued)		
Permits and Approvals Required by Victory Ranch for Proposed Action		
Agency/Department	Permit/Approval	Required for
Other Agencies and Organizations		
Wasatch County Planning Department	Conditional Use Permit	Activities which are conditional in a particular zone
Summit County Planning Department	Conditional Use Permit	Activities which are conditional in a particular zone
Wasatch County Engineering Department	Grading Permit	Excavation and fill activities
Summit County Engineering Department	Grading Permit	Excavation and fill activities
Provo River Water Users Association	License Agreement	PRWUA concurrence is required on license agreement and final project design
Northern Ute Tribe Northwest Band of the Shoshone Nation	Tribal Consultation	National Historic Preservation Act 36CFR 800

1.5 Interrelated Projects

This section describes projects that could cause cumulative impacts related to the Proposed Action. These projects are referred to as interrelated projects.

The NEPA and CEQ Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Part 1500-1508) require federal agencies to consider the cumulative impacts of their actions. These are defined as the incremental impact of the action when added to other past, present and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such actions. Cumulative impacts can result from actions that are individually minor but collectively significant over a period of time (40 CFR 1508.7).

Section 1.5.2 describes future projects that have been included in the cumulative impacts analysis. Interrelated projects could combine with the Proposed Action to create cumulative impacts on the environment. Section 3.15 discusses the cumulative impacts interrelated projects may cause in conjunction with the Proposed Action.

1.5.1 Past Projects

The natural flow in the Provo River was increased in 1932 with the completion of phase 1 of the Weber/Provo Canal to import 210 cfs of water from the Weber River to the Provo River. This canal was enlarged in 1948 to a capacity of 1000 cfs, allowing diversion of the Weber River's high flows into the Provo River for storage in Deer Creek Reservoir. With this input, flooding on the Provo River increased dramatically.

In 1954 the Duchesne Tunnel was completed which diverts high flows from the Duchesne River into the Provo River. Following completion of this diversion, flooding along the Provo River was again increased dramatically with approximately 600 cfs added during high flows. By simply subtracting the high flows from the Weber and Duchesne diversions using peak flow records at the gage near Hailstone just below Victory Ranch, the estimated 2-year flood without the Weber and Duchesne water would be 931 cfs and with the added water it is 2,431 cfs (600 cfs from the Duchesne and 1,000 cfs from the Weber).

To control flooding, Reclamation initiated a flood control project including channel realignment, channel enlargement, dike construction and repair, and purchase of flood easements. The objective of these projects was to increase channel capacity to 3,000 cfs between the Duchesne Tunnel to the Weber/ Provo Canal, and to increase channel capacity to 4,300 cfs between the Weber/Provo Canal and Deer Creek Reservoir.

A flow duration relationship was computed for the mean daily flow record of the USGS gage on the Provo River near Hailstone, Utah (station number 10155000). The relation is for the reach below the Weber/Provo Canal and cannot be converted directly into a relation for the river above that point. However, since transbasin diversions occur only during periods of high discharge, the curve is probably appropriate for moderate to low discharge periods for all of Victory Ranch. A mean daily discharge of 50 cfs was exceeded over 94% of the time for the period of record, whereas a discharge of 750 cfs was exceeded only 11% of the time. Mean daily discharges over 2,000 cfs were exceeded only 1.3% of the time.

Changes resulting from construction and operation of the past projects along the Provo River through Victory Ranch have been included in the baseline conditions being used to measure impacts of construction of the Proposed Action. Therefore, since impacts are measured from a baseline (i.e., existing conditions), impacts from past projects are not included as a separate item in the cumulative impact analyses.

1.5.2 Future Projects Included in the Cumulative Impact Analysis

The Victory Ranch Resort (Map 1) is directly linked to the Proposed Action in that the river restoration work is funded by the resort. However, the resort development plan does not necessarily require restoration of the river. Several other developments around the Jordanelle Reservoir are proposed or under construction including: Mayflower North Properties, Mayflower South Properties, East Park subdivision, Deer Cover Resort, Deer Crest hotel, Pioche Village, Deer Meadow, Hideaway Hollow, The Aspen, Deer Canyon Preserve, Sorenson Properties, Todd Hollow and Tuhaye. Most of these projects are residential developments and they are unrelated to the Proposed Action.

Planned activities for which Reclamation or U.S. Department of the Interior authorization is required include an intake pipeline to be built by Jordanelle Special Service District to draw water from Jordanelle Reservoir, and a lease of power privilege that would allow Heber Light and Power and the Central Utah Water Conservancy District to construct a power plant to generate electricity at Jordanelle Dam. Neither of these projects would contribute impacts to or be affected by the Proposed Action.

The Victory Ranch Resort encompasses 5803 acres, including 732 acres of the Provo River Valley and the area of the Proposed Action (the River Restoration Project). The resort property was acquired over the past 10 years and is largely composed of the historic Double Bar A Ranch, Fitzgerald Ranch and Victory Ranch (which accounts for the name of the Victory Ranch Resort). When build out is completed, the resort would include three golf courses, 432 resort housing units, 76 employee housing units and 217 lots for single family homes. Approximately 83% of the resort area would be open space.