

CHAPTER 1: INTRODUCTION

1.0 INTRODUCTION

1.1. INTRODUCTION

The United States Department of the Interior, Bureau of Reclamation (Reclamation) has prepared this Environmental Impact Statement (EIS) to evaluate the potential impacts of the proposed Humboldt Project Conveyance, commonly known as the Humboldt Project Title Transfer. The Humboldt Project (Project) located in north central Nevada is a Reclamation storage project. Authorized in 1933, the Project includes federal lands that were withdrawn from the public domain and dedicated to the Project (withdrawn lands), and private lands that were purchased for dedication to the Project (acquired lands).

The proposed title conveyance is authorized under Title VIII of Public Law 107-282, Humboldt Project Conveyance (Act) dated November 5, 2002. The Act directs the Secretary of the Interior (Secretary) to convey all right, title, and interest in and to the lands and features of the Humboldt Project, including all water rights for storage and diversion, to the Pershing County Water Conservation District (PCWCD), the State of Nevada (State), Pershing County, and Lander County consistent with the terms and conditions set forth in the Memorandum of Agreement between PCWCD and Lander County dated January 24, 2000; the Conceptual Agreement between PCWCD and the State of Nevada dated October 18, 2001; the Letter of Agreement between Pershing County and State of Nevada dated April 16, 2002; and any agreements between Reclamation and PCWCD. A Memorandum of Agreement between the Reclamation and PCWCD was entered into on May 6, 2004.

The Humboldt Project includes three primary features – Humboldt Sink, Rye Patch Dam and Reservoir, and the Community Pasture. The Humboldt Sink encompasses approximately 32,650 acres of withdrawn lands in Pershing and Churchill Counties. The Rye Patch Reservoir, located in Pershing County approximately 25 miles north of Lovelock, includes approximately 8,460 acres of withdrawn lands and approximately 12,340 acres of acquired lands. The Community Pasture encompasses approximately 30,000 acres of acquired pasture lands located in or near the unincorporated town of Battle Mountain.

Non-Reclamation project features, including water distribution and drainage facilities in the Lovelock Valley and lands owned by the PCWCD, are not included in this transfer and are not subject to environmental review under the National Environmental Policy Act (NEPA).

The title transfer involves approximately 83,530 acres of federal lands associated with the Humboldt Project. Under the proposed transfer, title of these lands would be conveyed as follows:

Pershing County Water Conservation District – All acquired lands in the Rye Patch Reservoir area, and all withdrawn lands below the reservoir high water mark and approximately 22,500 acres of acquired land in the Community Pasture.

State of Nevada – The State of Nevada will receive approximately 31,660 acres of withdrawn Reclamation lands in the Humboldt Sink, and certain withdrawn lands above the Rye Patch Reservoir high water mark. Approximately 5,850 acres of acquired land in the Battle Mountain Community Pasture would transfer to the State of Nevada to be managed by Nevada Department of Wildlife (NDOW) for the purpose of creating a wetland.

Lander County – Lander County would receive title to four parcels totaling approximately 1,100 acres in the Battle Mountain Area.

Pershing County – Pershing County would receive approximately 990 acres of withdrawn

Reclamation lands adjacent to the Derby Airfield in the Humboldt Sink.

1.2. PURPOSE AND NEED

The purpose of this action is to transfer the Humboldt Project from federal ownership to PCWCD, State of Nevada, Lander County, and Pershing County. The action is needed to comply with Title VIII of Public Law 107-282 (**Appendix B**) which directs the Secretary to transfer title of the Humboldt Project to the above named entities.

1.3. TITLE TRANSFER PROCESS

Reclamation policy requires that title transfers be carried out in an open and public manner. In addition to satisfying NEPA requirements, this EIS evaluates the proposed title transfer using the following six broad public interest criteria, as defined by the *Framework for the Transfer of Title: Bureau of Reclamation Projects* dated August 7, 1995. A copy of the document can be found in **Appendix A**.

- The Federal Treasury, and thereby the taxpayer's financial interest, must be protected;
- There must be compliance with all applicable state and federal laws;
- Interstate compacts and agreements must be protected;
- The Secretary of the Interior's Native American trust responsibilities must be met;
- Treaty obligations and international agreements must be fulfilled; and
- The public aspects of the project must be protected

The title transfer program is being implemented throughout the western states in which Reclamation has developed water and power projects. In recent years, Reclamation has completed a number of title transfers for lands, facilities, and other assets associated with federal projects.

1.4. PROJECT LOCATION AND DESCRIPTION

The Humboldt Project, located in the high desert of north central Nevada, includes the Humboldt Sink, the Rye Patch Dam and Reservoir, and the Battle Mountain Community Pasture. These areas are contained within three separate noncontiguous areas along the Humboldt River. The Humboldt River is the longest river within the State of Nevada and is the major source of irrigation water for the Humboldt Project. Project lands range in elevation from approximately 3,900 to 4,100 feet in the Humboldt Sink and Rye Patch Reservoir area to over 4,500 feet in the Battle Mountain Community Pasture. Project lands are surrounded by the Eugene Mountains, West Humboldt, and Trinity Ranges in the lower reaches of the Humboldt River, and the Battle Mountain, Sheep Creek, and Shoshone Ranges in the upper reaches near Battle Mountain.

1.4.1. Humboldt Sink

The Humboldt Sink consists of two noncontiguous segments at the terminus of the Humboldt River. The northeast segment includes the Toulon Lake, Humboldt Lake, and Humboldt drainage, and the southwest segment includes the White Plains area (Figure 2). The area is located between the West Humboldt Range to the southeast and the Trinity Range to the northeast. In total, approximately 32,650 acres of withdrawn lands located in Pershing and Churchill Counties are included in the proposed title transfer. The northern extent is located approximately 10 miles south of Lovelock, the county seat of Pershing County, Nevada and approximately 80 miles northeast of the Reno/Sparks area.

Since 1957, portions of the Humboldt Sink have been managed by NDOW as the Humboldt Wildlife

Management Area (Humboldt WMA), also called Humboldt-Toulon. The Humboldt WMA is fed by both natural flow of the Humboldt River and the drain system carrying tail water from the irrigated lands of the PCWCD. At the southwest end of the Humboldt Sink is the Humboldt Dike, a naturally formed feature that rises over 100 feet above the Humboldt Sink to the north and the White Plains to the south. The dike is breached where the Humboldt River cuts through to allow water to flow from the Humboldt Lake to the White Plains (referred to as the Humboldt Slough or Canal). In extremely wet years the Humboldt Sink discharges to the Carson Sink via this drainage.

1.4.2. Rye Patch Dam and Reservoir

The Rye Patch Dam and Reservoir are located on the Humboldt River about 26 miles upstream from Lovelock, and approximately 22 miles from the northern extremity of the PCWCD service area. The lands to be transferred include approximately 8,460 acres of withdrawn lands and approximately 12,340 acres of acquired lands. The reservoir is about 21 miles long, has approximately 72 miles of shoreline and covers approximately 12,000 acres when full. The dam is an earth-fill rock-faced structure with a height of 78 feet and a crest length of 1,074 feet, and has a storage capacity of approximately 213,000 acre-feet (USBR 1976).

The Nevada Division of State Parks (State Parks) operates and maintains the Rye Patch State Recreation Area facilities at Rye Patch, although the management agreement with Reclamation and the PCWCD has expired. The park entrance, located at the southern end of Rye Patch Reservoir, is approximately 1 mile west of Interstate 80 (I-80) via Federal Aid Secondary Road (FAS) 401. Access to other areas within the Park is available from numerous dirt roads and jeep trails and by boat.

1.4.3. Battle Mountain Community Pasture

The Battle Mountain Community Pasture is located approximately 125 miles upstream of the northern end of Rye Patch Reservoir and is traversed by the Humboldt, Rock Creek and Reese River. The lands to be transferred include approximately 30,000 acres of acquired lands north of Interstate 80, with a few isolated parcels south of the interstate. There are pasture lands primarily north and east of the unincorporated town of Battle Mountain, the county seat of Lander County, Nevada. Project lands are accessible by several paved and unimproved roads.

In addition, several Reclamation-acquired parcels in and near the Town of Battle Mountain are included in the proposed title transfer. These properties include lands adjacent to the Livestock Events Center, a metal building adjacent to the County complex used by PCWCD as a maintenance shop and a vacant parcel adjacent to the sewage treatment plant on the western edge of town. Also included in the transfer are the ranch manager's house and various farm-related structures, and the Slaven Diversion Dam located on the Humboldt River near the eastern boundary of the Community Pasture (**Appendix E**).

1.5. PROJECT BACKGROUND

1.5.1. Project History

Historical accounts of the Humboldt Project are taken from the *U. S. Bureau of Reclamation History Program, Humboldt Project* (Autobee 1993), the *Nevada Water Basin Information and Chronology Series, Humboldt River Chronology* (NDWP 2004d), and numerous unpublished reports obtained during the course of this study. **Section 3.10.1** provides a detailed analysis of cultural resources in the project area.

The first attempt to provide reliable water storage facilities for the Lovelock Valley began in the early 1900s. The Humboldt-Lovelock Irrigation Light & Power Company constructed the Pitt-Taylor Reservoirs, located upstream of Lovelock, Nevada with a combined reservoir capacity of 49,000 acre-feet. These reservoirs soon proved to be inadequate as demands for the waters of the Humboldt River increased and the reservoirs lacked available water during dry years (Autobee 1993).

As the settlement of the Humboldt Basin progressed, increasing use of water on lands in the upper reaches of the river basin created shortages for lower basin water users. In response to the problem, the Nevada State Engineer ordered a general adjudication of the Humboldt River system in 1923. After years of judicial challenges, the Humboldt River adjudication was finalized by order of the Nevada Supreme Court in 1938 when it affirmed the Humboldt River Decree.

The Lovelock Irrigation District was organized in 1926 for the primary purpose of exploring possible storage sites on the Humboldt River. To facilitate the construction of such a project, the District reorganized as a quasi-governmental entity under the Nevada Irrigation District Act and changed its name to the Pershing County Water Conservation District.

In the early 1930s, PCWCD began negotiations with Reclamation for the construction of the Humboldt Project. The Humboldt Project was authorized for construction under the National Industrial Recovery Act of June 16, 1933 and approved in August 1933. The Humboldt Project was found feasible by the Secretary on November 1, 1935, and approved by President Franklin D. Roosevelt on November 6, 1935.

After studying several locations for reservoir construction, PCWCD and Reclamation decided on the present site of Rye Patch Reservoir. However, to make the Project feasible, PCWCD needed to acquire water to store in the proposed reservoir through the purchase of water rights. To this end, the PCWCD directors located willing sellers in Lander County, and in January 1934 entered into purchase agreements with several ranch owners in the Battle Mountain and Valmy areas. Two of the willing sellers were the Filippini family, who owned Argenta Ranch and Muleshoe Ranch, and the Aldous family, who owned the Aldous Ranch. These three ranches eventually become the Community Pasture. In total, PCWCD contracted to acquire more than 30,000 acres of land and appurtenant water rights from these two large ranches just outside Battle Mountain, and an additional 30,580 acre-feet of water rights from nearby properties.

In late 1934, to facilitate the transfer of water rights to storage at Rye Patch for ultimate use on PCWCD lands, PCWCD assigned its right under the ranch and water right purchase agreements to the U. S. Government. These agreements were assigned to Reclamation, which advanced the money for the sale price of the ranches. PCWCD entered into a repayment contract with Reclamation for the construction of Rye Patch Dam and the purchase price for the lands and water rights on October 1, 1934, and supplemental contract dated August 8, 1941. The contract provided for the full repayment of all Project-related construction and acquisition costs over a 40-year period.

Construction of Rye Patch Dam began in January 1935, and was completed in January 1936, with a design capacity of 170,000 acre-feet. Because of the drought conditions and legal problems with the Pitt-Taylor Reservoirs, Rye Patch was not initially filled to full capacity.

In 1934, the Humboldt Sink was withdrawn from the public domain as part of the Humboldt Project. Reclamation withdrew these lands out of concern for responsibility for flood damage which might occur as a result of Project operations. In 1957, the Nevada Fish and Game Commission entered into a 25-year land use agreement with Reclamation on approximately 18,179 acres within the Humboldt Sink. The purpose of the lease and land use agreements was to preserve the wetland habitat within the Humboldt Sink for the benefit of waterfowl, shorebirds and other wildlife, and to provide hunting opportunity for

sportsmen (Bull and Richards 2003).

In the early 1940s, with all water transfers completed, legal problems resolved, and operating methods established, PCWCD assumed the operation and maintenance of the Humboldt Project, including Rye Patch Dam and the purchased lands in Lander County.

In 1955, PCWCD entered into a contract with the United States for the rehabilitation and betterment of works of the Humboldt Project (Contract No. 14-06-200-429). This contract provided for improvements to the Battle Mountain Development and Collection System, a part of which is located on the Battle Mountain Community Pasture. This contract, as well as the original construction contract, called for repayment by PCWCD for all funds expended by the United States for Project costs. Final payment of these obligations was completed in 1978.

According to the Lander County Memorandum of Agreement, at the time of purchase of the Lander County ranches, and within the area of the Argenta Ranch and the Muleshoe Ranch, there existed an area known as the Argenta Marsh. After the transfer of the water rights from Lander County ranches, and as part of the water rights change approvals, the Nevada State Engineer ordered that the lands be dewatered. In 1955, the marsh area was channelized to improve water conveyance in the Humboldt River adjacent to those lands (**Appendix E**).

In 1975, PCWCD entered into a contract with the United States for the rehabilitation and betterment of Rye Patch Dam (Contract No. 14-06-200-8194A). The dam height was increased by 3 feet, and the total storage capacity of Rye Patch Reservoir was increased to 213,000 acre-feet. The contract required PCWCD to repay the costs of these improvements. Final payment of these obligations was made in 1995.

In the early 1990s, Reclamation determined that some modifications to Rye Patch Dam would be necessary to protect the integrity of the actual dam structure. This work was completed in 1996, and Rye Patch Reservoir was filled to a capacity of 213,000 acre-feet. Modification costs totaled approximately \$7.7 million. Of this amount, PCWCD was required to repay 15 percent (approximately \$1.1 million) of the total modification costs over an 8-year period. PCWCD completed repayment to the United States for its portion of the modification costs in 2002.

1.5.2. Title Transfer Effort

The current title transfer effort was initiated by PCWCD in 1996. Members of the Nevada Congressional delegation introduced title transfer legislation in 1982 and then again in 1991. In 1982, HR 5652 was introduced to “authorize and direct the Secretary of the Interior to convey real property to the Pershing County Water Conservation District.” The bill failed after the Department of Interior indicated that they had not finished developing title transfer guidelines.

Title transfer legislation was again proposed in 1991. HR 1038, titled the Battle Mountain Pastures Restoration Act of 1991, was introduced to convey the Community Pasture to the PCWCD. A companion bill was also introduced in the Senate (SB 357). Neither of these bills were enacted into law.

On August 7, 1995, Reclamation adopted the “Guidelines and Framework for the Transfer of Title – Bureau of Reclamation Projects.” This document established a collaborative, proactive approach to title transfers in an effort to resolve major concerns before legislation was introduced in Congress (**Appendix A**).

Since 1996, PCWCD has been engaged in ongoing communications and negotiations with Reclamation,

the State of Nevada, Lander County, Pershing County, environmental and various other public interest groups regarding the current title transfer effort. Prior to the preparation of this EIS, PCWCD, with the assistance of Reclamation, held scoping meetings to identify the public's concerns and resource issues. In subsequent discussions, the State of Nevada and Lander and Pershing Counties reached tentative agreements regarding future land ownership and use subsequent to transfer, including enhanced wildlife habitat, recreation opportunities and minimum operational pool requirements in Rye Patch Reservoir.

In January 2000, the Lander County Board of Commissioners and the PCWCD Board of Director's drafted a Conceptual Memorandum of Agreement (**Appendix E**) to define the proposed transfer of lands from Reclamation to Lander County and PCWCD. This agreement supported the title transfer and included language requesting transfer of approximately 1,100 acres of Community Pasture lands in the vicinity of the unincorporated town of Battle Mountain to Lander County. Proposed uses for these lands include the potential development of an industrial park in the vicinity of the sewage treatment facility, expansion of the County Fairgrounds adjacent to the Livestock Events Center, and the transfer of an existing maintenance building currently used by PCWCD to Lander County. In addition, a low-maintenance public recreation site, adjacent parking area, and access easements along the Humboldt River were proposed. The access easement would be subject to certain restrictions, including maintenance of the easement area in its natural state and allowing day use and foot traffic only.

In October 2001, the State of Nevada drafted and signed a letter of Conceptual Agreement outlining the concepts of the agreement between the State and PCWCD (**Appendix F**). The parties agreed to support legislation that transfers ownership of lands in the Battle Mountain Community Pasture, Rye Patch Reservoir, and lands within the Humboldt Sink from the federal government to the State of Nevada and PCWCD.

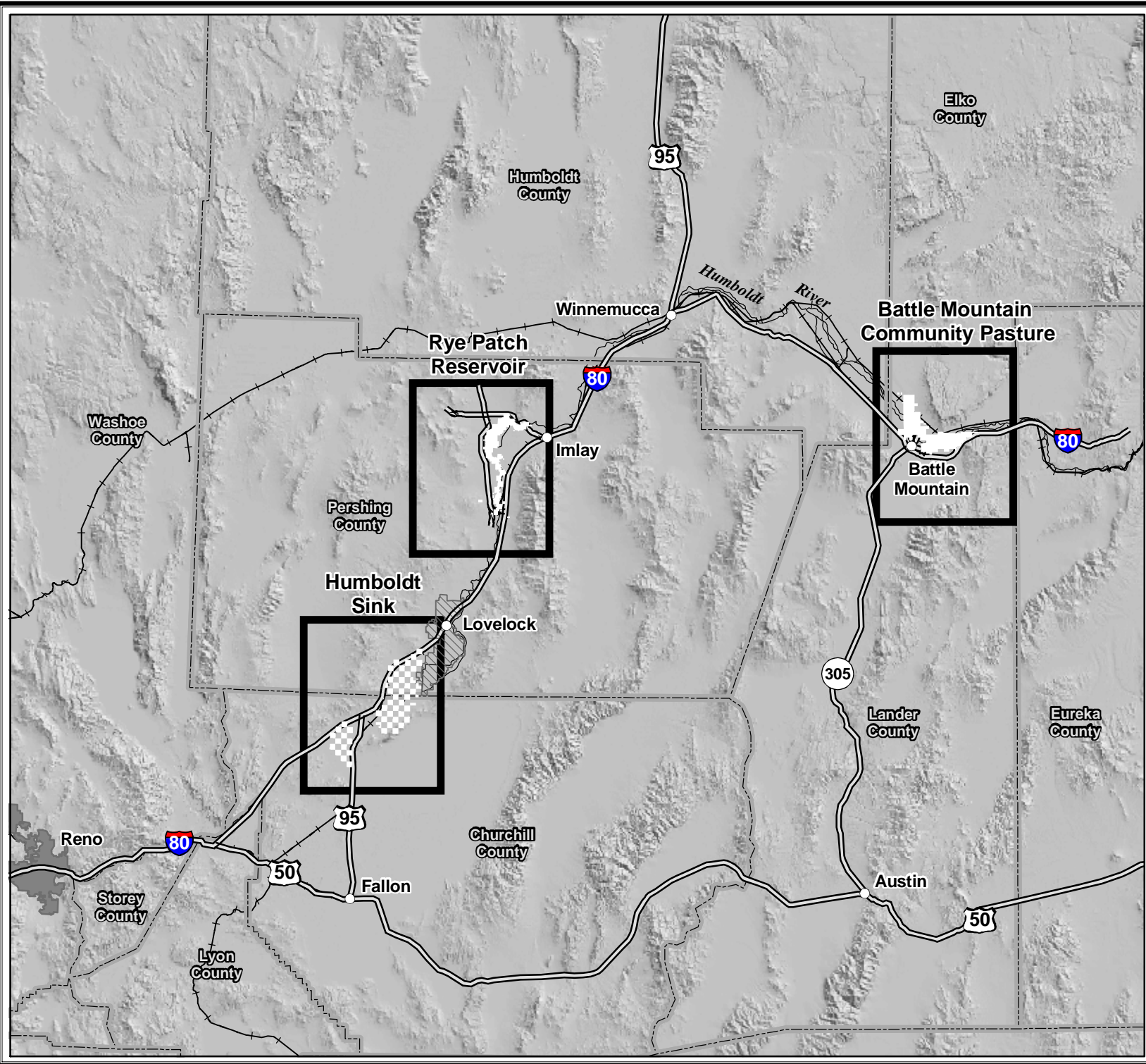
On April 16, 2002, the Pershing County Board of Commissioners provided specific language requesting transfer of portions of the Humboldt Sink near the Derby Airfield to Pershing County (**Appendix F**).

On November 5, 2002, Title VIII of Public Law 107-282, Humboldt Project Conveyance Act was signed into law (**Appendix B**).

1.6. SCOPE OF THIS EIS

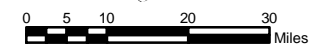
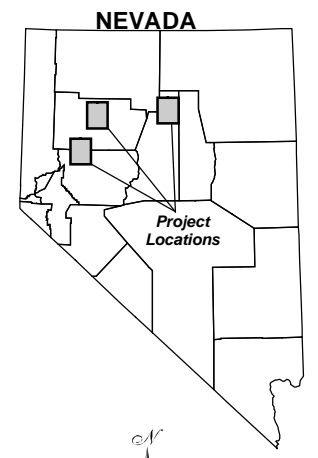
Reclamation is the lead agency in this NEPA review of the proposed title transfer. PCWCD is a cooperating agency under NEPA for this EIS. The Proposed Action would transfer lands from federal ownership to the PCWCD, the State of Nevada, and Pershing and Lander Counties. With the exception of the portion of the Community Pasture lands proposed to be transferred to the State of Nevada, and the isolated parcels proposed to be transferred to Pershing and Lander Counties, there would be no substantial change by the receiving entities in overall existing resource management.

PCWCD would continue to operate the Rye Patch Dam and Reservoir in a manner similar to its current agreement with Reclamation. The remaining pasture land in the Battle Mountain Community Pasture would continue to be managed by PCWCD on behalf of its constituents for livestock grazing. NDOW would continue to manage lands within the Humboldt Sink as a Wildlife Management Area and State Parks would continue to manage the Rye Patch State Recreation Area. Lands proposed to be transferred to Pershing and Lander Counties, and the Community Pasture lands proposed to be transferred to the State may undergo a change in land use. Chapter 3, Affected Environment and Environmental Consequences, describes the approach used in this EIS to define changes in land use that may occur in the Project area and analyzes the environmental effects that could occur as a result of the proposed title transfer.



Legend

- County Boundary
- Project Areas
- Highway
- PCWCD Boundary
- Land Transfer Locations
- City



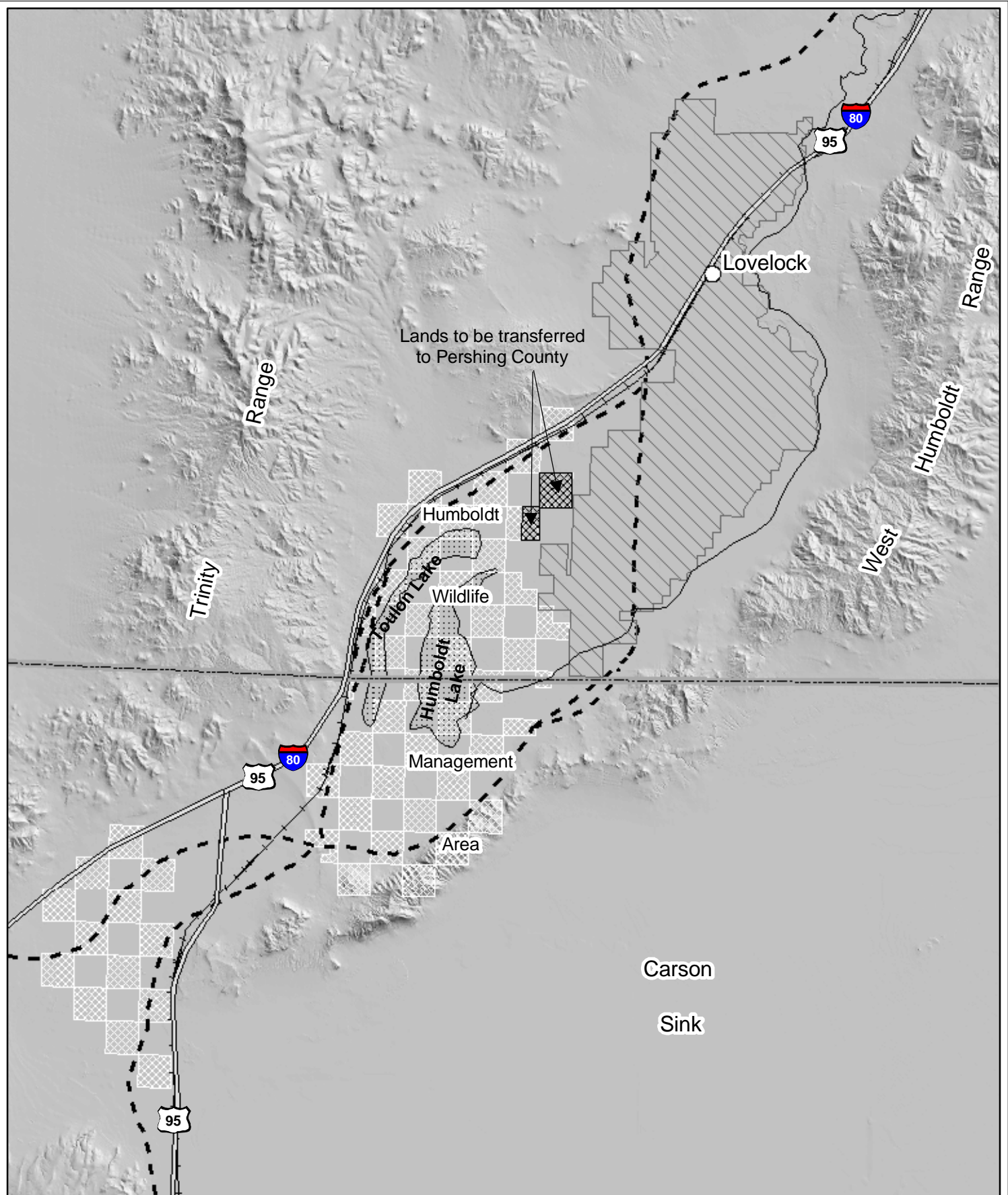
Universal Transverse Mercator Projection
 1983 North American Datum
 Units Meters
 Zone 11

DRAFT

Humboldt Project Conveyance EIS

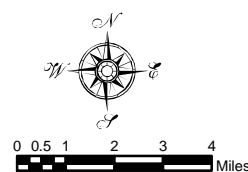
Figure 1: Project Area Map

Date: 01.13.05	file: PROJ_AREA	Author: msh
----------------	-----------------	-------------



Legend

○ City	Withdrawn
== Highway	PCWD Boundary
+ Railroad	Derby Field
- - - California Trail	County Boundary
— River	Lake



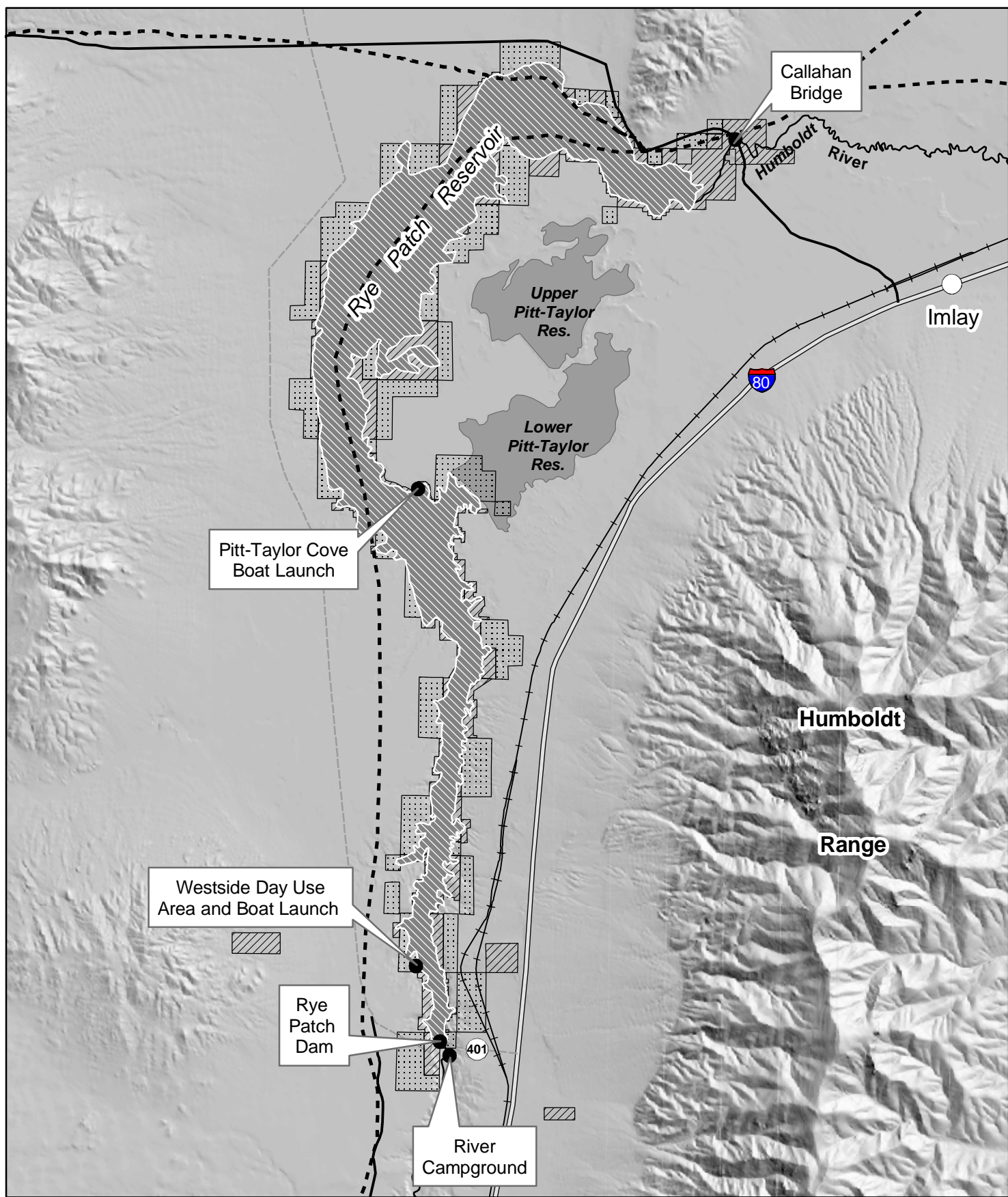
DRAFT

Universal Transverse Mercator Projection
1983 North American Datum
Units Meters
Zone 11

Humboldt Project Conveyance EIS

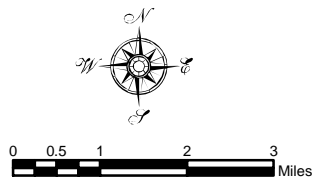
**Figure 2:
Humboldt Sink**

Date: 01.13.05 file: HUMBOLDT Author: msh



Legend

○ City	--- Unpaved Road
== Highway	▨ Acquired PCWCD
+ Railroad	▤ Withdrawn State
- - - California Trail	▧ Withdrawn PCWCD
— Road	



Universal Transverse Mercator Projection
1983 North American Datum
Units Meters
Zone 11

Humboldt Project Conveyance EIS

**Figure 3:
Rye Patch Reservoir**

Date: 01.13.05 file: RYE_PATCH Author: msh

DRAFT

