



**NOTICE OF PREPARATION**  
**Environmental Impact Report for the**  
**Centennial Reservoir Project**  
**February 16, 2016**

The Nevada Irrigation District (NID) is preparing an Environment Impact Report (EIR) for the Centennial Reservoir Project. NID will serve as the lead agency under the California Environmental Quality Act (CEQA).

## Summary

NID is proposing to implement the Centennial Reservoir Project (Proposed Project) to provide drought and climate change-mitigation, meet projected future water supply needs, and improve water supply reliability for NID's customers. The Proposed Project involves the construction of a new 110,000 acre-foot reservoir, on the Bear River between the existing Rollins and Combie reservoirs. The Proposed Project would extend upriver from just above the existing Combie Reservoir for slightly over six miles to a point west of the Town of Colfax, approximately two miles downstream of the existing Rollins Dam (see Attachment 1, Figure 1, Project Location and Vicinity Map).

NID has determined that its current water system is over-reliant on runoff from the annual mountain snowpack, resulting in an urgent and greater need for mid elevation storage to capture runoff from rain storms as well as snow storms. The Proposed Project's location is at a site that was initially identified in 1926 as part of an early NID reconnaissance project on the Bear River and found to be a superior water storage location. The region's climate and precipitation patterns are changing, bringing more rain and less snow resulting in an increase in the need for mid-elevation storage within NID's water system. The proposed reservoir is designed as a storage recovery project, rather than an expansion project. The Proposed Project would provide drought-mitigation and recapture water lost due to changing climate and reduced snowpack. The Proposed Project would also allow NID to continue to meet existing water delivery commitments and to bring more flexibility in meeting the future water supply needs of customers in all parts of NID's service area.

The Proposed Project would involve construction of a new dam and associated facilities. The anticipated water depth at the dam would be approximately 255 feet and the height of the dam would be approximately 275 feet. NID anticipates that low impact public recreational opportunities (e.g. 5 mile per hour maximum speed on the reservoir, pedestrian trails, swimming, and kayaking) are also anticipated to be included with the Proposed Project.

Additional background information, purpose and need, setting, description of the Proposed Project and anticipated permits and approvals are provided in Attachment 1.

NID has determined that the Proposed Project could have potentially significant environmental effects on the following resources areas and will evaluate these effects in the EIR:

- Aesthetics
- Air Quality
- Agriculture and Forestry Resources
- Terrestrial and Aquatic Biological Resources
- Cultural Resources
- Tribal Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

## **Alternatives**

A number of water supply operation alternatives as well as alternative dam sites and types have been/are being considered and the effect of these alternatives on the environment and NID's service area will be analyzed in the EIR. The EIR will describe the direct project-specific, system-wide, and cumulative effects of constructing and implementing the Proposed Project. The EIR will also evaluate cumulative effects of the Proposed Project when considered in conjunction with other related past, present, and reasonably foreseeable future projects, including other NID, Nevada County, and Placer County projects.

# Permits and Approvals

A summary of the anticipated permits and approvals that may be required for the Proposed Project is provided in Attachment 1. In addition, to those permits and approvals compliance under the National Environmental Policy Act (NEPA) will also be required for the Project and will likely be carried out as part of the Clean Water Act Section 404 compliance for the Project through the U.S. Army Corps of Engineers (USACE). It is anticipated that an Environmental Impact Statement would be prepared under NEPA and that the USACE would serve as the NEPA lead agency. NID is working with the USACE to coordinate this effort.

## Scoping and Public Involvement Process

Written comments and suggestions concerning the Proposed Project must be received by March 17, 2016 and sent to Lisa Francis Tassone, Board Secretary, Nevada Irrigation District, 1036 W. Main St., Grass Valley CA 95945, by e-mail [tassone@nidwater.com](mailto:tassone@nidwater.com), or by fax 530-477-2646. Questions about the Proposed Project and the EIR should be addressed to Doug Roderick, P.E., at (530) 271-6866, by e-mail [roderick@nidwater.com](mailto:roderick@nidwater.com), or by fax 530-477-2646.

Two public scoping meetings will be held on March 9 and 10, 2016. The purpose of the scoping meetings is to present information about the Proposed Project and NID's decision-making processes, and to listen to the views of the public on the range of issues relevant to the scope and content of the EIR. The scoping meeting dates, times, and locations are as follows:

### **Grass Valley**

Wednesday, March 9, 2016

6:00 – 8:00 p.m.

Holiday Inn Express

121 Bank Street, Grass Valley, CA 95945

### **Auburn**

Thursday, March 10, 2016

6:00 – 8:00 p.m.

Forest Lake Christian High School

12515 Combie Road, Auburn, CA 95602

The Draft EIR is scheduled to be available for public review and comment in the beginning of 2017. A 45-day public review period will be provided for individuals, interested parties, and agencies to review and comment on the Draft EIR. All interested parties are encouraged to respond to this notice and provide a current address if they wish to be notified of the Draft EIR circulation.

Project information will also be posted periodically on the internet at [www.centennialreservoir.org](http://www.centennialreservoir.org).

# 1 Project Description

## 1.1 Introduction

The Nevada Irrigation District (NID) is proposing to implement the Centennial Reservoir Project (Proposed Project) to provide drought and climate change-mitigation, meet projected future water supply needs, and improve water supply reliability for NID's customers. The Proposed Project involves the construction of a new 110,000 acre-foot reservoir, on the Bear River between the existing Rollins and Combie reservoirs. The Proposed Project would involve construction of a new dam and associated facilities. NID anticipates that low impact public recreational opportunities are also anticipated to be included with the Proposed Project.

## 1.2 Project Background

NID, was formed in 1921 and is currently headquartered in Grass Valley, California is an independent special district operated by and for the people who own land within its 287,000-acre boundaries (NID 2015a). NID primarily supplies water for irrigation, municipal, domestic, and industrial purposes throughout portions of Nevada, Placer, and Yuba Counties, with additional storage facilities in Sierra County. NID collects water on over 70,000 acres of high mountain watershed and owns and operates an extensive reservoir and canal system and network of water treatment plants. NID's water storage system extends from the crest of the Sierra Nevada mountain range to the Central Valley, and consists of a network of 10 major and 17 minor reservoirs, 450+ miles of canal, and 300+ miles of pipeline. Other NID facilities include seven hydroelectric facilities that produce 82+ megawatts (MW) of renewable hydroelectric energy, under various Federal Energy Regulatory Commission (FERC) licenses. NID also owns and operates a number of outdoor public recreation facilities located adjacent to some of its operational reservoirs.

The Yuba River, Canyon Creek, Bear River, and Deer Creek watersheds provide NID's primary water supplies. NID's water supply comes from a single source, natural runoff from the contributing watershed area. Natural runoff within the watershed fluctuates annually because of the variability in hydrologic conditions, as evidenced by the inconsistent accumulations of annual rainfall and snowpack.

NID also benefits from carryover storage, which is the volume of water left in NID's storage reservoirs at the end of the water delivery season, and used as a buffer in the event that the following year produces below average storage. Reservoir capacities, seasonal hydrology, and minimum storage requirements affect carryover storage levels.

NID's water supply system is a "store and release" system, in that the reservoirs store snow melt and seasonal rains for release during the typically dry irrigation seasons. Based on the timing of seasonal events, NID's water supply management is dependent on snowmelt and winter period rains to fill storage reservoirs. While there is some natural runoff during the summer months, the irrigation season demand is met primarily with withdrawals from storage reservoirs. Careful management and operation of the storage reservoirs is essential to capture the maximum amount of runoff, minimize spillage from the reservoirs, and ensure there is

sufficient volume available in the reservoirs to accommodate runoff during the spring snow melt and storm events. The Proposed Project would help manage these water resources for the region.

### **1.3 Purpose and Need**

As water demand within NID's service area increases, events such as drought and climate change create imminent challenges for NID in maintaining a sustainable water system. According to NID's Raw Water Master Plan, studies indicate that the margin between average watershed runoff volume and demand is diminishing (NID 2011). Increased future demands in the service area will result in increased demand on water storage and greater draw down of NID's reservoirs, especially during summer months when there is little natural runoff. As a result, NID is considering their current practices regarding surplus sales, purchased contract water, and carryover storage, as well as climatic changes that impact the natural runoff volume, all of which are becoming increasingly more important.

NID has determined that its current water system is over-reliant on runoff from the annual mountain snowpack, resulting in an urgent and greater need for mid elevation storage to capture runoff from rain storms as well as snow storms. The Proposed Project's location is at a site that was initially identified in 1926 as part of an early NID reconnaissance project on the Bear River and found to be a superior water storage location. The region's climate and precipitation patterns are changing, bringing more rain and less snow resulting in an increase in the need for mid-elevation storage within NID's water system.

The Proposed Project location may be even more valuable to NID today than in 1926. Designed as a storage recovery project, rather than an expansion project, the Proposed Project would provide drought-mitigation and recapture water lost due to changing climate and reduced snowpack. The Proposed Project would also allow NID to continue to meet existing water delivery commitments and to bring more flexibility in meeting the future water supply needs of customers in all parts of NID's service area.

According to NID's Raw Water Master Plan, reservoir storage is a key issue. Water management recommendations in the plan include the investigation into the potential to increase water storage, a recommendation that has become increasingly important as the impacts of climate change emphasize the need for storage capacity to accommodate changes in the type, timing, and intensity of precipitation (NID 2011).

The Proposed Project would directly benefit the southern portions of NID's service territory, including the Placer County service areas. Upstream areas in Nevada County would also benefit from NID's future ability to route more water from the mountains down the Yuba River/Deer Creek watershed and less down the Bear River side. The Proposed Project would increase maximum water storage available to NID's service customers from 280,000 to 390,000 acre-feet, helping to ensure a stable future water supply (NID 2015b).

## 1.4 Proposed Project

### 1.4.1 Regional Setting

As stated in the introduction, the Proposed Project would be located on the Bear River, between the existing Rollins and Combie reservoirs. The Bear River, Rollins Reservoir, and Combie Reservoir are all located along the eastern boundary of NID's service territory and cover southern Nevada County and western Placer County.

Within NID, most of the water supply begins as snow and as the snowpack melts, seven mountain division reservoirs capture the runoff. Water then flows through the Bowman-Spaulding Canal, via Fuller Lake, to Pacific Gas & Electric's (PG&E) Lake Spaulding. It is then routed down the South Yuba/Chalk Bluff Canal to Scotts Flat Reservoir and the Nevada City-Grass Valley area (Deer Creek watershed), or down the PG&E Drum Canal along the Bear River where it is used to generate power for NID and PG&E before supplying customers in southern Nevada and Placer Counties.

NID supplies water to nearly 25,000 agricultural and treated water customers within its boundaries. A network of seven water treatment plants provide treated water to service areas. Other users outside the NID service area are supplied surplus raw water.

### 1.4.2 Project Site and Description

The Proposed Project would extend upriver from just above the existing Combie Reservoir for slightly over six miles to a point west of the Town of Colfax, approximately two miles downstream of the existing Rollins Dam (see Figure 1, Project Location and Vicinity Map).

The Proposed Project involves the construction of a new 110,000 acre-foot reservoir as well as the construction of a new dam and associated facilities. The dam types considered include roller-compacted concrete and rockfill. The anticipated water depth at the dam would be approximately 255 feet and the height of the dam would be approximately 275 feet. It is also anticipated that low impact public recreational opportunities (e.g. 5 mile per hour maximum speed on the reservoir, pedestrian trails, swimming, and kayaking) would be included with the Proposed Project. A new raw water pipeline would be installed within Dog Bar Road in NID's service area. A pump station, tank, and extraction wells/pump intake area would also be constructed in the northern portion of the reservoir. Figure 2 shows the location of these proposed facilities.

NID holds several senior pre-1914 water rights to the Bear River and has additional post-1914 water rights (NID 2015b) acquired over time. NID filed an application for the annual appropriation of 221,400 acre-feet of water from the Bear River with the State Water Resources Control Board in August 2014 for the Proposed Project. NID owns several hundred acres of land along the river, and more than 1,200 acres within the Project Study Area (approximately 34 percent of the area within the Project Study Area). NID land is mainly located on the Nevada County side of the river, whereas state land and PG&E/Stewardship Council land is located on the Placer County side. Several private properties are located in the Project Study Area as well thus; some acquisitions and easements on private land would be required for implementation of the Proposed Project. Figure 2 shows the Project Study Area and land ownership.

### **1.4.3 Environmental Setting**

Elevations in the Project Study Area range from 1,620 feet above mean sea level (amsl) at the southern end to 1900 feet amsl at the northeastern end. The Upper Bear River watershed, below the snowline, is dominated by mixed-conifer forest in the higher elevations. In the lower elevations of the watershed, there is a gradual change in the vegetation to a dryer zone of Gray Pines, Blue Oaks, and Valley Oaks in grasslands and agricultural lands. In the limited riparian zones of the Bear River in the lower elevations, the vegetation consists of oak-spotted hillsides, Buckeyes, Spicebush, Willows, and other shrubs.

A number of special-status plant and wildlife species have the potential to occur within the Project Study Area. These include two federally listed species (the valley elderberry longhorn beetle and California red-legged frog), four state species of special concern (the foothill yellow-legged frog, western pond turtle, coast horned lizard, and tri-colored blackbird), and four sensitive plant species (Brandegge's clarkia, inundated bog-clubmoss, Stebbin's phacelia, and Nisenan manzanita).

Soil conditions and quality in the Project Study Area will be evaluated for remnant mercury and measures will be proposed to handle, treat, and/or remove remnant mercury where necessary.

Ninety eight parcels in the Project Study Area contain built resources (buildings, structures, or objects). Several of these parcels contain private, single-family homes. Based on assessor parcel data of these 98 parcels, three buildings may be more than 50 years old.

Dog Bar Road crosses the Bear River west of Eden Valley and provides the only public connection between Placer County and Nevada County within the Project Study Area.

### **1.4.4 Schedule**

The Proposed Project is currently in the planning phase and will be moving into the design and implementation phase in early 2016. NID recently initiated environmental documentation and compliance under the California Environmental Quality Act (CEQA). NID anticipates that the Proposed Project will require preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines, with an estimated completion date in 2017. Additional permits and approvals would be required for the Proposed Project in addition to CEQA compliance. These permits and approvals are listed below in Section 1.4.5. Assuming NID obtains all permits and approvals, NID anticipates construction to start in 2021. NID is estimating that construction of the Proposed Project will take approximately two to three years and the Project will be open and functional by 2023.

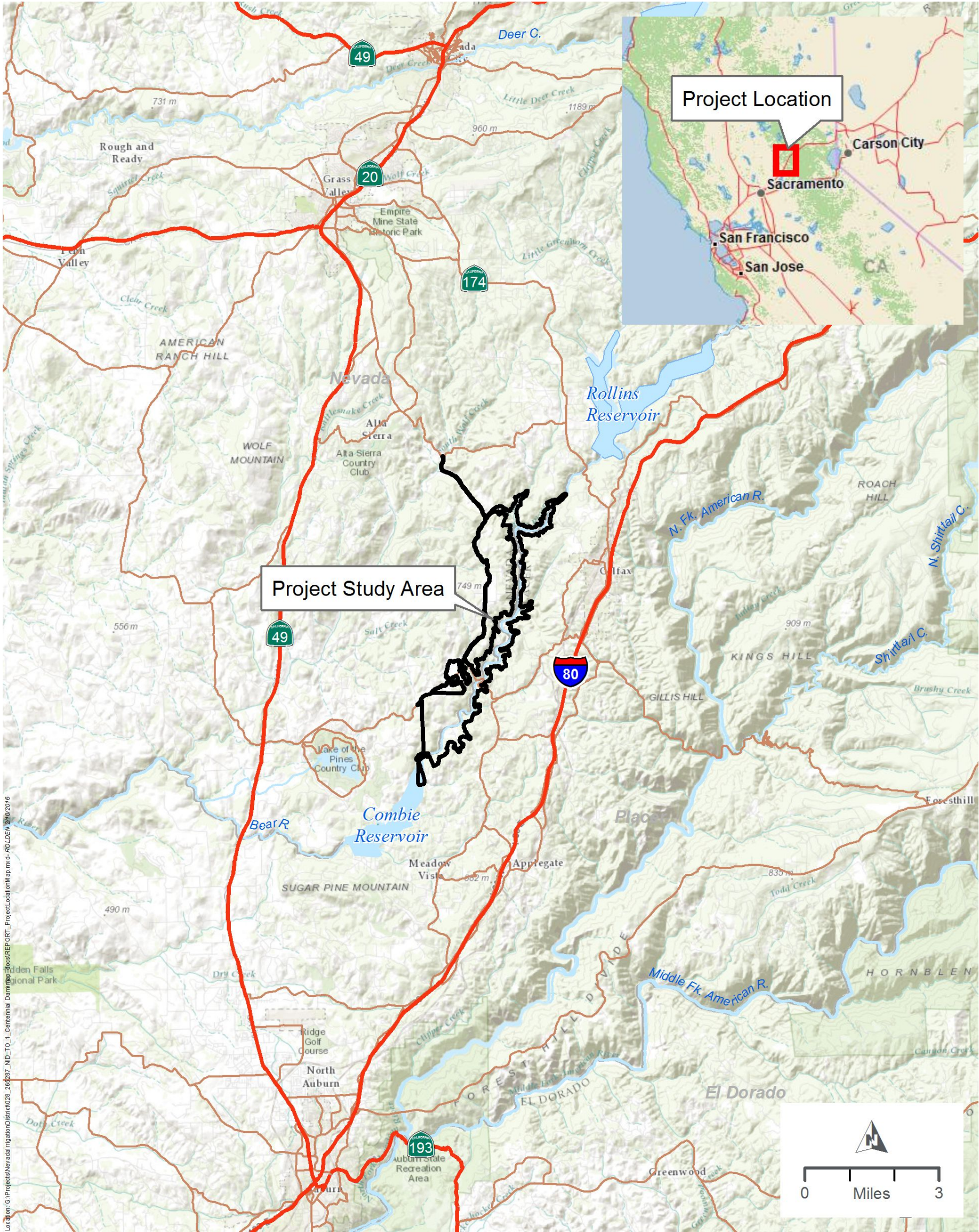
### **1.4.5 Anticipated Permits and Reviews**

A summary of the anticipated permits and approvals that may be required for the Proposed Project is provided below in Table 1. Agencies with jurisdiction over those permits or approvals would consider the information provided in the EIR in determining under what conditions to issue permits or approvals.

Table 1. Summary of Anticipated Permits and Approvals

| Agency   | Type of Approval   |
|--|--|
| <b><i>Federal</i></b>  |  |
| U.S. Army Corps of Engineers   | Clean Water Act Section 404 Permit   |
| National Marine Fisheries Service  | Section 7 Consultation for Federal Endangered Species Act compliance   |
| U.S. Fish and Wildlife Service   | Section 7 Consultation for Federal Endangered Species Act compliance   |
| State Historic Preservation Officer  | Section 106 Compliance for the National Historic Preservation Act,   |
| <b><i>State</i></b>  |  |
| California Department of Fish and Wildlife   | Consultation for State Endangered Species Act compliance<br>Streambed Alteration Agreement (CDFG code1602)   |
| California Native American Heritage Commission   | Consultation for effects on Native American burials or artifacts   |
| Regional Water Quality Control Board   | National Pollutant Discharge Elimination System General Permit for Stormwater Discharge Associated with Construction Activities<br>Clean Water Act Section 401 Water Quality Certification |
| <b><i>Local</i></b>  |  |
| Northern Sierra Air Quality Management District and Placer County Air Pollution Control District | Consultation for Authority to Construct Permits  |

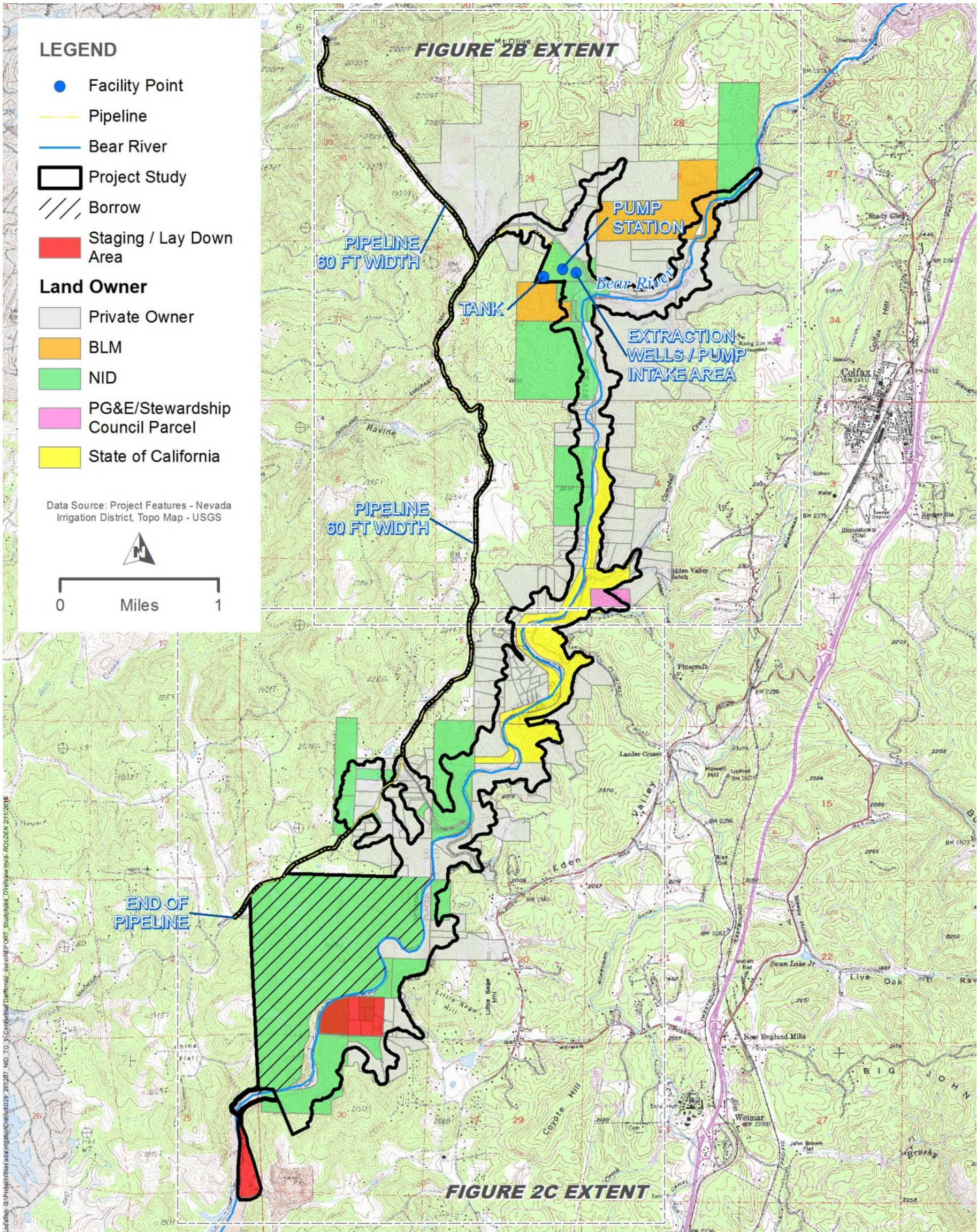




Project Location and Vicinity

Figure 1



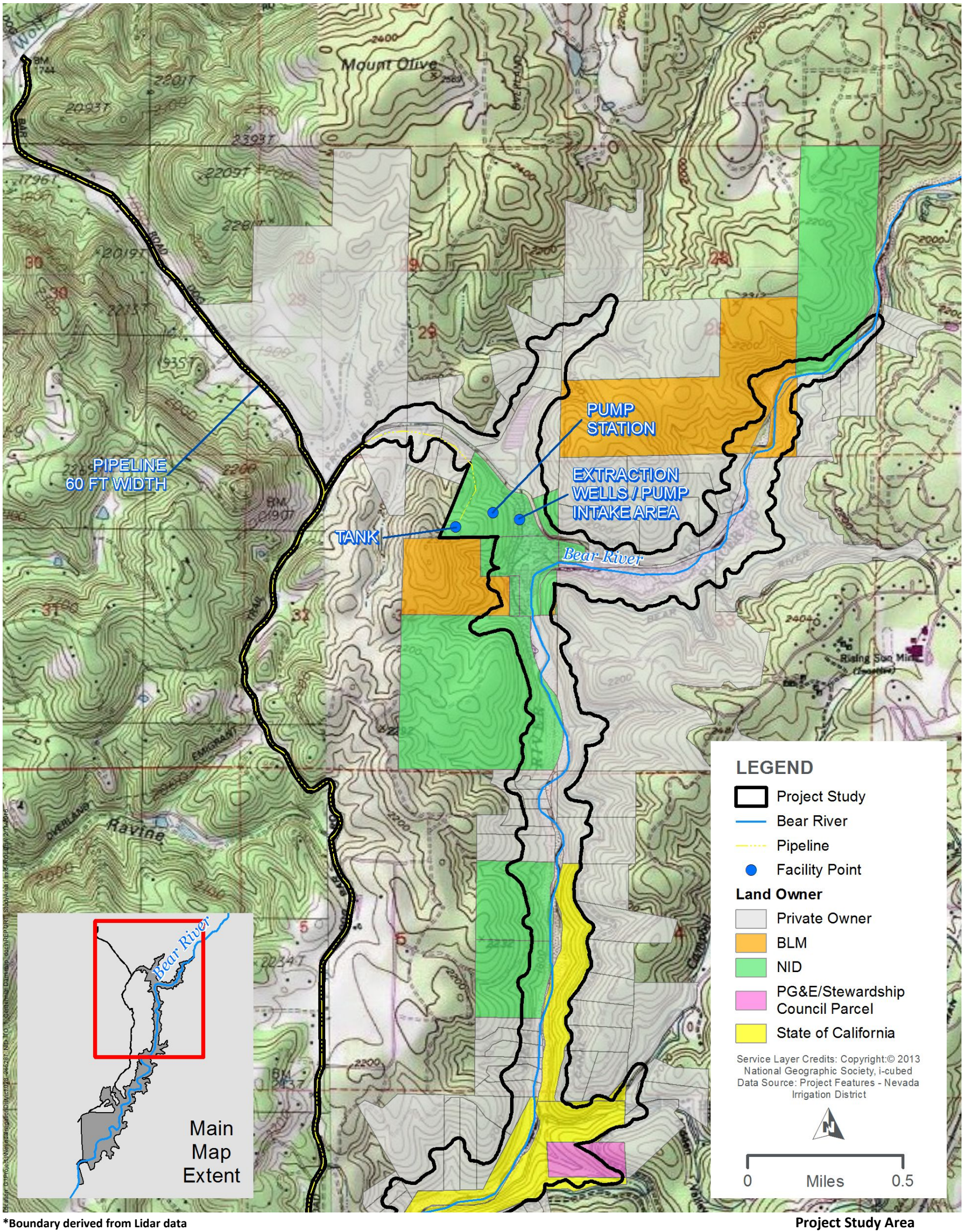


\*Boundary derived from Lidar data

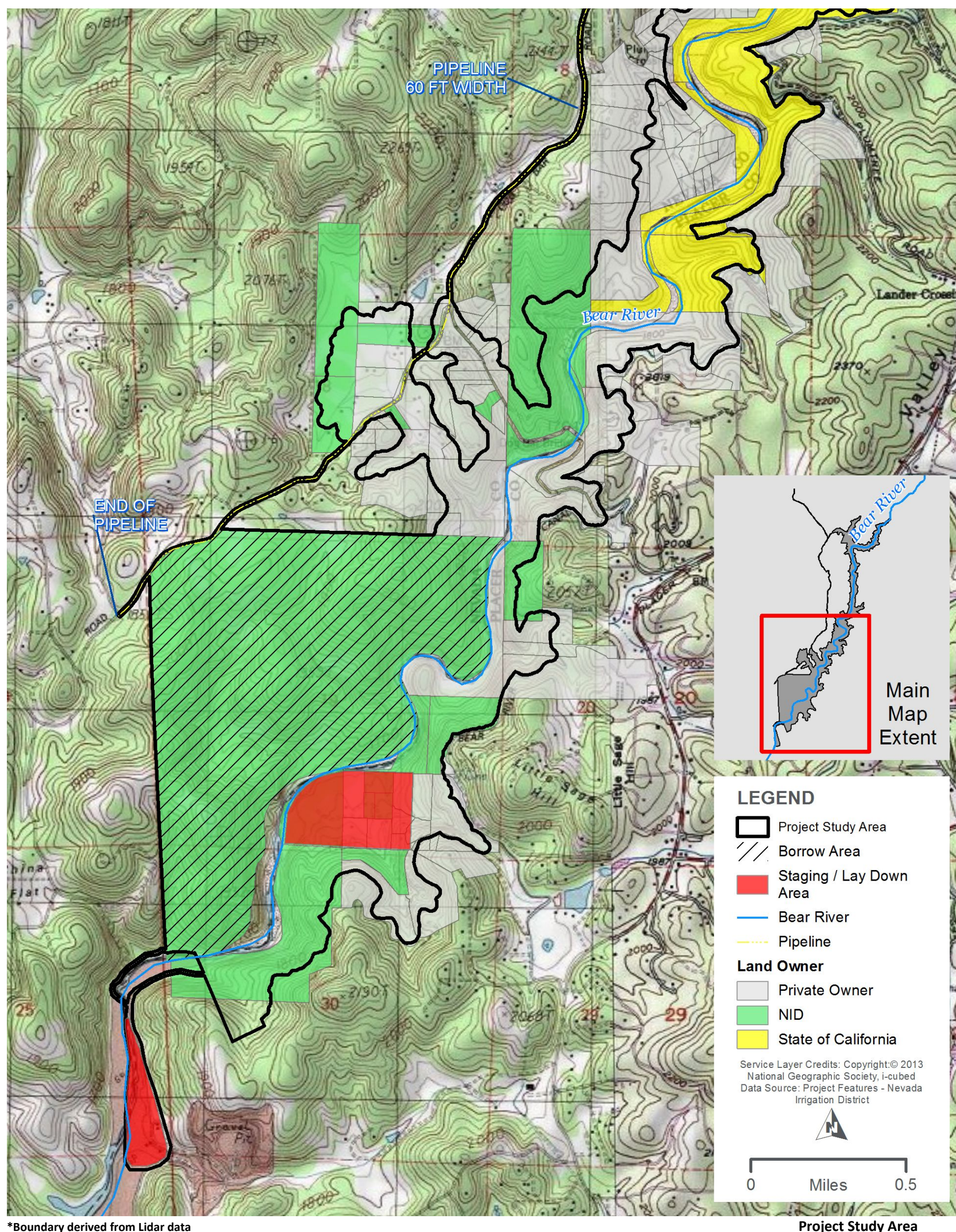
Project Study Area

Figure 2A









**Figure 2C**



Nevada Irrigation District. 2015a. About NID. Available online:

<<http://nidwater.com/about-nid/>>. Accessed October 20, 2015.

———. 2015b. Centennial Reservoir Project. Available online:

<<http://nidwater.com/parker-dam-and-reservoir-project/>>. Accessed December 7, 2015.

———. 2011. Raw Water Master Plan Update, Phase 2. Available online:

<<http://nidwater.com/planning/master-plan-2/>>. Accessed October 20, 2015.

———. 2008. Pure Mountain Water Brochure. Available online:

<<http://nidwater.com/planning/master-plan-2/>>. Accessed October 20, 2015.