

NOTICE OF PREPARATION

To: Office of Planning and Research;
State Clearinghouse; Responsible
and Trustee Agencies; Federal
Agencies; Organizations; and
Interested Parties

From: Gary King
Nevada Irrigation District
1036 West Main Street
Grass Valley, CA 95945

Subject: Notice of Preparation of a Draft Environmental Impact Report

Nevada Irrigation District will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the Greenhorn Sediment Removal at Rollins Reservoir Project (Project). We need to know the views of your agency as to the scope and content of the Proposed Project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the Project.

The Project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study is not attached.

Due to the time limits mandated by state law, your response must be sent at the earliest possible date, but not later than thirty (30) days after receipt of this notice.

Please send your response to Kris Stepanian via e-mail at stepaniank@nidwater.com or regular mail to the address shown above. We will need the name for a contact person in your agency.

Project Title: Greenhorn Sediment Removal at Rollins Reservoir Project

Project Applicant, if any: Nevada Irrigation District

Date: May 17, 2017

Signature: 
Gary D. King

Title: Engineering Manager

Telephone: 530-273-6185 ext. 260

Notice of Preparation and Public Scoping Meeting

Date	May 17, 2017
Lead Agency	Nevada Irrigation District
Contact	Gary D. King, PE PhD Engineering Manager 1036 West Main Street Grass Valley, CA 95945 Phone: 530-273-6185 ext. 260 Email:king@nidwater.com
Project Title	Greenhorn Sediment Removal at Rollins Reservoir Project
Project Location	The Project is located in unincorporated Nevada County, California, approximately 6 miles north of the City of Colfax on the Greenhorn Arm of Rollins Reservoir (Attachment A).
County	Nevada
<p>Project Description. The Nevada Irrigation District (NID), acting as Lead Agency under the California Environmental Quality Act (CEQA), will prepare an Environmental Impact Report (EIR) for the Greenhorn Sediment Removal at Rollins Reservoir Project (Project). The objectives of the Project are as follows:</p> <ul style="list-style-type: none"> • Restore and maintain the historic water storage capacity in the Greenhorn Arm of Rollins Reservoir and prevent further migration of suspended sediment from this arm into the main reservoir. • Maintain the water storage capacity in the Greenhorn Arm of Rollins Reservoir in perpetuity by conducting annual sediment maintenance activities to remove accumulated sediments which could enter the main reservoir during storm water flows. • Restore recreational opportunities in the Greenhorn Arm of Rollins Reservoir through the removal of accumulated sediment thereby increasing water depth and improving aquatic habitat and boating access. • Economically dispose of the sediment removed from the Greenhorn Arm of Rollins Reservoir. <p>The EIR will evaluate the environmental impacts of the Project and identified alternatives. Additional information about the Project is presented in Attachment A. This Notice of Preparation (NOP) is also available for review at the following locations: NID's Business Center, 1036 West Main Street, Grass Valley, CA; NID's website: http://www.nidwater.com; and the Nevada County Clerk's office.</p>	

Purpose of this Notice. Pursuant to CEQA Guidelines Section 15082, NID prepared this NOP to notify responsible and trustee agencies; Federal agencies; organizations; and other interested parties that it will prepare an EIR for the Project. The purpose of the NOP is to solicit guidance and input from those agencies and interested parties as to the scope and content of the environmental information to be included in the EIR. The NOP is intended to provide agencies with sufficient information describing the Project and its potential environmental effects to allow these agencies to offer meaningful responses related to the scope and content of the EIR.

Probable Environmental Effects. Based on preliminary review, NID has determined that the Project may affect aesthetics, air quality, biological resources, cultural resources, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, recreation, transportation and traffic, and utilities and service systems.

Public Comment Period. The NOP will be circulated for a 30-day public review period. Written comments from interested parties are encouraged and must be received before close of business on **June 16, 2017**. For agencies with statutory responsibilities in connection with the Project (CEQA Guidelines Section 15082[b]), we are requesting your views regarding the scope and content of the environmental information necessary to make any relevant decision by your agency. Your agency may need to use the EIR prepared by NID when considering issuance of a permit or other approval for the Project, if any is required. Written comments and requests for information should be sent to Kris Stepanian at stepianiak@nidwater.com. All comments received, including commenter's names and addresses, will become part of the administrative record and will be made available to the public.

Public Scoping Meeting. Pursuant to CEQA Guidelines Section 15082[c] and 15206, NID will conduct a public scoping meeting for the Project. Meeting information is provided below.

June 1, 2017

6:00–7:30 p.m.

NID Business Center

1036 West Main Street

Grass Valley, CA 95945

The purpose of this meeting is to provide NID with comments on the proposed scope and content of the EIR. The public will have the opportunity to offer oral and/or written comments for consideration during the meeting.

Attachment A

**Greenhorn Sediment Removal at Rollins
Reservoir Project**

**Notice of Preparation
Background Information**

PROJECT LOCATION

The Project is in unincorporated Nevada County, California, approximately 6 miles north of the City of Colfax on the Greenhorn Arm of Rollins Reservoir (**Map 1**). The currently operating Hansen Bros. Enterprises Greenhorn Gravel Plant is located north of the Project area. The Project is located within Sections 2, 3, 10, and 11 of Township 15N and Range 9E on the Chicago Park 7.5-minute USGS topographic quadrangle.

To access the Project area from Interstate 80, exit Highway 174 in Colfax and proceed 7.75 miles north toward Grass Valley. Turn right onto You Bet Road and proceed 2.5 miles to the You Bet Bridge (39°11'14.52" N, 120°56'30.77" W) which is at the northern end of the Project area (**Map 2**).

The Project site is approximately 147 acres in size, including the sediment removal area, three staging areas, and the haul/access road. Sediment removal operations would occur in a 49.7-acre area (Work Area), downstream of the Hansen Bros. Enterprises' lease boundary (**Map 2**).

PROJECT BACKGROUND

Following construction of the Rollins Reservoir Dam in 1965, sediments have accumulated in Rollins Reservoir. An estimated 10,000 acre-feet of storage capacity (17%) has been lost in Rollins Reservoir, which had a capacity of 65,998 acre-feet upon its completion in 1965.

Sediment accumulation in the Greenhorn Arm of Rollins Reservoir can occur very quickly depending on water year type and flows from Greenhorn Creek. **Figure 1** shows the build-up of sediment that has occurred from July 2014 to late 2016. In July 2014 sediments extended in the Greenhorn Arm approximately 9,300 feet from the intersection of You Bet Bridge and the existing access/haul road. In late 2016, sediment build-up began to extend into the main body of the reservoir (extending an additional 980 feet).

In October 2013, NID entered into an agreement with Hansen Bros. Enterprises to remove sediment from Greenhorn Creek during record low water levels. During the work, it was discovered that foothill yellow-legged frogs (FYLF) were present along the haul route in the Greenhorn Arm of Rollins Reservoir. Accordingly, work was halted until NID and Hansen Bros. Enterprises could prepare a Corrective Action Plan (CAP) to protect the frogs. The CAP was completed at the end of November 2013; however, no additional sediment removal has occurred and sediment has continued to be deposited in the Greenhorn Arm and subsequently transported into the reservoir during high-flow events.

PROPOSED PROJECT

NID's Proposed Project includes the annual removal of sediment from the Greenhorn Arm of Rollins Reservoir. Due to the annual migration of aggregate from Greenhorn Creek into the Project area, the Project will be ongoing with the ultimate goal of returning the Project area to pre-1965 conditions (following construction of Rollins Reservoir), and then maintaining this condition in perpetuity.

The Greenhorn Sediment Removal Project objectives are as follows:

- Restore and maintain the historic water storage capacity in the Greenhorn Arm of Rollins Reservoir and prevent further migration of suspended sediment from this arm into the main reservoir.
- Maintain the water storage capacity in the Greenhorn Arm of Rollins Reservoir in perpetuity by conducting annual sediment maintenance activities to remove accumulated sediments which could enter the main reservoir during high flows.
- Restore recreational opportunities in the Greenhorn Arm of Rollins Reservoir through the removal of accumulated sediment thereby increasing water depth and improving aquatic habitat and boating access.
- Economically remove and dispose of the sediment removed from the Greenhorn Arm of Rollins Reservoir.

PROJECT ACTIVITIES

Three primary activities will be implemented annually as part of the Project: (1) notification/mobilization; (2) sediment removal activities; and (3) demobilization. In addition, the Project includes implementation of a water quality and methylmercury monitoring program.

Notification/Mobilization

- Public Notification
 - a. Rollins Reservoir supports three district operated campgrounds, Long Ravine, Orchard Springs, and Peninsula, and one independently operated campground, Greenhorn. Combined these campgrounds offer approximately 250 campsites and a complete range of services, including stores, restaurants, fuel sales and rentals (Map 3). As part of the Project, NID will keep the Rollins Reservoir campground concessionaires apprised of water surface elevation conditions and other construction-related activities in the Greenhorn Arm so that information can be disseminated to the public via the NID website (www.nidwater.com). In addition, NID will provide concessionaires annual notification of the Project schedule and activities in a format that can be posted onsite at the reservation window, at information boards within the campgrounds, and at boat docks. Information will also be posted on NID's website to ensure that prospective recreation visitors are informed of Project activities.
- Transport Equipment and Material Staging Areas
 - a. Sediment removal activities will involve the use of heavy equipment, vehicles, and machinery. **Table 1** includes a list of anticipated heavy equipment that will be used during Project implementation. A barge and pile driver will be used to install the sediment barrier to reduce future creep of sediment in the reservoir. A track hoe, front end loaders, excavators, dump trucks/yukes and scrapers will be used during sediment removal activities. In addition, a small backhoe, front-loader, excavator, bulldozer, and flat-bed trucks will be used to transport materials to and within the Work Area and for removal of sediment. Pick-up trucks will be used to transport personnel to and from the Work Area.
 - b. NID has three staging areas (SA), as shown on **Map 2**. All staging areas are located in previously-disturbed locations. No grading, vegetation removal, or other site preparation will be necessary prior to use. NID will designate vehicle fueling areas

at SA-1 and SA-3. Fuel will be stored in a mobile tanker truck. Any pumps, generators, or other stationary equipment that must be fueled on the dewatered reservoir bed will be placed on secondary containment structures to avoid soil/water contamination. All fueling activities will be completed consistent with state and federal Best Management Practices.

- c. Project office trailers, personnel parking, and portable restrooms, will be located at SA-1 and SA-3. Portable restrooms will be placed onsite by a licensed vendor and operated in accordance with Nevada County Environmental Health requirements.

Sediment Removal Activities

- Establish Work Area Boundary
 - a. Prior to initiation of work activities each year, NID will install a buoy line with hazard markers and closure signage to restrict access to the Greenhorn Arm at Rollins Reservoir. The buoy line will remain in place until the reservoir levels drop precluding entrance into the Greenhorn Arm.
 - b. Hazard markers and signage will also be placed in the Greenhorn Campground and along the shoreline near the entrance to the Greenhorn Arm to notify the public of the Work Area closure. NID will also notify and provide a Project schedule and activity information to campground concessionaires on Rollins Reservoir for posting on their reservation website, and at the reservation window and information boards.
 - c. Hazard markers and additional buoys or signage with a 5-mile-per-hour (mph) speed restriction will be placed near the location of the sediment barrier in the main body of the reservoir. The buoys or signage will remain in place when the sediment barrier is present within the reservoir.
 - d. Work area boundaries will be delineated, including the upstream and downstream ends, with fencing, stakes, or flagging.
- Water Quality Monitoring
 - a. NID will prepare a Water Quality Monitoring Plan (Plan) for the Project. This Plan will describe the approach for monitoring water quality (baseline and Project conditions) in the vicinity of the Project during implementation (setup through demobilization). The Plan will include compliance thresholds and adaptive management to address potential water quality issues should any arise. The Plan would be implemented in any year which sediment removal activities occur. The Plan will include water quality monitoring for the following constituents:
 - Water temperature;
 - Dissolved oxygen (DO);
 - Turbidity;
 - Total dissolved solids (TDS);
 - Total suspended solids (TSS);
 - Total mercury; and
 - Methylmercury.

- Installation of Sediment Barrier

- a. Interlocking steel sheet piles (36-foot-long steel sheets) will also be driven into the reservoir bottom, with a pile driver off of a barge, to form a sediment barrier perpendicular to the main body of the reservoir. The purpose of the sediment barrier is to:
 - Prevent further migration of sediment into the reservoir;
 - Provide a barrier between the area of active sediment removal and the main body of the reservoir.

Initially, the sediment barrier will be installed in Rollins Reservoir proper, however, the location will eventually move into the Greenhorn Arm as sediment removal activities proceed. When located in the main body of the reservoir, the barrier will be maintained below the water surface and 5-mph buoys or signage will be installed over the top of the barrier.

- Establish Access/Haul Road

- a. An access/haul road will be used to support Project activities consisting of: (1) the existing road from You Bet Bridge through the Hansen Bros. Enterprises lease to the Greenhorn Arm of Rollins Reservoir; and (2) establishment of a new haul road within the inundation zone of the Greenhorn Arm for Project-specific sediment removal activities. The new haul road will be established annually, as high spring flows from the creek into the reservoir will likely redistribute material used to establish the road.
- b. The new haul road will be 24 feet wide and will be constructed using native material from the Project site. One or two construction vehicle turnarounds will be developed as part of the new road. Bridges and culverts, as appropriate, will be installed along the new haul road to provide access over Greenhorn Creek within the inundation zone of Rollins Reservoir (multiple crossings may be necessary because the creek meanders through Work Area).
- c. The bridge or pipe crossings will be sized and positioned to maintain passage of aquatic species (fish or amphibians) and the appropriate velocity of water flows. Exclusionary, high visibility fencing will be installed, where appropriate, to protect aquatic species breeding sites.

- Channelization of Creek Bed

- a. Following installation of the sediment barrier, and once water levels recede in the Greenhorn Arm, construction mats, bridges, and culverts will be installed, where necessary, to allow access from You Bet Bridge to the Work Area. A track hoe will then be used to construct a berm to form the channelized creek bed. Once the berm is complete, a pilot channel will be excavated. A channel will be constructed and will extend the entire length of the berm. The pilot channel will then be connected to the active stream allowing relocation of Greenhorn Creek to the channelized section. The berm if needed will be established annually as high spring flows will likely redistribute material used to establish the berm.

- b. Once the creek is re-routed, a corrugated pipe if needed will be installed perpendicular to the original stream channel and through the berm to collect and direct subsurface water into the channelized creek bed. A valve box/pond will also be installed in the active channel at the upper end of the pipe to allow for controlled release of water from the active channel through the pipe into the channelized creek bed. An aeration system will be placed in the value box and turned on, if necessary, to maintain oxygen concentrations to reduce the methylation of mercury.
- c. Flows will be released as needed, from the valve box/pond into the subsurface flow pipe to maintain a reasonable velocity of water, if available from the active channel. Continuous oxygen monitors will be installed in the stream channel upstream of the valve box/pond, at the valve box/pond, and at the end of the subsurface pipe entering the channelized creek bed. The aeration system and oxygen monitors will remain in place until demobilization is complete.
- Installation of Dewatering Pipes/Channels
 - a. After the creek bed has been channelized, dewatering pipes will be installed or channels will be excavated in the sediment removal area. The dewatering pipes/channels will direct subsurface flow from the proposed sediment removal area to the reservoir. The pipes/ channels will be installed to allow drainage from the sediment removal area. The dewatering pipes will be 24 inches or larger in diameter, perforated polyvinyl chloride (PVC) or polyethylene pipes.

The purpose of the dewatering pipes/channels is to collect subsurface water in the sediment removal area to speed up the drying process. Once the sediment in the Work Area is reasonably dry, such that heavy excavating and earthmoving equipment can travel and maneuver over the sediment allowing for initiation of sediment removal activities.
 - b. A valve box/pond will be installed in the active channel at the upper end of the dewatering pipes/channels to allow for controlled release of water from the active channel, through the dewatering pipes/channels. An aeration system will be placed in the valve box/pond.
 - c. Flows will be released from the valve box/pond into the dewatering pipes/channels to maintain a reasonable velocity of water, if available, from the active channel. As described above, continuous oxygen monitors will be installed in the stream channel upstream of the valve box/pond, and at the end of the dewatering pipes/channels. The aeration system will be turned on, when necessary, to maintain oxygen concentration to reduce the potential for methylation of mercury by anaerobic digestion.
- Sediment Removal
 - a. Dry sediment will be excavated in the Work Area using heavy excavating and earthmoving equipment (e.g., scrapers, trackhoes, backhoes, excavators, and/or front end loaders). Excavation will continue until the level of creek bed surface is lowered to the top of the dewatering pipe/channel. An additional dewatering pipe/channel will then be connected to the valve box/pond and sediment removal will continue.

No dredging would occur as part of the Project. Excavated material will be transported

to the stockpile area via the access/haul road.

- Sediment Transport to Stockpile Area and Processing
 - a. Sediment removed from the Work Area will be transported by dump trucks or other loading equipment via the access/haul road to the stockpile area. The stockpile area is an existing stockpile that is currently used as part of the Hansen Bros. Enterprises operations and is located on the east side of the Greenhorn Arm of Rollins Reservoir approximately 0.76 miles from intersection of You Bet Road and the access road maintained by Hansen Bros. Enterprises (**Map 2**).
 - b. At the stockpile area, sediment will be passed through a grizzly and various sized mesh screens for removal of debris and large rocks, and to sort the material into various sizes of aggregate. Typical screening sizes include: less than 1 inch, 1-2 inches, and greater than 2 inches. A containment system, such as a flatbed trailer or other container, will be placed under the grizzly to collect fine material. Material collected in the containment system may be returned to the grizzly for re-screening to separate “usable” aggregate material, or if the containment is dominated by silt-sized aggregates (fine sediment), it will be transported via dump truck to an approved offsite processing center for disposal. The screened material (larger aggregate) will be temporarily stockpiled at the site for commercial sale and/or use in a local mine reclamation project. Barrier walls would be placed along the stockpile area adjacent to the reservoir shoreline to minimize erosion during high flows and/or reservoir levels.
 - c. The only onsite processing will be screening of sediment and removal of debris. There will be no onsite washing of excavated materials. Water will be applied to material being stockpiled and loaded as required to reduce fugitive dust. Watering will be limited to dust suppression and will be applied in a manner to prevent direct run-off into the Greenhorn Arm. The water will be supplied onsite using NID’s surface water in the Project area.

Demobilization

- Annual Demobilization
 - a. Following completion of annual sediment removal activities (typically in mid- to late November), the following will be removed from the Work Area:
 - Dewatering pipes/channels;
 - Valve box/pond;
 - Aeration system;
 - Construction equipment and mats;
 - Bridges and culverts;
 - Work area closure buoy line; and
 - Processing plant.
 - b. The sediment barrier may remain in place depending on the extent of sediment removal completed. Buoys or signage with 5-mph speed restriction will be maintained adjacent to these features if they remain in place. The berm and new access/haul road will be left in place, but high spring flows will likely redistribute the material into the Work Area. In addition, the stockpile area barrier wall will remain in

place throughout the duration of the Project.

- Sediment Fate-Offsite Transport

- a. It is estimated that up to 250,000 tons (approximately 3.5 acre-feet) of material could be removed from the Work Area per year, depending on market demand; although a typical year (based on similar activities) would include removal of approximately 50,000 tons per year. It is assumed that 250,000 tons of material would be removed approximately every 6 years, depending on storm events.
- b. The stockpile area will be used to temporarily store sediment until the material can be transported to an approved offsite location. Sediment will be sampled and analyzed to identify any potential hazards to the public or environment. If sediments exceed hazardous waste thresholds, the sediment will be disposed of in accordance with relevant hazardous waste regulations at an approved hazardous materials disposal site. If sediments do not exceed hazardous waste thresholds, the materials will be distributed as follows:
 - Distribution of approximately 30% of material to Hansen Bros. Enterprises for processing at the local plant located across You Bet Road approximately 1.25 mile north of the Project (**Map 2**);
 - Distribution of approximately 30% of material for local sales in Nevada County via Highway 174;
 - Distribution of approximately 10% of material for use in reclamation of one or more mining sites within 10 miles of the Project; or
 - Distribution of approximately 30% of material via Highway 80 for sales outside of Nevada County.

ENVIRONMENTAL ANALYSIS

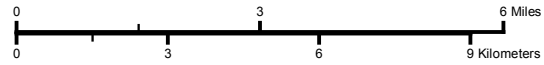
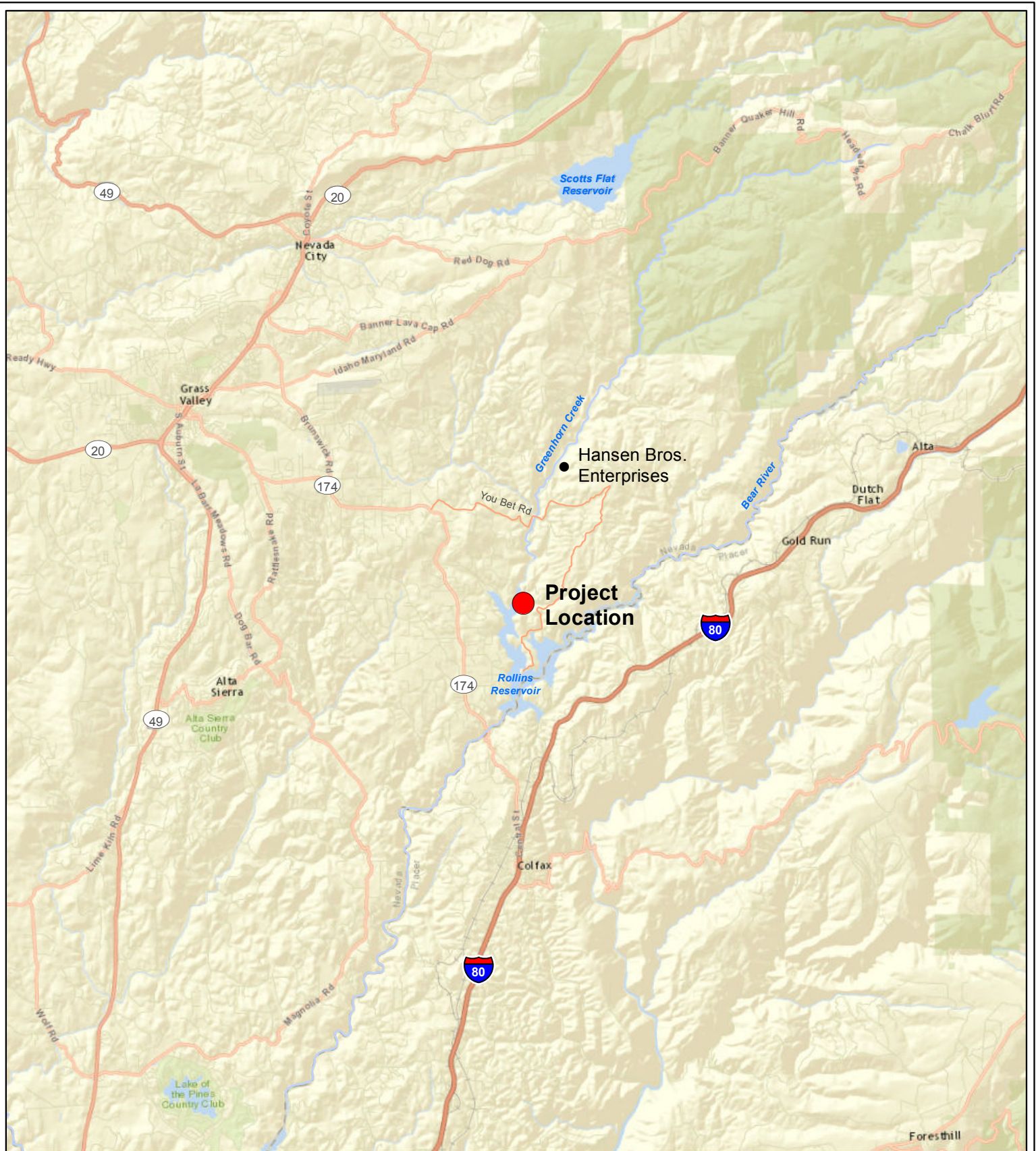
NID (as the lead agency) will prepare a Draft Environmental Impact Report (EIR) under CEQA that clearly demonstrates the future need for removal of sediment from the Greenhorn Arm of Rollins Reservoir and discloses potential environmental effects.

The Draft EIR will:

- Describe the environmental and regulatory setting;
- Evaluate a reasonable range of alternatives capable of avoiding or substantially lessening one or more of the Project's significant environmental effects;
- Identify thresholds of significance that will be used to evaluate the changes in the physical conditions;
- Evaluate the environmental effects of components of the Proposed Project, including direct, indirect, short-term, long-term, cumulative, and unavoidable impacts; and
- Propose mitigation measures to reduce significant impacts, should any be identified, to a less-than-significant level when possible.

ENVIRONMENTAL REVIEW

The initial step in the environmental review process is a formal public scoping period, for which this NOP has been prepared. During the public scoping period, NID will conduct a public meeting on June 1, 2017 to solicit comments on the proposed scope and content of the EIR. Following the public scoping period, a Draft EIR will be prepared and circulated for a 45-day public review period (CEQA Guidelines Section 15105). Public comments on the Draft EIR will be accepted in writing during the review period, or verbally at a public meeting to be held by NID. NID will subsequently prepare written responses to comments on environmental issues raised during the public review period and include these responses in the Final EIR. These documents will be considered by NID's Board of Directors (BOD), along with the Draft EIR, and any revisions to the draft based on the responses to comments, for certification as the Final EIR. Following the BOD's certification of the Final EIR, NID will prepare and file a Notice of Determination (NOD) to inform interested parties and responsible agencies that the Final EIR has been adopted pursuant to CEQA.



1:150,000

Map 1: Project Vicinity
 Greenhorn Sediment Removal
 at Rollins Reservoir Project
 Nevada County, CA

USGS 7.5' Quads:
 Chicago Park, CA
 T 15N, R 09E, Sections 2-3, 10-11

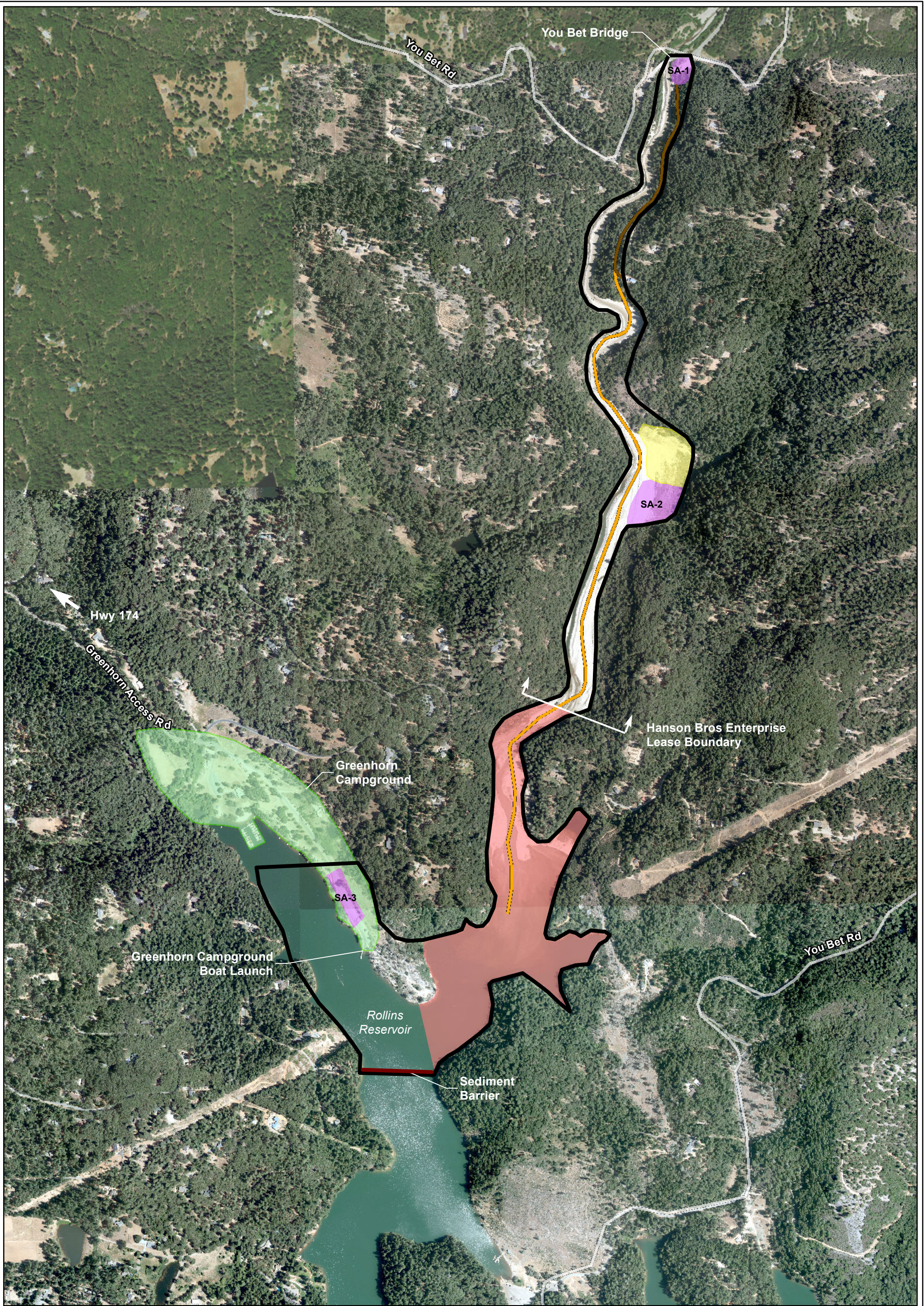
Map Prepared By A. Clare
 11/18/2016



2300 Clayton Road, Suite 200 | tel (925) 935-9920
 Concord, CA 94520 | fax (925) 935-5368

www.cardno.com

Map Projection : NAD 1983 UTM Zone 10N



Legend	
	Project Site Boundary
	Work Area
	Existing Haul Road
	Staging Area
	New Haul Road
	Stockpile Area
	Campground

Map 2: Project Area

Greenhorn Sediment Removal at Rollins Reservoir Project
Nevada County, CA

USGS 7.5' Quads:
Chicago Park, CA
T 15N, R 09E, Sections 2-3, 10-11

2300 Clayton Road, Suite 200 Concord, CA 94520	tel (925) 935-9920 fax (925) 935-5368
www.cardno.com	
Image Source: NID, 2016 Map Prepared By: A. Clare 3/1/2017	
Map Projection: NAD 1983 UTM Zone 10N	



2014 Imagery (NAIP)



2016 Imagery (NID)

Figure 1: Extent of Sediment in the Greenhorn Arm of Rollins Reservoir

Greenhorn Sediment Removal at Rollins Reservoir Project
Nevada County, CA

USGS 7.5' Quads:
Chicago Park, CA
T 15N, R 09E, Sections 2-3, 10-11

Map Prepared By A. Clare
1/5/2017



1:5,138



2300 Clayton Road, Suite 200 | tel (925) 935-9920
Concord, CA 94520 | fax (925) 935-5368

www.cardno.com

Map Projection : NAD 1983 UTM Zone 10N

Table 1. Construction Vehicles and Equipment.

Equipment	Quantity
Construction Vehicles	
Large Loader	2
Skid Steer Loader	1
Large Excavator	1
Medium Excavator	1
Small Excavator	2
Backhoe	2
Trackhoe	2
Scraper	3
Bulldozer	2
Compaction Equipment	
Large Vibratory Roller	1
Small Vibratory Roller	1
Hand Vibratory Compactor	1
Trucks	
Flat-bed Trucks	1
Pick-up Trucks	4
Delivery Trucks	2
Dump Truck/Yukes	4
Sweeper Truck	1
Water Truck	1
Other Construction Equipment	
Grizzly	1
Barge	1
Pile Driver	1
Chainsaw	3
Aeration Equipment	1-3
Oxygen Sensors	3-6