

Newlands Project Frequently Asked Questions

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What is the Newlands Project?

The Newlands Project in Nevada is one of the first Reclamation projects in the country, with construction beginning in 1903. It covers lands in the counties of Churchill, Lyon, Storey, and Washoe and provides water for about 57,000 acres of irrigated land in the Lahontan Valley near Fallon and bench lands near Fernley. Made up of two divisions, the Truckee Division and the Carson Division, the Project has features in both the Carson and Truckee River basins with the Truckee Canal allowing interbasin diversions from the Truckee River to the Carson River. The major features of the Newlands Project include Lake Tahoe Dam, Derby Diversion Dam, the Truckee Canal, Lahontan Dam, Lahontan Power Plant, Carson River Diversion Dam and canals, laterals, and drains for irrigation of approximately 57,000 acres of farmlands, wetlands and pasture.

Water for the Newlands Project comes from the Carson River and supplemental water is diverted from the Truckee River into the Truckee Canal at Derby Dam for conveyance to Lahontan Reservoir for storage. The water stored in Lahontan Reservoir or conveyed by the Truckee Canal is released into the Carson River and diverted into the `V` and `T` Canals at Carson Diversion Dam.

The Bureau of Reclamation has a contract with the Truckee-Carson Irrigation District to operate and maintain the Newlands Project on behalf of the Federal government.

Who is the Bureau of Reclamation?

The Bureau of Reclamation is a federal agency within the Department of the Interior. Established in 1902, Reclamation is best known for the dams, powerplants, and canals it constructed in the 17 western states. These water projects led to homesteading and promoted the economic development of the West. Reclamation has constructed more than 600 dams and reservoirs including Hoover Dam on the Colorado River and Grand Coulee on the Columbia River.

Today, Reclamation is the largest wholesaler of water in the country. Reclamation brings water to more than 31 million people, and provides one out of five Western farmers (140,000) with irrigation water for 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts.

Reclamation is also the second largest producer of hydroelectric power in the western United States. Fifty-eight powerplants annually provide more than 41 billion kilowatt hours generating nearly a billion dollars in power revenues and produce enough electricity to serve 3.5 million homes.

Reclamation is the owner of the Newlands Project. In 1926, Reclamation entered into a contractual agreement with the Truckee-Carson Irrigation District (TCID) to operate and maintain the Newlands Project. That agreement was renewed in 1996. Under the agreement, TCID completes its duties without cost to the Federal government or American taxpayers by charging an operation and maintenance fee to all water users who benefit from the Newlands Project.

What was the damage to the Truckee Canal as a result of the January 5, 2008 breach?

At approximately 4:30 a.m. on Saturday, January 5, 2008, a breach occurred in the Truckee Canal operated and maintained by the Truckee-Carson Irrigation District (TCID). As a result of the breach, an uncontrolled release of water flowed into irrigated lands and a portion of the City of Fernley, located some 30 miles east of Reno. About 590 properties were affected.

To rapidly isolate the breach and drain the canal in the area where it occurred, TCID operated available spillways, wasteways, check structures, and nearby lateral canals. The breach was sealed by about 4 p.m. that same day. TCID began construction on January 16, 2008, to repair the breach in the Truckee Canal using a “Zoned Earthfill Embankment” type design. Repairs were completed on February 18, 2008.

The Zoned Earthfill Embankment design is similar to that used in major earthen dam structures. This approach was used because of the urban area that lies downslope of the canal and the importance of protecting public health and safety. What makes this type of design special is that it provides multiple layers of protection to prevent failure.

What operating limitations have been placed on the Truckee Canal?

In order to ensure public safety, Reclamation has restricted the operation of the Truckee Canal such that the flow in the canal may not exceed the water level that would be reached by the canal flowing freely at 350 cubic feet per second (cfs). In addition, the Federal District Court has placed an interim temporary restraining order on the operation of the Truckee Canal, reinforcing the 350 cfs flow limitation. The court’s order also requires daily inspections of portions of the canal.

What is the impact of the Truckee Canal being limited to 350 cfs this year?

During January and February 2010, the canal has been flowing at rates between approximately 150 and 350 cfs. The specific rate on any given day has been limited primarily by the amount of water available from the Truckee River. The Reclamation and court-ordered limitation of 350 cfs on the canal has only impacted the flow into the canal less than 12 days total through the end of February 2010.

Preliminary model runs show the number of shortage years to the Carson Division start to increase when the maximum flow in the Truckee Canal is limited to 350 cfs or less. The following table shows predicted shortage years at various maximum canal capacities, as determined from the model runs, and assuming the water is available in the Truckee River for diversion.

Maximum Truckee Canal flow (cubic feet per second)	Number of years with Carson Division shortages, per 100 years
<u>900 cfs (unrestricted flow)</u>	9 years
550 cfs	9 years
450 cfs	9 years
350 cfs	10 years
250 cfs	14 years
150 cfs	26 years
0 cfs	38 years

What are the historic diversions to the Truckee Canal?

In reviewing data from the two decades prior to the January 5, 2008 breach of the Truckee Canal, diversion into Lahontan Reservoir from the Truckee Canal occurred during various months in 14 years out of 20. In the other 6 years, there was ample water supply in the Carson River that made it unnecessary to divert water into Lahontan Reservoir from the Truckee Canal. Of the years that diversions occurred to Lahontan Reservoir, average flow into the Canal from the Truckee River in February was approximately 300 cfs, rising to an average of approximately 460 cfs in March and 480 cfs in April, before dropping back down to an average of approximately 350 cfs and 300 cfs in May and June, respectively. Much larger runoff-driven flow events (up to 900 cfs) sometimes occurred during these months and were able to be diverted.

When will the Truckee Canal be fixed?

In the Operations and Maintenance (O&M) contract between Reclamation and the Truckee-Carson Irrigation District (TCID), TCID agreed to operate and maintain the Newlands Project at no expense to the Federal government. TCID agreed to take on the responsibility of making and funding any necessary repairs to Newlands Project facilities. Under the contract TCID also agreed to submit, for Reclamation approval, detailed plans for major changes to project features. In September 2008, TCID submitted a one-page proposal on their plan to rehabilitate the Truckee Canal. Reclamation provided comments in December 2008. Upon development of a proposal that meets Reclamation engineering standards, TCID will be able to proceed with the appropriate repairs to the Canal.

What is the Newlands Project Planning Study and Risk Assessment?

The Newlands Project Planning Study and Risk Assessment is a \$2.5 million project designed to perform an exploration/risk analysis of the Truckee Canal to determine the full extent of rehabilitation needed for the canal to resume flows above 350 cubic feet per second (cfs). Reclamation completed the risk assessment in June 2011. Additionally, Reclamation is conducting a study to evaluate multiple alternatives for water delivery in the Newlands Project that will integrate the design data collected on the canal and the risk assessment. That study began in April 2011. The study is expected to be completed in April 2013 and will help to determine effective alternatives for safely delivering water to meet Newlands Project water rights. The planning study and risk assessment do not limit TCID's ability to proceed with repairs pursuant to the O&M contract.

What is OCAP?

Operating Criteria and Procedures (OCAP) is a regulation developed in compliance with Federal law that governs diversions to the Newlands Project from the Truckee River. The initial OCAP was put into place in 1967 and has been revised through the years at various times, with the current version being the 1997 Adjusted OCAP. The purpose of OCAP is to maximize use of the Carson River and minimize use of the Truckee River for Newlands Project irrigation. OCAP does not limit storage in Lahontan Reservoir. Under OCAP, each month Reclamation reviews the amount of water stored in Lahontan Reservoir, estimates the amount of Carson River water that will be available to Lahontan Reservoir, and uses that information to calculate the supplemental amount that may be diverted from the Truckee River, if any is needed, to meet the water requirements of the Newlands Project for that irrigation season. On average, the Truckee River provides approximately 20 percent of the Carson Division water supply. The actual percentage varies from year to year depending upon the availability of water in the Truckee-Carson River system.

OCAP also encourages efficient operation of the canal system and delivery of water to the water-righted users by providing efficiency incentives to TCID.

What is TROA?

Signed on September 6, 2008, the Truckee River Operating Agreement (TROA) is an agreement dealing with *operations* of the reservoirs in the Truckee River basin. The primary purpose of TROA is to implement section 205(a) of Public Law (P.L.) 101-618, which directs the Department of the Interior to negotiate an agreement with California and Nevada to increase the operational flexibility and efficiency of certain reservoirs in the Lake Tahoe and Truckee River basins. Under Section 205(a)(2) of the public law, TROA is to ensure that water is stored in, and released from Truckee River reservoirs, to satisfy the exercise of water rights in conformance with the Orr Ditch decree and Truckee River General Electric decree. Those decrees determined the various owners of water rights on the Truckee River and their entitlement to water from the Truckee River system.

How does TROA affect my water rights?

TROA does not change or alter the water rights recognized in Nevada or California. In fact, Congress specifically required that TROA recognize and respect existing rights. In addition, TROA itself expressly provides that the Federal Water Master will have full authority to ensure that water rights holders receive the water they are legally entitled to. TROA will not permit storage in upstream reservoirs unless it is within the rights of the party storing it.

Will TROA decrease water flows in the Truckee Canal to the Newlands Project?

The Department of the Interior completed extensive modeling of the Truckee River system including examining the current conditions with and without TROA and future predicted conditions with and without TROA. This modeling determined that the change, if any, in the amount of Truckee River water available for diversion at Derby Diversion Dam would depend on whether upstream water users had fully utilized their senior priority rights. A limited amount of the water which previously has been available for diversion to the Newlands Project results from upstream water right holders not fully exercising their water rights. TROA allows for more efficient exercise of those water rights, and, in the future, water right holders will find ways to more efficiently use those rights, particularly in dry periods. Such future uses of water rights could also occur in the absence of TROA.

Model results from the TROA Environmental Impact Statement based on the past 100 years of hydrology show the same number of shortage years occurred with or without TROA and the difference in the Truckee Canal diversions was less than 2 percent. Attached are two graphs showing the modeling results, with and without TROA, in the Truckee and Carson Divisions of the Project.

Who was allowed to participate in the TROA negotiations?

All TROA negotiation plenary sessions and most working group and committee meetings were open to all interested persons. The Secretary of the Interior, States of California and Nevada, the Pyramid Lake Paiute Tribe, and Sierra Pacific Power Company (now Truckee Meadows Water Authority) were mandatory signatories to TROA. Over the 18 years of negotiations, the negotiators entertained proposals submitted by any person for inclusion in TROA.

Did TCID participate in the TROA negotiations?

TCID was involved in many of the earlier negotiating meetings, and on a number of occasions did propose provisions or concepts which it wanted to be considered for TROA. All of TCID's written proposals were discussed by the negotiating participants. A TCID representative was present at and participated in many of those discussions. Verbal responses were provided to any TCID representative present when TCID proposals were made or discussed. Because of the "give and take" nature of the negotiating process, no written responses to proposals were generally provided to any party unless the party proposed language or alternative language for a particular provision of TROA. To the extent that any specific TCID proposals or concepts were not accepted for inclusion in a TROA draft, it was because those specific proposals or concepts were not consistent with the statutory objectives TROA is required to achieve, were deemed to

be contrary to the Department of the Interior's OCAP, or were not acceptable to one or more of the mandatory signatory parties.

Who determines how much water California can use from the Truckee River before it reaches Nevada?

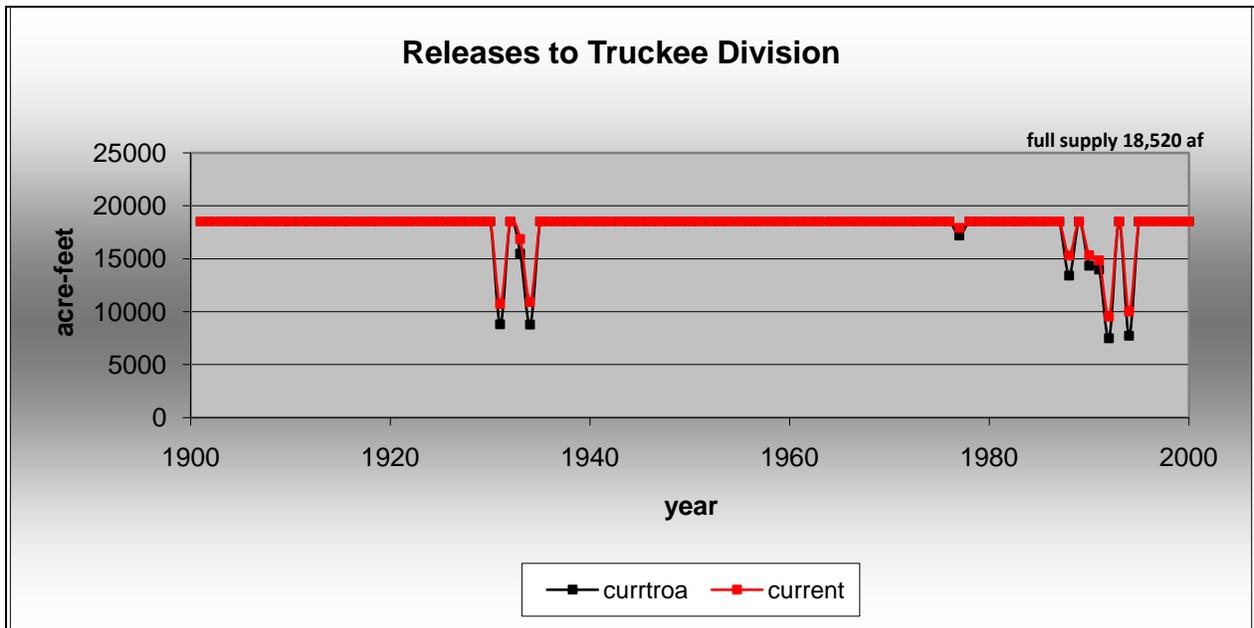
An agreement between California and Nevada called an “interstate allocation” spells out how much water is available to each State from Lake Tahoe, the Truckee River and the Carson River. This allocation was negotiated by the two States in the 1960s, when Ronald Reagan was Governor of California and Paul Laxalt was Governor of Nevada. This interstate apportionment of water protects water users in northern Nevada. It will ensure that water users in northern Nevada have the rights in Lake Tahoe and the Truckee and Carson Rivers that they have sought since the 1960s, and that no contrary claims based on changes in uses that have occurred since the initial agreement will be allowed. Under the interstate allocation, Nevada will receive 90 percent of Truckee River flows produced in California. The agreement was approved by Congress in Public Law 101-618, but conditioned on implementation of TROA. For the interstate allocation to become effective, Public Law 101-618 requires that TROA must be implemented.

What is the Orr Ditch Decree and why is it important?

The *Orr Ditch* decree was entered by the U.S. District Court for the District of Nevada in 1944 in *United States v. Orr Water Ditch Co., et al.* The decree was the result of a legal action brought by the United States in 1913 to fully specify who owned water rights on the Truckee River and had rights to storage in Lake Tahoe. The *Orr Ditch* decree adjudicated water rights of the Truckee River in Nevada and established amounts, places, types of use, and priorities of the various rights, including the United States' right to store water in Lake Tahoe for the Newlands Project. The decree also incorporated the 1935 Truckee River Agreement among Sierra Pacific Power Company (now Truckee Meadows Water Authority), TCID, Washoe County Water Conservation District, Department of the Interior, and certain other Truckee River water users.

The Truckee River Agreement is an operating agreement that, among other things, provided for a reduced flow rate at the California-Nevada state line, and for the construction of what is now Boca Reservoir. The *Orr Ditch* decree, 1915 *Truckee River General Electric* decree, and Tahoe-Prosser Exchange Agreement provide the current operational framework and rules for Truckee River reservoirs. The provisions of the *Orr Ditch* decree are administered by the Federal Water Master appointed by the *Orr Ditch* court.

Attachment



The red line on each graph indicates simulated releases for current operations based on the past 100 years of hydrology within the two divisions of the Newlands Project. The black line indicates simulated releases with TROA. Over this 100-year timeframe, the Newlands Project experienced 9 years of shortages. Had TROA been in effect during this time frame, the Newlands Project would have experienced the same 9 years of shortages. The shortages would have been slightly more intense under TROA due to more efficient use of water rights on the Truckee River.

