

Testimony of Chester C. Buchanan
Before State Water Resources Control Board Hearing
Water Right Applications 31487 and 31488 by US Bureau of Reclamation
Change Petition 5169 by Washoe County Water Conservation District,
Change Petition 9247 by Truckee Meadows Water Authority,
Change Petition 15673 by US Bureau of Reclamation
Change Petition 18006 by US Bureau of Reclamation

Biography

My name is Chester C. Buchanan. I earned a Bachelor of Science in Biology and a Master of Science in Zoology from San Diego State University in 1966 and 1968, respectively. I was employed as a fishery biologist by the National Marine Fisheries Service from 1968 to 1978, and then by the U.S. Fish and Wildlife Service from 1978 through 2002. I was appointed the Deputy Field Supervisor for the Reno Field Office in Reno, NV in 1982. I held this position until 2000 when I became the Special Assistant to the Field Supervisor. During the period 1982 to 1996, I was responsible for evaluating and formulating annual spawning flow regimes for cui-ui and Lahontan cutthroat trout (LCT) in the lower Truckee River, and from 1992 through 2002, I was the Service's technical representative on the Federal team negotiating Truckee River Operating Agreement (TROA) and the Service's representative on the Federal/California team developing the related Environmental Impact Statement / Environmental Impact Report (EIS/EIR). Since my retirement from the Service in early 2003, I have continued to perform TROA-related technical tasks as a consultant to the US Bureau of Reclamation.

I. Purpose of testimony

I will testify as to 1) the linkage of TROA provisions with the change petitions and appropriation applications, and 2) TROA provisions that address the key issues that the State Water Resource Control Board (SWRCB) raised in its hearing notice. References to TROA in my testimony may be found in Exhibit App./Pet. Joint-19.

II. TROA and the change petitions

The change petitions are essential to TROA because they would enable coordinated reservoir operations required to implement TROA.

A. Dependence of TROA on approval of the change petitions

TROA is an agreement negotiated pursuant to an Act of Congress, section 205(a) of Title II of Public Law 101-618 (Exhibit App./Pet. Joint-16), for operation of Truckee River Reservoirs.¹ It is intended to provide more effective and efficient use of these facilities to meet existing, as well as anticipated future demands, (agricultural, environmental, municipal, and industrial) than can be achieved with current operations, while not adversely affecting existing water rights. TROA will 1) enhance water management

¹ Prosser Creek Reservoir, Boca Reservoir, Stampede Reservoir, and Martis Creek Reservoir, and the storage provide by the dam at the outlet of Lake Tahoe.

flexibility, water quality, conditions for Pyramid Lake fishes, reservoir recreational opportunities, and reservoir efficiency; 2) increase municipal and industrial (M&I) drought supply, minimum reservoir releases, and the capacity for carryover storage; 3) provide procedures to implement the allocation of Truckee River water between California and Nevada; and 4) reduce water use conflicts. Accomplishment of these objectives is predicated on the versatility requested in the change petitions.

Approval of the change petitions would allow TROA signatory parties to accumulate water (generally classified under TROA as one of twelve categories of credit water) in Prosser Creek, Boca, and Stampede reservoirs, and Independence Lakes, by retaining in storage all or a portion of water to which they have a right. Waters that may be accumulated in this way are: 1) water stored in or passed through Boca Reservoir to achieve Floriston Rates pursuant to the *Orr Ditch* decree and the existing Boca license, 2) water associated with Prosser Creek Reservoir license and Stampede Reservoir permit, 3) privately owned water associated with Independence Lake license, and 4) direct diversion water rights that are available from existing or purchased water rights in California or Nevada. Essentially, such credit waters, when supported by an underlying state water right, are accumulated in place of, converted from, or exchanged with project water associated with a storage license or permit. Credit waters may be retained in storage or exchanged among the reservoirs until needed to satisfy their beneficial uses.

Approval of the change petitions would accommodate the accumulation of credit waters in Prosser Creek, Boca, and Stampede Reservoirs, and Independence Lake. Boca, Stampede, and Independence project waters could be initially captured (i.e., diverted to storage) in any of these storage facilities, then released and re-stored (i.e., rediverted or redistributed) or exchanged to either or both of the other two facilities consistent with TROA. In order to remain in compliance with the existing licenses and permit and to allow for TROA operations, the petitions would expand places and purposes of use so that they were common among these three storage facilities and Prosser Creek Reservoir. This concept has the added advantage of allowing the purpose and use of a project water to change within the limits of the change petitions. Places and purposes of use of such waters are specified in TROA. Approval of the change petitions would not add new water rights to the licenses and permit, and would not change the annual amount that may be diverted to storage.

B. Changes requested in the petitions are necessary

TROA recognizes that certain changes to existing Boca, Prosser Creek, and Independence Lake licenses and Stampede permit are necessary for TROA to take effect. Section 12.A.4 states that TROA “shall enter into effect and become operative within one (1) year” after a number of conditions are satisfied, among them are approval of certain provisions of the change petitions.

C. Protects existing water rights

Approval of the change petitions to support operations under TROA would not injure existing water rights because TROA provisions protect water rights in two ways. First, credit waters may only be stored under TROA in Truckee River Reservoirs, including

Donner and Independence Lakes, to the extent allowed by changes to water rights under applicable state law (see TROA sections 7.B through 7.G).

Secondly, TROA will not affect the exercise of *Orr Ditch* decree water rights, except for those water rights voluntarily relinquished by parties to TROA (see TROA sections 5.A and 12.A.4). TROA complies with section 205(a)(2)(D) of P. L. 101-618, which requires that Truckee River Reservoirs be operated under the provisions of TROA 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, except for those rights that are voluntarily relinquished by the parties to the Preliminary Settlement Agreement as modified by the Ratification Agreement [PSA], or by any other persons or entities or which are transferred pursuant to State law.”

Existing water rights are further protected by section 210(b)(13) of P. L. 101-618, which expressly recognizes the authority of the *Orr Ditch* court “to ensure that the owners of vested and perfected Truckee River water rights receive the amount of water to which they are entitled under the *Orr Ditch* decree or the *Alpine* decree.” TROA section 1.C.1 recognizes and incorporates this provision of Public Law, and further recognizes that “[t]he Federal Water Master under the *Orr Ditch* decree shall retain full authority to ensure that such rights are fully enforced.”

In addition to recognizing the authority of the Federal Water Master, TROA provides for the appointment of an Administrator, whose authority would include protection of *Orr Ditch* decree water rights. If the implementation of any provision of TROA results, or would result, in an owner of exercised *Orr Ditch* decree water rights not receiving an amount of water to which that owner is legally entitled, section 1.C.2 provides that the Administrator take specific measures to remedy such deficiency. TROA provides in section 2.A.2 that the first Administrator shall be the Federal Water Master, and that subsequent Administrators shall be appointed by the *Orr Ditch* court. Section 2.B contains dispute resolution procedures (including a special hearing officer) which apply to parties to TROA, and which the TROA parties have agreed to use to resolve disputes arising under TROA. Decisions by the hearing officer are reviewable by the *Orr Ditch* court (TROA section 2.B.2(B)(5)).

Orr Ditch decree water rights also would be protected by the court review requirement of section 205(a)(4) of P.L. 101-618. This section requires that for TROA to enter into effect, it “shall be submitted to the *Orr Ditch* court and the *Truckee River General Electric* court for approval of any necessary modifications in the provisions of the *Orr Ditch* decree or the *Truckee River General Electric* decree.”

Provisions of P. L. 101-618 addressing *Orr Ditch* decree water rights are reflected in the following TROA provisions:

1. Section 1.A.1 is a general stipulation that TROA is intended to satisfy the provisions of Sections 205(a)(2) and (a)(3) of P. L. 101-618.

2. Section 1.B.2 is a general operational principle of TROA which provides a framework for the Administrator to satisfy vested and perfected rights to use water of the Truckee River and its tributaries.
3. Section 1.C.1 specifically states that nothing in TROA shall affect the power of the *Orr Ditch* court to ensure that the owners of vested and perfected water rights receive the amount of water to which they are entitled under the *Orr Ditch* decree, or alter or conflict with such rights.
4. Section 1.C.2 instructs the Administrator to take such actions as necessary to correct a situation where implementation of TROA has caused an owner of an exercised *Orr Ditch* decree water right not to receive the legally entitled amount of water.
5. Section 2.B.1 states that disputes arising under the *Orr Ditch* decree will be subject to the jurisdiction of the *Orr Ditch* court and the Federal Water Master.
6. Section 12.A.4(b) and 4(c) require that TROA be approved by the *Orr Ditch* court and the *Truckee River General Electric* court before it can become effective.
7. Section 13.B states that TROA is the basis for operation of Truckee River Reservoirs to comply with the requirements of section 205(a)(2) of P. L. 101-618 and the elements of 205(a)(3) of P. L. 101-618.

TROA provisions also protect specific water rights. Maintenance of Floriston Rates and Reduced Floriston Rates, as well as the protection of water used for these rates, are addressed in sections 5.A.2 (maintenance of rates), 8.C (priorities of project and Floriston Rate Water as to credit water operations), 8.L (when Tahoe elevation recedes below the rim), and 8.S (exchange of credit water from Stampede with Floriston Rate Water in Tahoe). Sections 5.C, 5.D, and 5.E protect project waters from spills, evaporation, and conveyance losses that may be caused by the operations of credit waters. Sierra Valley diversion is addressed in section 6.B.1, California surface water in section 6.C.1, Newlands Project diversions from the Truckee River in section 7.H, and Donner Lake privately owned water in sections 1.C.5 and 5.B.4.

D. Does not initiate new water rights

Approval of the petitions would allow project waters associated with Boca, Stampede, and Independences to be diverted, rediverted, or redistributed among any of the three water bodies, and would expand places and purposes of use so that Boca, Stampede, and Prosser Creek reservoirs, and Independence Lake would have common places and purposes of use. Such changes would enable the accumulation of credit water categories under TROA (sections 7.B through 7.G) in accordance with applicable state law. Therefore, the change petitions would not initiate new water rights in that they are only seeking changes to water rights associated with the existing storage licenses and permit.

E. Environment benefits

Approval of the change petitions,² would enable the following opportunities under TROA for water managers to protect and enhance fish habitat, water quality, and recreational opportunities in the Truckee River system:

1. Under TROA, Prosser fish water (section 5.B.6(a)(5)), Stampede fish water (section 5.B.8(c)), and fish credit water (section 7.C.5) are accumulated and used for the benefit of cui-ui in the lower Truckee River and Pyramid Lake, and LCT in the Truckee River basin. Section 5.B.7(h) provides for exchanges of credit water to assist in maintaining access for LCT from Independence Lake to upstream spawning habitat in Independence Creek.

2. A general operating principle of TROA (section 1.B.3) is to 1) maintain minimum reservoir releases and 2) to the extent practicable and consistent with existing water rights, enhance minimum reservoir releases, and maintain preferred stream flows and reservoir recreation levels. The following TROA provisions implement this principle:

- a) Section 5.B.6(b) provides for using Prosser Creek reservoir project water to maintain minimum releases from Lake Tahoe.
- b) Section 5.B.6(c) provides for recreational pools and minimum fish pools in Prosser Creek Reservoir: 1) storage target of 19,000 acre-feet during the summer for recreational purposes; 2) a fish pool of no less than 9,800 acre-feet during the summer; and 3) no least 5,000 acre-feet for fish habitat at all times, unless California Department of Fish Game identifies a lesser amount.
- c) Section 7.C.6 dedicates a portion of fish credit water to joint program fish credit water that is managed by California to enhance stream flows and reservoir recreational pools. Once the joint program water can no longer be used for this purpose, it is allowed to flow to Pyramid Lake.
- d) Section 8.S allows for specific exchanges between Stampede and Lake Tahoe to enhance minimum releases from Lake Tahoe and to reduce the chance of exceeding California Guidelines specification for the Little Truckee River.
- e) With the exception of Boca Reservoir, section 9.C establishes minimum and enhanced minimum releases from Truckee River Reservoirs, Independence Lake, and Donner Lake.

² Environmental benefits associated with California's future environmental credit waters under TROA (sections 7.D.8 and 7.D.9) are not addressed here, but will be addressed by California if and when it applies to SWRCB for a water right or a change to an existing water right.

f) Section 9.F allows California to establish non-mandatory guidelines for reservoir release ramping rates, reservoir recreational storage targets, and maximum and preferred stream flows. TROA parties are encouraged to schedule their operations to accommodate California Guidelines “[t]o the extent practicable and consistent with the exercise of water rights, assurance of water supplies, operational considerations, the requirements of the Settlement Act and all other requirements of this Agreement.”

3. Three sections of TROA benefit water quality:

a) Section 7.E provides for the accumulation and storage of water quality credit water under the *Truckee River Water Quality Settlement Agreement*. Once this water is released to serve the agreement, it ultimately flows to Pyramid Lake.

b) In order to prevent credit water accumulation from diminishing river water quality, section 7.A.5 in general, restricts accumulation of credit waters if such action would reduce flows at the Sparks gauge to less than 275 cfs from June through October, or less than 120 cfs from November through May.

c) Section 8.T provides criteria for Stampede fish water and fish credit water operations to ensure that water quality credit water is available at times required by the *Truckee River Water Quality Settlement Agreement*.

III. TROA and the applications

The current Stampede Reservoir permit limits the amount of water that may be diverted to storage during a year, while the current Prosser Creek Reservoir license limits both the amount of water that may be released each year as well as the filling period. These limitations reduce opportunities to divert water to storage and to use. Approval of the Stampede Reservoir application would supplement the current permit, so that the total combined amount of water that could be diverted to storage from January 1 through December 31 at the rate of 350 cfs would be 226,500 acre-feet. This would increase the maximum amount of water that could be annually diverted to storage by 100,000 acre-feet over the current permit. There would be no injury to existing water rights since only water that would have otherwise flowed to Pyramid Lake during periods of high flow would be diverted to storage under this application.³

Approval of the Prosser Creek Reservoir application would modify the current license. It would remove the existing maximum withdrawal of 20,162 acre-feet during a year and would expand the filling period from April 10–August 10 to October 1–August 10, while continuing to allow a maximum annual storage of 30,000 acre-feet. This would increase the potential annual withdrawal from the reservoir by 9,800 acre-feet, but only when

³ Water availability for the Stampede appropriation application will be addressed by another witness.

California Department of Fish and Game relaxed the 5,000 acre-feet minimum fish pool required by TROA section 5.B.6(c)(4). Also, TROA section 5.B.6(c)(2) restricts such withdrawal during the summer months for maintaining the “desired” reservoir recreational pool.

The applications allow potential environmental and recreational benefits under TROA sections 7.A.4(a)(5) and (a)(7). Approval of the applications would produce more benefits than the existing license and permit because more water could be managed (sections 5.B.6(a)(5) and 5.B.8(a)) for cui-ui and LCT are spawning in the lower Truckee River. Also, there would be more fish credit water 1) to maintain spawning access for LCT from Independence Lake into Independence Creek (section 5.B.7(h)), and 2) to enhance minimum bypass flows at hydroelectric diversions on the Truckee River (section 9.E.2). Such management would also benefit fish species other than cui-ui and LCT.

In addition, approval of the applications would provide more water 1) to be exchanged from Prosser Creek Reservoir to Lake Tahoe to maintain minimum releases from the lake (section 5.B.6(b)), 2) for maintaining minimum releases from Prosser Creek Reservoir (section 5.B.6(a)(4)), and 3) for conversion to joint program fish credit water (section 7.C.6). Such additional storage in both reservoirs would provide enhanced reservoir recreational opportunities and habitat for fish, water fowl and shore birds.

IV. Summary

TROA provides sufficient measures to assure that approval of the change petitions would:

- Not injure existing water rights
- Not create new water rights
- Benefit water quality and the environment

TROA provides sufficient measures to assure that the appropriation applications, if approved, would:

- Not injure existing water rights
- Be in the public interest
- Benefit water quality and the environment