DATE: November 21, 2019

TO: Water Commission

FROM: Dan Hentschke, Assistant City Attorney

SUBJECT: Summary of Adopted State Water Rights Order

Recommendation:

That Water Commission receive an oral summary of the adopted State Water Rights Order.

Background:

The Cachuma Project consists of Bradbury Dam and Cachuma Reservoir. The project was built in 1956 by the Federal Bureau of Reclamation (Reclamation) and provides water to the City of Santa Barbara, Carpinteria Valley Water District, Goleta Water District, Montecito Water District, and Santa Ynez River Water Conservation District, Improvement District No. 1 (often collectively referred to as the Cachuma Member Units). Reclamation operates the project pursuant to a water rights permit issued by the State Water Resources Control Board (Water Board). The first water right permit for the Cachuma Project was issued in 1958. The current permit is the culmination of nearly 20 years of legal proceedings to protect water right holders and address long-term declines in native fish populations in the Lower Santa Ynez River (downstream of Bradbury Dam.)

Discussion:

The Water Board adopted the order for the new water rights permit on September 17, 2019. The order, including its attachments, is over 180 pages. A copy is on file in the Public Works Department, and it can be found online at: https://www.waterboards.ca.gov/board_info/agendas/2019/sept/091719_8_drft_order_clean.pdf

A primary motivation is to prevent extinction of native steelhead. Southern California steelhead, which includes the population of the Lower Santa Ynez River, has been a federally listed endangered species since 1997. The Water Board is obligated to consider protection of public trust interests, prior water rights (e.g., downstream rights of the Santa Ynez River Water Conservation District and City of Lompoc), and water supply interests of the Cachuma Member Units when it issues a water rights order. The new order will result in higher downstream flows during wet years, which will reduce available storage in Cachuma Reservoir going into normal and dry years, and a reduction in supplies available for use by the Cachuma Member Units. For this reason, the water rights order requires Reclamation to include a conservation requirement in the water supply contract for the Cachuma Member Units. As the Water Commission is aware, the City of Santa Barbara already has a robust water conservation program. In addition, the Water Board considered the City’s desalination plant as an additional supply source capable of offsetting shortages resulting from the additional releases for the steelhead.

A media release and fact sheet prepared by the Water Board are attached to this memorandum.
State Water Board Adopts Order Protecting Endangered Steelhead and Senior Water Right Holders Impacted by the Cachuma Reservoir Project

Sept. 17, 2019

Contacts: George Kostyrko
George.Kostyrko@waterboards.ca.gov

SACRAMENTO – The State Water Resources Control Board today adopted an order for Cachuma Reservoir in Santa Barbara County to protect the endangered steelhead trout population and downstream senior water right holders.

The State Water Board action follows nearly 20 years of legal efforts to protect water right holders and address long-term declines in native fish populations in the Santa Ynez River.

“This order is an important step towards improving the condition of a struggling species, while continuing to develop the science and information needed to return the species to sustainable levels,” said State Water Board Chair E. Joaquin Esquivel. “I am hopeful that adoption of this order will inspire the parties to continue working collaboratively to resolve these long-standing water management challenges – challenges not unlike those found in other communities and watersheds throughout the state.”

The Order requires the U.S. Bureau of Reclamation to increase flows on the Santa Ynez River below Bradbury Dam to provide additional habitat for steelhead and prevent its extinction. To minimize impacts on local water users, higher flows will be required only during wetter years.

Historically, the Santa Ynez River was a major spawning ground and nursery stream that supported the largest steelhead run in Southern California. Damming the river in 1953 stored runoff for the Santa Barbara area, but blocked off crucial spawning and rearing habitat and reduced the average annual run from 20,000 adult fish to fewer than 100 today.

Similar to salmon, steelhead trout spend much of their life in the sea before returning to the place of birth in a freshwater stream to spawn. Southern California steelhead, which include the population of the Santa Ynez River, have been federally listed as an endangered species since 1997 and are on the brink of extinction.

State law (Fish and Game Code section 5937) requires that dam owners keep fish species below the dam in good condition. In its evaluation of the project, the Board determined that the steelhead were not in good condition and required actions that will help preserve the species.
Providing higher flows during wet years may reduce storage in Cachuma Reservoir going into drier years and could result in decreased supply for areas served by the reservoir during future droughts if alternatives, such as water conservation, are not utilized. The Order requires that water supply managers for communities in the Santa Barbara area served by Cachuma Reservoir implement conservation measures to prepare for future dry periods.

According to the order, the Bureau of Reclamation is also required to:

- Explore the potential for fish passage around the dam to provide access to additional habitat and present the findings within 24 months;
- Consider additional measures to replenish the steelhead population; and
- Study the effects of the increased flows on the fish.

If the flows fail to provide the anticipated benefit, or if the increased water supply results in impacts not identified in the final Environmental Impact Report, the instream flows will be reduced accordingly.

The State Water Board is responsible for issuing water rights permits and licenses and enforcing many of California’s water laws. The agency also has broad authority to establish minimum flows and implement other measures to protect fisheries and other public trust resources.

More information is available on the Cachuma Project page. A fact sheet is also available.

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State Water Board Adopts Revised Order for Cachuma Project in Santa Barbara County

Order Will Improve Water Conditions for Survival of Migrating Fish

Overview
A Board-approved order issued Sept. 17, 2019 will increase the instream flow requirements (in the Bureau of Reclamation’s water rights) downstream of Lake Cachuma in Santa Barbara County for the protection of fish, possibly reducing the water supply for communities that rely on the lake. The revised document addresses injury resulting from construction and operation of Bradbury Dam to senior water right holders and public trust resources such as the endangered species Southern California steelhead. Additionally, the Board granted Reclamation’s request and changed the permits’ purposes and places of use. The order is based on evidence and testimony presented at multiple hearings spanning more than a decade.

Historical Role of the State Water Boards
Built in 1956 by Reclamation and consisting of Bradbury Dam and Cachuma Reservoir, the project captures the seasonal floodwaters for use by communities in Santa Barbara County. It serves approximately 150,000 people between the Santa Ynez Mountains and the Pacific Coast, including those in Santa Barbara, Goleta, Montecito, Summerland and Carpinteria, and another 13,000 in Santa Ynez, Los Olivos, Ballard and Solvang.

Since the State Water Board issued the water right permits to Reclamation in 1958, the Board has retained the authority to determine the requirements necessary to protect senior water rights and public trust resources downstream of Bradbury Dam, including the endangered steelhead fishery.

What the Draft Order Requires
It amends the terms and conditions of Reclamation’s water right permits for the project to protect the steelhead fishery and other public trust resources. The updated order also incorporates conditions of an existing settlement agreement that protects more senior downstream water right holders from injury due to changes in water quality or a reduction in the quantity of available water.
Revisions to the place and purposes of use were approved because they were not found to affect the project’s operations or flows in the Santa Ynez River.

The State Water Board determined that the steelhead fishery in the Santa Ynez River is not in good condition, as required by the public trust doctrine and Fish and Game Code section 5937, and that additional measures are needed to increase the amount of suitable habitat available for spawning and rearing above the dam. The evidence shows that damming the Santa Ynez River, the most productive steelhead river in Southern California, reduced the annual steelhead run from a historic average of 20,000 adult fish to fewer than 100. Loss of instream rearing habitat for juvenile steelhead is a lead cause of the steelhead population’s decline.

The Board’s action further requires Reclamation to conduct studies of additional measures that could be implemented to keep the steelhead fishery in good condition at the individual, population and community level. Specifically, the order requires Reclamation to evaluate the following: Opportunities to provide passage of steelhead above and below Bradbury Dam; instream flow measures for the protection of steelhead and other native aquatic species in the Santa Ynez River; measures to reduce impacts of predation and other species on steelhead and other native aquatic species; and improvements or restoration of stream and streamside habitat.

**Draft Order Requires the Following Steps**

To improve conditions for the steelhead and minimize water supply impacts, the project’s requirements to meet a certain amount of flow in the river ("instream flow") would depend on the hydrologic conditions that are present. In years when the runoff is determined to be below normal, dry, or critical, the criteria for instream flow requirements would be the same as the existing operating criteria in the National Marine Fisheries Service’s 2000 Biological Opinion. In years when the runoff into the Cachuma Reservoir is determined to be wet or above normal, the instream flow conditions would be greater.

Reclamation will be required to study the impact of the increased flows on steelhead. The order reserves the State Water Board’s continuing authority to flexibly manage the increased flows with input from the South Coast Area water users and state and federal fishery agencies.

**Additional Resources**

More information on the this Project can be found on the [State Water Board Cachuma webpage](http://www.waterboards.ca.gov/).
SUMMARY OF ADOPTED STATE WATER RIGHTS ORDER

Water Commission – November 21, 2019
Introduction

• State Water Board Water Rights Order of Sep 17, 2019
  - 18+ year permitting effort involving USBR, Cachuma Users, numerous agencies, experts, general public
  - multiple evidentiary hearings, draft permits and CEQA docs
• USBR petition for reconsideration filed Oct. 16, 2019
  - Objections to two items
    • Term 24(a) relating to feasibility study of fish passage around Bradbury Dam
    • Reliance on 2016 Draft BO and 2013 Biological Assessment as source information.
• Board has until December 16 to act on the petition
Background – 2000 BiOp

• Cachuma Reservoir operational basics:
  - USBR has been operating the reservoir and Bradbury Dam under the 2000 BiOp
  - Dam releases determined by the 2000 BiOp “flow regime” plus calls for water rights releases to the lower river (downstream senior water rights of SYRWCD, Lompoc)
  - 2000 BiOp flow regime based on amount of water stored in reservoir and whether reservoir is spilling.
  - Water released to maintain “mainstem rearing flows” at two points downstream (Hwy 154 & Alisal Rd. bridge).
  - Referred to as Option 3C
New Order – Major Changes

• New Order ties releases from Bradbury Dam to WY class
  - Below Norm, Dry, Crit. Dry: same as 2000 BiOp regime
  - Above Norm, Wet: additional water volume @ 154, Alisal bridge
  - Releases in Above Norm water years must be sufficient and sustained to meet target flows at two measuring points to support steelhead during its life cycle stages (spawning, incubation, rearing, emigration, residency)
  - Attempts to recognize downstream water rights per settlement agreement, but the flow regimes are a bit different.
The New Order – Option 5C

• Basis of new Order flow regime
  - 70+ yr. hydrologic record divided into 5 Water Year classes: Wet, Above Normal, Below Normal, Dry, Critically Dry
  - Classes based on inflow into reservoir during WY (Oct – Sep)

<table>
<thead>
<tr>
<th>Water Year Classification</th>
<th>Cachuma Reservoir Inflow (acre-feet)</th>
</tr>
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<tbody>
<tr>
<td>Wet</td>
<td>&gt; 117,842</td>
</tr>
<tr>
<td>Above Normal</td>
<td>≤ 117,842 &gt; 33,707</td>
</tr>
<tr>
<td>Below Normal</td>
<td>≤ 33,707 &gt; 15,366</td>
</tr>
<tr>
<td>Dry</td>
<td>≤ 15,366 &gt; 4,550</td>
</tr>
<tr>
<td>Critical</td>
<td>≤ 4,550</td>
</tr>
</tbody>
</table>

- Cachuma storage currently ~143,000 AF (Oct 2019 avg.)
# Flow changes under the new order

## Flow requirements for Above Normal and Wet years

<table>
<thead>
<tr>
<th>Alisal and San Lucas Bridge Requirement</th>
<th>Period of Release</th>
<th>Purpose of Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>48 cfs</td>
<td>02/15 to 04/14</td>
<td>Spawning</td>
</tr>
<tr>
<td>20 cfs</td>
<td>04/15 to 06/01</td>
<td>Incubation and Rearing</td>
</tr>
<tr>
<td>25 cfs</td>
<td>06/02 to 06/09</td>
<td>Emigration</td>
</tr>
</tbody>
</table>

Ramp to 10 cfs by 06/30

| 10 cfs                                 | 06/30 to 10/01    | Rearing and Resident Fish Maintenance |
| 5 cfs                                  | 10/01 to 02/15    | Resident Fish                     |
Water Supply Impacts

• Estimated *average* annual shortfall to Cachuma Members is less than 200 AFY

• Most significant supply impacts in *Dry* or *Critically Dry* years following *Above Normal* or *Wet*
Summary

• New Board Order requires higher flows during period of greater rainfall to improve rearing flows at two locations
  - Water supply impacts will be largest in Dry and Critical Dry year(s) following Above Normal water year
  - Purveyors must make up shortfalls with other sources
    - E.g. the City’s desalination plant is identified as a supply source
• Focus shifts to new BiOp
• CCRB acts as the representative of Santa Barbara, Goleta WD, and Montecito WD to protect Cachuma water rights
Questions?