

STAFF REPORT

TO: HONORABLE MAYOR AND CITY COUNCIL
FROM: GREG RAY, PUBLIC WORKS DIRECTOR/CITY ENGINEER 
SUBJECT: DRAFT LOW RESERVOIR RESPONSE PLAN FOR LOPEZ RESERVOIR

BACKGROUND

The City Council will consider a draft Low Reservoir Response Plan for operation of Lopez Reservoir during a declared drought emergency, provide recommended changes to the draft Plan and provide direction to the City's Zone 3 Advisory Committee and Technical Advisory Committee representatives.

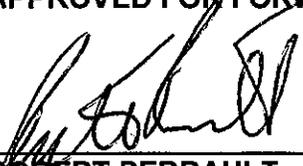
The County of San Luis Obispo Zone 3 Flood Control and Water Conservation District has been developing a Habitat Conservation Plan for over ten years in response to a lawsuit challenging operation of the Lopez Reservoir. The Habitat Conservation Plan (HCP) would ultimately identify the quantity and timing of water released downstream into Arroyo Grande Creek to provide habitat for the endangered Steelhead Trout. The draft HCP recognizes that under extreme drought conditions rainfall and water entering Lopez Reservoir from tributary streams is significantly reduced or even nonexistent and that, during times of reduced inflow, downstream flows should approximate inflow to the reservoir. The HCP identifies a Low Reservoir Response Plan (LRRP) that would be triggered when reservoir storage reaches 20,000 Acre-Feet (AF) but does not provide operational details.

The Zone 3 Technical Advisory Committee (TAC) and County Zone 3 staff have recently determined that under existing conditions the reservoir could reach the 20,000 AF threshold as early as December. Together the two groups have been working to develop the draft LRRP. The draft LRRP (see Attachment 1) is being presented for Council review, input and direction to the City's Zone 3 representatives.

DISCUSSION

The draft LRRP provides a framework for modifying operation of the Lopez Reservoir during periods of extended drought. The goal of the LRRP is to extend the period during which water is available for delivery up to 3 years. In developing the draft, the Zone 3 TAC reviewed weather and reservoir data collected since 1969. The TAC worked closely with County Zone 3 staff to tailor the draft such that all interests, including those of the agricultural community and environmental concerns, were considered. The following paragraphs provide general

APPROVED FOR FORWARDING


ROBERT PERRAULT
CITY MANAGER

Please Review for the Possibility of a Potential Conflict of Interest:

- | | |
|---|-----------------------------------|
| <input type="checkbox"/> None Identified by Staff | <input type="checkbox"/> Bright |
| <input type="checkbox"/> Peterson | <input type="checkbox"/> Marshall |
| <input checked="" type="checkbox"/> Lee | <input type="checkbox"/> Nicolls |

information about how the LRRP was developed and how it affects operation of the Lopez Reservoir. More detail is provided in the draft LRRP itself (see Attachment 1).

Rainfall and Inflow Data. The Draft LRRP uses data on rainfall and reservoir inflow selected from four different time periods to develop drought scenarios A thru D. These scenarios were then input into a model for use in determining the effect of reduced downstream releases and municipal deliveries on reservoir storage.

Downstream Releases. By contract the County is responsible to release up to 4,200 AF of water downstream into Arroyo Grande Creek to meet the needs of farmers and environmental concerns. Historically the downstream release rate has been modified and carefully monitored to provide the minimum amount necessary to satisfy these demands. The draft HCP includes an interim downstream release strategy that was developed to provide necessary flows for Steelhead Trout habitat. This interim strategy has been conceptually approved by National Marine Fisheries and has been the operational strategy used by Zone 3 staff for several years. This is considered to be the least restrictive downstream release strategy and the draft LRRP identifies this as the initial prescribed reduction strategy to be used when the LRRP is first initiated. At 20,000 and 15,000 AF of reservoir storage downstream releases would be 3,800 AF per year (AFY). Then at 10,000; 5,000; and 4,000 AF, downstream releases would be 1,026,300 and 0 AFY respectively. Growers who rely on water from Arroyo Grande Creek have indicated that they would prefer this strategy versus a gradual reduction strategy. In order to extend Lopez supplies during more severe periods of drought, the draft LRRP considers more restrictive release strategies with the most restrictive being to match downstream releases to reservoir inflow. This would essentially mimic flows in Arroyo Grande Creek during a drought with no dam in place.

Municipal Deliveries. Once reservoir storage levels reach 20,000 AF, municipal deliveries would be modified based on four storage level thresholds. At 20,000 AF Zone 3 agencies would have their full allocations available but there would be no new allocations of Surplus Water from unreleased downstream releases and an extension of time that agencies can take delivery of existing unused water throughout the duration that the Drought Emergency is in effect. At 15,000; 10,000; 5,000 and 4,000 AF municipal deliveries would be reduced by 10%, 20%, 35% and 100% respectively. This is the initial prescribed reduction strategy assuming rainfall and reservoir inflow conditions are similar to those of scenarios A and D. Note that a 35% reduction in deliveries provides approximately 55 gallons per capita per day to all of the Zone 3 agencies. This would allow for minimum household water use and would require no delivery of water from municipal wells. At 4,000 AF it is assumed the reservoir could no longer deliver water for any reason.

Enactment and Adaptive Management.

In order to extend reservoir storage for up to 3 years, the Zone 3 TAC and County Zone 3 staff have determined that reductions in downstream releases and water delivered to the Zone 3 agencies would be necessary. The initial prescribed reduction strategy would be implemented once reservoir storage reaches 20,000 AF and other prescribed actions are complete.

To provide County Zone 3 staff, the Zone 3 agencies and agricultural stakeholders with sufficient flexibility to adapt to changing drought conditions and to address the environmental requirements, the draft LRRP includes an adaptive management component that allows the

initial prescribed actions to be modified and adapted to the specific drought conditions. The steps for modifying the initial prescribed actions are outlined below.

1. The TAC will review several factors including the time of year that the LRRP is enacted, when the reservoir level drops to lower triggers, and hydrologic conditions including but not limited to: predicted climatic conditions; anticipated reservoir inflow; and the availability of the Zone 3 agencies' other water supplies.
2. If determined to be necessary, the TAC will make a recommendation to the Zone 3 Advisory Committee on a strategy for modifying the initial prescribed actions, hereafter referred to as an Adaptive Management Strategy.
3. Upon review of the TAC's recommendation, the Zone 3 Advisory Committee will vote to approve, deny, modify or continue consideration of the Adaptive Management Strategy for a period not to exceed 30 days, at which time the Advisory Committee will act to approve, deny or modify. If approved by the Advisory Committee, the Adaptive Management Strategy will be implemented 14 days following its approval. If the Adaptive Management Strategy is approved, denied, or modified by the Advisory Committee, Advisory Committee members, Zone 3 member agencies, and other third parties in interest may appeal to the County Board of Supervisors within 14 days. If no appeal is made to the Board of Supervisors, the Advisory Committee action will be final.
4. If appealed to the Board of Supervisors, Board action shall be final.

Schedule. The schedule of adoption of the draft LRRP was developed based on a prediction that the reservoir levels could reach the 20,000 AF threshold by the end of this year. Staff is recommending that the Council comment and provide direction to the City's Zone 3 Advisory Committee Representative at the October 6 City Council Meeting. The Advisory Committee is scheduled to meet in early November to review the final draft and provide a recommendation for approval. Staff is recommending the item be returned to City Council on November 17th with the final draft, the recommendation from the Advisory Committee, a resolution for adoption of the LRRP and a CEQA Notice of Exemption. The Board of Supervisors is scheduled to consider approval of the LRRP on December 2nd.

Other Considerations. The draft LRRP identifies operational parameters that are not specifically identified in the Zone 3 Member Agency Contracts. Staff, the Zone 3 TAC, the Zone 3 Advisory Committee and County Zone 3 staff have all indicated that the Agency Contracts should be modified to include the implementation of the LRRP. Also, the final HCP may include downstream release requirements that would require modification of the LRRP in the future. Both of these actions would be presented to Council for review and approval at a future date.

ALTERNATIVES

The Council has the following alternatives to consider:

1. Review the draft Low Reservoir Response Plan for operation of Lopez Reservoir during a declared drought emergency, provide recommended changes to the draft Plan, provide direction to the City's Zone 3 Advisory Committee and Technical Advisory Committee representatives and direct staff to return to City Council on November 17th

with the final draft, the recommendation from the Advisory Committee, a resolution for adoption of the LRRP and a CEQA Notice of Exemption.; or

2. Provide staff with additional direction.

RECOMMENDATION

It is recommended that the Council review the draft Low Reservoir Response Plan for operation of Lopez Reservoir during a declared drought emergency, provide recommended changes to the draft Plan and provide direction to the City's Zone 3 Advisory Committee and Technical Advisory Committee representatives

FISCAL IMPACT

There is no fiscal impact associated with the recommended action.

PUBLIC NOTIFICATION

The agenda was posted in accordance with the Brown Act.

ATTACHMENTS

1. Draft Low Reservoir Response Plan