

ITEM: 23

SUBJECT: Clear Lake Nutrient TMDL Control Program 5-year Update

BOARD ACTION: This is an informational item.

BACKGROUND: Clear Lake is located in the Coast Ranges, about 80 miles north of San Francisco, in Lake County. Nuisance algal blooms have been observed in Clear Lake throughout the 20th century. Existing study results and data analyses suggest that controlling phosphorus is the best approach for addressing the nuisance blooms. In June 2006, the Central Valley Water Board adopted Resolution No. R5-2006-0060, *Amending the Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin Rivers Basins for the Control of Nutrients in Clear Lake*. US EPA approved the Total Maximum Daily Load (TMDL) within the Basin Plan amendment in September 2007.

Numerous actions have been implemented in the 5 years since the program was approved to reduce the input of sediment and nutrients into the Lake. However, a reduction in the nuisance algae blooms has not been realized.

The Basin Plan, as amended, directs the Central Valley Water Board staff to review the progress toward meeting the load and waste load allocations for phosphorus in Clear Lake by five years after TMDL approval. The Central Valley Water Board will consider newly available information and determine whether the phosphorus load and waste load allocations should continue to be required or if some other control strategy or approach is more appropriate.

Public comments on the Central Valley Water Board Staff Report for this item were received from the Essential Public Information Center, the Big Valley Rancheria Band of Pomo Indians, and the Lake County Department of Water Resources. Staff responses to all submitted written comments are provided in the Response to Comments document within this agenda package.

ISSUES:

1. Appropriateness of the Clear Lake Nutrient TMDL Control Program. There may be other factors, in addition to phosphorus, controlling the algae blooms.
2. The algae blooms have increased since adoption of the Clear Lake Nutrient TMDL Control Program.
3. Responsible parties have not quantified their loads to be able to determine their load reductions once management measures have been implemented.

4. Lake County is considered a disadvantaged community, with 73.3% of the population earning a Mean Household Income of less than \$37,994 (80% of the statewide average).

Although the algal blooms have increased, the Clear Lake Nutrient Control Program continues to be the appropriate approach to reduce the nuisance blooms. The control program will take time to see results. First, external phosphorus loads must decrease, which will decrease internal phosphorus concentrations. Then, phosphorus stored in lake bed sediment will provide an internal load of phosphorus that will take time to reach equilibrium. After these factors occur, a decrease of algae blooms is expected. Staff supports continued phosphorus load reduction through the currently mandated control program.

Mgmt. Review_____

Legal Review__PEP_____

4/5 October 2012 Board Meeting
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670