

## Frequently Asked Questions Regarding the Clear Lake Nutrient TMDL Control Program

What is a Total Maximum Daily Load (TMDL)?

A TMDL is a control program designed to improve water quality conditions and includes several elements.

- A source analysis that identifies the sources of the pollutant that are causing or contributing to the impairment.
- Load allocations for the different sources (point and nonpoint sources). These load allocations incorporate load reductions calculated to ensure the impairment is addressed.
- An implementation plan that identifies actions necessary to meet the allocations.
- Compliance time schedules, which can include implementation milestones.

TMDLs also generally require that programs and agencies work collaboratively to achieve the desired level of pollution control.

What is the difference between point and nonpoint sources of pollution?

- Point sources release pollutants from discrete channels, such as a discharge pipe from a factory and are defined in statute.
- Nonpoint sources release pollutants from landscape scale features and include such features as agricultural field runoff and dust and air pollution from human activities (i.e., everything that is not covered under the point source definition).

How long ago was the Clear Lake Nutrient Control Program established?

What allocations does the program include?

The Clear Lake Nutrient TMDL Control Program was adopted in 2006. The load allocations were based on modeling studies that predicted a 40% reduction in average phosphorus loading would significantly reduce the frequency of algae blooms. In addition, existing study results and data analyses suggest that controlling phosphorus is the best approach for addressing the nuisance blooms. This reduction equates to an annual allowable phosphorus loading of about 87,000 kilograms of phosphorus per year.

The TMDL includes allocations for point sources and nonpoint sources of phosphorus. Point sources in the Clear Lake watershed include permitted storm water discharges. The allocations for permitted storm water sources are 2,000 kg/year for Lake County storm water

permittees and 100 kg/year for Caltrans. The allocation for nonpoint sources includes a combined allocation of 85,000 kg/year for the US Bureau of Land Management, the US Forest Service, Lake County and irrigated agriculture.

What is the role of the Central Valley Water Board?

The Central Valley Water Board uses its regulatory authority through issuance of permits to limit sediment and other phosphorous discharges to Clear Lake. The Central Valley Water Board also reviews the progress of both point and nonpoint sources toward meeting the reduction of phosphorus to Clear Lake in compliance with the TMDL. New permits adopted and enforced since the 2006 TMDL plan include:

- 2012 Statewide Onsite Wastewater Treatment Systems Policy (Septic Policy)
- 2013 Statewide General Permit for Small Municipal Storm Water System Discharges
- 2014 Sacramento Valley Irrigated Lands Regulatory Program General Order
- 2015 Central Valley Permit for Discharges from Medicinal Cannabis Cultivation Activities
- 2017 State Water Board Policy and Permit for Cannabis Cultivation

Upcoming permits include:

- State Water Board Small Municipal Storm Water General Permit TMDL Amendment
- Nonpoint Source Activities on Federal Lands

Why did the TMDL Plan not meet its 2017 goal of a 40 percent reduction in phosphorus?

A big part of the compliance effort revolved around one project, the Middle Creek Restoration Project, which is expected to reduce phosphorus pollution by 28 percent. However, this effort fell behind schedule. In addition, at the time the TMDL was developed, lake conditions had been improving. Immediately thereafter, a five-year statewide drought had a devastating effect on the lake due to an increase in HAB blooms. The heavy precipitation events that ended the drought in the area also caused an increase when phosphorus-laden sediment eroded into the watershed during storm events. Although the TMDL plan did not meet the 2017 goal, collaborative efforts continue in the Clear Lake watershed to improve water quality in the Lake.

What is the status of the Middle Creek Restoration Project?

The Middle Creek Flood Damage Reduction and Ecosystem Restoration Project (Middle Creek Restoration Project) was identified by the TMDL and several other studies as a critical component of overall efforts to reduce phosphorus loading to the lake because it is predicted to reduce loading to the Upper Arm of Clear Lake by almost a third. The project will restore historic wetland and floodplain areas, help capture phosphorus-laden sediment, reduce flood risks, and enhance water quality. All the land necessary for the project must be acquired before restoration efforts can begin.

Recently, Assembly Member Cecilia Aguiar-Curry, in coordination with the California Natural Resources Agency (CNRA) and Department of Water Resources (DWR), secured \$15 million in funds to aid the Middle Creek Restoration Project.

What other changes can be expected for Clear Lake that will address cyanobacteria and harmful algae blooms?

The Central Valley Water Board issued information orders (13267 Orders) to all responsible parties in 2016. Staff is currently evaluating the status of the TMDL to determine next steps, which may include requests for additional information, revisions to the TMDL, or other actions deemed appropriate. In addition, Governor Brown signed [AB 707](#), establishing a *Blue Ribbon Committee for the Rehabilitation of Clear Lake*. Additional small-scale watershed restoration projects are being identified since the Middle Creek Restoration Project is still acquiring funding.

What is the role of the Blue Ribbon Committee?

The Blue Ribbon Committee will meet quarterly, beginning in 2018, and is tasked with providing an annual report on activities to the Governor and appropriate legislative committees. The annual report will identify barriers and contributing factors to poor water quality, strategies to improve water, and threats to wildlife. It will provide recommendations, cost estimates, and a multi-agency coordination plan to secure funding.

What would an extension of the TMDL compliance date mean for the program and responsible parties?

If the Central Valley Water Board extends the compliance deadline, milestones may be added to the phosphorus control program for the parties that are out of compliance. The Central Valley Water Board will seek input on new milestones to track improvements and management practices. For example, milestones could include more frequent updates to review implementation efforts. Dischargers would be required to continue to implement management practices to reduce phosphorus inputs and have programs that identify and address erosion issues.

What improvements can be expected if an extension is not granted?

Regardless of whether the compliance date is extended, the Central Valley Water Board will continue to use our regulatory authority to protect water quality at Clear Lake. This includes implementing and updating our existing permits for point and nonpoint source pollution and continuing to develop new permits that will address nutrient discharges to Clear Lake.

For example, the Central Valley Water Board is developing a regionwide permit for nonpoint source activities on federal lands. This permit will provide additional regulatory tools for addressing nonpoint source nutrient discharges in the Clear Lake watershed.

What are other current causes of delay?

Current delays stem from various reasons, including administrative reasons, such as a lack of personnel time as certain staff positions that are crucial to the project are being filled. However, significant delays are still primarily caused by funding shortages.

Other Clear Lake Resources

- Receive regular TMDL implementation activity updates by signing up for the Central Valley Water Board email subscription list by selecting *Clear Lake Nutrient TMDL*:  
[www.waterboards.ca.gov/resources/email\\_subscriptions/reg5\\_subscribe.shtml](http://www.waterboards.ca.gov/resources/email_subscriptions/reg5_subscribe.shtml)
- A user-friendly webpage was created to access the latest TMDL information:  
[https://www.waterboards.ca.gov/centralvalley/water\\_issues/tmdl/central\\_valley\\_projects/clear\\_lake\\_nutrients/](https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/clear_lake_nutrients/)
- Find monitoring data from the California Department of Water Resources Water Data Library:  
[www.water.ca.gov/waterdatalibrary/](http://www.water.ca.gov/waterdatalibrary/)

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