April 3, 2023

Courtney Taylor

Acting Clerk to the Board

State Water Resources Control Board

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RE: Comment Letter - 2024 Integrated Report

Dear Ms. Taylor:

The Lake Elsinore and Canyon Lake Nutrient TMDL Task Force (TMDL Task Force) appreciates the opportunity to comment on the 2024 Draft Integrated Report. The TMDL Task Force is a stakeholder effort that is administered by the Lake Elsinore and San Jacinto Watersheds Authority (LESJWA). The TMDL Task Force and its member agencies work cooperatively to implement the Lake Elsinore and Canyon Lake Nutrient TMDL provisions contained in the Water Quality Control Plan for the Santa Ana Region (Basin Plan) – including implementing a comprehensive monitoring program to monitor the San Jacinto Watershed and both lakes. Accordingly, the TMDL Task Force is knowledgeable and familiar with data collected in the watershed and in the lakes. Based on our direct understanding of the data, the watershed and the lakes, we provide the following comments on draft proposed decisions in the 2024 Draft Integrated Report.

1. **Lake Elsinore DDT & PCB Listings**

The TMDL Task Force does not agree with the proposed recommendation to maintain impairment listings for Lake Elsinore for DDT and PCBs. The data relied on to maintain the listing for DDT in Lake Elsinore are based on elevated fish tissue concentrations observed from a State Water Resources Control Board (State Water Board) 2007 study, and for PCBs, this 2007 study and a study going back to 1994. These older studies are not reflective of current fish tissue data. Moreover, and as discussed below, the fish tissue concentrations from the 2007 study shows a dramatic decline as compared to previous data from the 1980s, indicating that there is a trend in the decline of DDT and PCBs in fish from Lake Elsinore. This, and other evidence, support a decision of delisting for DDT and PCBs in Lake Elsinore.

In 2019, LESJWA, on behalf of the TMDL Task Force, commissioned a study to evaluate how fishery management in Lake Elsinore could be used to improve water quality under a pending revision to the 2004 TMDL and to evaluate trends in PCB and DDT fish tissue concentrations over time. Among other things, the 2019 study included collection and tissue analysis of various fish species. The fish tissue results from the 2019 study, as well as the Quality Assurance Project Plan, were submitted to CEDEN in response to the 2024 Integrated Report Data Solicitation Notice. In summary, 10 composite results from collected fish tissue are well below the OEHHA Fish Contaminant Goals of 15 ng/wet g and 2.6 ng/wet g for Total DDT and Total PCBs, respectively. For Total DDT, the results ranged from 0.24 ng/wet g to 3.20 ng/wet g; for Total PCBs, the results were 6 composite samples of non-detect (ND) and the highest result was 1.53 ng/wet g.

The State Water Board’s Water Quality Control Policy for Developing California’s Clean Water Act Section 303(d) List (Listing Policy) provides the State’s methodology for removing waters from the section 303(d) list. Under the Listing Policy, “[a]ny interested party may request an existing listing be reassessed under the delisting factors of this Policy.” (Listing Policy, page 11.) The Listing Policy sets forth various conditions for delisting based on pollutant type. For the bioaccumulation of pollutants in aquatic life tissue, the binomial distribution condition requires that there be a sample size of at least 28 samples and no more than 2 exceedances based on a pollutant specific evaluation guideline. A sample size of 28 for fish tissue is exceedingly large and difficult to meet.

Recognizing that delisting may not always be possible through the binomial distribution condition, the Listing Policy also includes an alternative condition through consideration of site-specific weight of evidence. Section 4.11 of the Listing Policy states as follows: “When all other Delisting Factors do not result in the delisting of a water segment but information indicates attainment of standards, a water segment shall be evaluated to determine whether the weight of evidence demonstrates that a water quality standard is attained. If the weight of evidence indicates attainment, the water segment shall be removed from the section 303(d) list.” (Listing Policy, page 13.) The weight of evidence supports delisting of Lake Elsinore for Total DDT and Total PCBs.

The multiple lines of evidence that support delisting of Lake Elsinore for these contaminants include all of the following:

* The pollutants of concern are legacy pollutants that are no longer being added to the environment and existing levels of these pollutants continue to degrade overtime.
* Recent data clearly shows that bioaccumulation of DDT and PCBs in fish tissue is well below applicable OEHHA fish contaminant goals.
* When the recent data is combined with historical data from the 1980s and 2007, the combined data set provides significant evidence that these legacy pollutants have degraded significantly over time to the point that they are no longer bioaccumulating at levels that are of concern in fish in Lake Elsinore.

Accordingly, the TMDL Task Force hereby requests that the DDT and PCBs listings for Lake Elsinore be removed as part of the 2024 Integrated Report process. The TMDL Task Force’s request is supported by recent fish tissue analysis data reported to CEDEN on behalf of the TMDL Task Force as well as other site-specific weight of evidence. In summary, the recent data combined with the other evidence shows that Lake Elsinore is attaining standards as it relates to impairment listings based on Total DDT and Total PCBs. Accordingly, pursuant to section 4.11 of the Listing Policy, Lake Elsinore should be delisted for these constituents.

1. **Lake Elsinore Total Dissolved Solids**

The Draft 2024 Integrated Report proposes to list Lake Elsinore for Total Dissolved Solids (TDS) (Decision ID 132527). For Lake Elsinore, the water quality objective at issue is a site-specific objective of 2,000 mg/L, which was based on historical surface water quality at the time that the Basin Plan was originally adopted in the mid-1970s. Importantly, the Santa Ana Region’s Water Quality Control Plan (Basin Plan), includes a footnote to this site-specific objective that denotes the fact that the volume and quality of water in Lake Elsinore are highly variable. This is because Lake Elsinore is a very large (i.e., over 3,000 acres), shallow, terminus lake that has historically gone dry in periods of prolonged drought conditions. The large, shallow nature of Lake Elsinore means that salts concentrate over time due to evaporation and limited freshwater inputs into the Lake.

Historical monitoring data indicates that salinity levels would rapidly deteriorate when Lake elevations fell below 1240’ msl and that it was near impossible for the Lake to meet the 2,000 mg/L TDS objective when the Lake was half full or less. To maintain Lake levels and a consistent quality of water, the Lake was permanently modified in 1996 when a levee was built that decreased Lake size from 6,000 acres to 3,000 acres. Then, based on an agreement between the City of Lake Elsinore and Elsinore Valley Municipal Water District (EVMWD), EVMWD agreed to discharge up to 7.5 million gallons per day (MGD) of highly treated recycled water to maintain Lake levels. The combined actions have kept Lake Elsinore from drying up completely in mid-2015 and have offset evaporation that would have resulted in hyper-saline conditions.

In other words, the natural reference condition for Lake Elsinore is one whereby the Lake would become hyper-saline during prolonged drought conditions and would improve during wet periods. This historical knowledge is well documented and acknowledged in the Basin Plan with the footnote that notes water quality is highly variable in Lake Elsinore.

Considering the natural variability of TDS in Lake Elsinore, the LECL Task Force disagrees with the proposed decision to list Lake Elsinore for TDS. First, and as noted, the site-specific objective of 2,000 mg/L was based on historical water quality at the time that the Basin Plan was adopted and was not associated with the WARM beneficial use. The 2024 Draft Integrated Report falsely associates the TDS objective with the WARM beneficial use (LOEs 239961, 239964, 239962, 239963, 239960, 239987). Second, although the Basin Plan includes the site-specific objective for TDS, the Basin Plan also notes that water quality is highly variable. This footnote, which is part of Table 4-1 in the Basin Plan, is further evidence that the site-specific objective for TDS for this Lake is not associated with protecting any specific beneficial use. It also suggests that the objective was not intended to be used for determining impairment because of the Lake’s natural variability. Further, there is no evidence available that suggests that TDS levels in Lake Elsinore are impairing any beneficial use.

In light of Lake Elsinore’s uniqueness and historical variability for TDS, there is sufficient evidence for the State Water Board to rely on to decline listing Lake Elsinore as an impaired waterbody.

1. **San Jacinto River Reach 1**

For the 2024 Draft Integrated Report, the State Water Board has identified the 2018 Recommended Aquatic Life Criteria for Aluminum in Freshwater (2018 Aluminum Criteria) as the appropriate criteria. However, the State Water Board’s use of the 2018 Aluminum Criteria appears to ignore critical qualifying statements from U.S. EPA that are directly applicable to the state’s listing process. Most significantly, it is well understood that total recoverable analytical methods for aluminum likely overestimate the biological available fraction of aluminum – which is the fraction of aluminum that is of concern to aquatic life. (See, e.g., U.S. EPA, Draft Technical Support Document: Implementing the 2018 Recommended Aquatic Life Water Quality Criteria for Aluminum (Draft Aluminum TSD), EPA-800-D-21-001, November 2021, p. 22, [“Over the last three decades, the scientific consensus has been that the total recoverable method for aluminum potentially overestimates the biologically available fraction and that a method that better addresses dissolved aluminum and aluminum bound to particulate matter would be useful and more accurately reflect toxicity under natural stream conditions.”].)

Because of this concern, U.S. EPA recognizes that analytical methods that measure bioavailable aluminum would provide more accurate information with respect to the toxic fraction of aluminum when measuring aluminum in ambient receiving waters and that analytical methods promulgated under 40 CFR Part 136 may not be appropriate for impaired waterbody listing purposes. (See Draft Aluminum TSD, pp. 22-23.) Specifically, U.S. EPA states the following with respect to using total recoverable aluminum samples for 303(d) listing purposes:

EPA’s existing regulations applicable to implementation of CWA Section 303 programs, which include assessment and listing of waters, do not require the use of analytical test methods promulgated at 40 CFR Part 136, nor do the regulations apply to the determination of a need for a WQBEL…. A state or authorized tribe is not required to use all available data and information to make listing decisions, including total recoverable data, where it can provide a technical, science-based rationale for the exclusion of such data and information. 40 CFR 130.7(b)(6)(iii). For example, a state or authorized tribe may be able to demonstrate that total recoverable aluminum samples are not representative of water quality conditions because non-toxic forms of aluminum are leading to an exceedance of the criteria. In such cases, the state or authorized tribe may decline to rely on total recoverable data, or may assign greater weight to bioavailable data if it is more representative of water quality for listing purposes.

(Draft Aluminum TSD, p. 23.)

Taking to heart EPA’s comments in the Draft Aluminum TSD and in conjunction with 40 CFR 130.7(b)(6)(iii), the State Water Board should reevaluate its proposed listing of aluminum for San Jacinto River Reach 1. Specifically, the data being relied on to support the listing is in fact total recoverable aluminum data that is magnitudes higher than dissolved data for the same samples. The dissolved data for the same samples are well below the 2018 Aluminum Criteria. (cite to appendix of data.)

More specifically, Decision ID 133722 states that there are 6 lines of evidence and that two samples exceed the evaluation guideline that is the 2018 Aluminum Criteria. The two samples that exceed the criteria are in fact the total fraction of aluminum and not the dissolved fraction. The dissolved fraction for both samples is well below the criteria. For the 2013 sample (LOE 307254), the total aluminum fraction was 1150 ug/L as compared to a dissolved fraction of 6 ug/L. For the 2017 sample, (LOE 307270), the total aluminum fraction was 1900 ug/L as compared to a non-detect dissolved fraction.

Further, the sample taken on February 20, 2017, should be excluded because it was collected after significant storm events and is a sample of stormwater coming over the Canyon Lake spillway. Listing Policy, section 6.1.5.3., states as follows: “Samples should be representative of the critical timing that the pollutant is expected to impact the water body. Samples used in the assessment must be temporally independent. If the majority of samples were collected on a single day or during a single short-term natural event (e.g., a storm, flood, or wildfire), the data shall not be used as the primary data set supporting the listing decision.” (Listing Policy, p. 23.) It is well documented that the 2017 sample was taken at the Canyon Lake Spillway, and that the date of the sample followed significant storm events. Thus, the total recoverable fraction represents significant sediment in the sample, and aluminum was not bioavailable.

With the exclusion of the 2017 sample, there remains only one exceedance of the total recoverable fraction, which is the 2013 sample. A single exceedance is not sufficient to support listing on the State’s 303(d) list. (Listing Policy, p. 9.) Thus, even if the State Water Board does not exclude the 2013 sample, it alone does not support a finding of impairment.

Accordingly, the evidence in the record indicates that there is no threat of impairment of the intermittent beneficial uses and that San Jacinto River Reach 1 should not be listed for aluminum.

Sincerely,

LE/CL TMDL Task Force Chair

Lake Elsinore & San Jacinto Watersheds Authority Administrator

cc: Barbara Barry, Santa Ana Water Board