CONSIDERATION OF A RESOLUTION APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE LOS ANGELES REGION (BASIN PLAN) TO INCORPORATE A TOTAL MAXIMUM DAILY LOAD (TMDL) FOR TRASH IN MACHADO LAKE

DISCUSSION

As part of California’s 1996, 1998, and 2002 303(d) list submittals, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) identified Machado Lake in the Dominguez Channel Watershed as being impaired by trash. A consent decree between the U. S. Environmental Protection Agency (USEPA), the Santa Monica Baykeeper, and Heal the Bay, Inc. (represented by the Natural Resources Defense Council) was signed on March 22, 1999. This consent decree requires that all TMDLs for the Los Angeles Region be completed within 13 years of the date of the decree. The consent decree also prescribed schedules for certain TMDLs. This TMDL for Machado Lake (aka Harbor Lake) fulfills Analytical Unit No. 81 of the consent decree.

Trash in water bodies may endanger aquatic organisms and impair the existing uses. The beneficial uses most affected by trash loadings into Machado Lake include water contact recreation (REC-1); non-contact water recreation (REC-2); warm freshwater habitat (WARM); wildlife habitat (WILD); rare, threatened, or endangered species (RARE); and wetland habitat (WET).

The amendment (Attachment) establishes the numeric target to be used in calculating wasteload allocations for point source discharges and load allocations for nonpoint source discharges. The numeric target of “zero” trash was derived based on the narrative water quality objectives of *Floating Material*, and *Solid, Suspended, or Settleable Materials*, specified in the Los Angeles Water Board Basin Plan (§ 3-9; 3-16). The Los Angeles Water Board has defined zero trash as (1) no trash immediately following each assessment and collection event consistent with an established Minimum Frequency of Assessment and Collection Program (MFAC), or (2) installing full capture system on conveyances that discharge to Machado Lake through a phased implementation schedule. The wasteload allocations and load allocations are calculated according to baselines determined by using a reference approach or by results of a Trash Monitoring and Reporting Plan (TMRP) approved by the Los Angeles Water Board’s Executive Officer (EO). To comply with wasteload allocations, a responsible jurisdiction may install an adequately sized and maintained full capture system that meets the minimum criteria outlined in the amendment; or implement a program of minimum frequency of assessment and collection in conjunction with best management practices (MFAC/BMPs) upon EO approval. Nonpoint source dischargers may achieve compliance with load allocations by implementing the program of MFAC/BMPs. The proposed TMDL establishes an eight-year implementation schedule when responsible jurisdictions choose to install full capture systems. When
responsible jurisdictions implement a MFAC/BMPs program (for point or nonpoint sources or both), the water quality objective of zero trash must be attained in five-years.

The TMDL includes monitoring based on a plan developed by responsible jurisdictions and approved by the EO. Minimum requirements for trash monitoring include collection and quantification of trash from the surfaces and shoreline of Machado Lake. The monitoring plan shall provide details of the frequency, location, and reporting of trash monitoring for each water body. Responsible jurisdictions shall propose a metric (e.g., weight, volume, pieces of trash) to measure the amount of trash in the water body and surrounding area over time.

During review of the Basin Plan amendment (Attachment), Los Angeles Water Board staff found that it was necessary to make several minor, non-substantive corrections to the language for clarity and consistency. Los Angeles Water Board Resolution No. R4-2007-006, adopted on June 7, 2007, allows its EO to make such corrections to the amendment language, if needed. The EO made the corrections in a memorandum, dated September 21, 2007. The memorandum includes the underline/strikeout version of the Basin Plan amendment showing these non-substantive corrections.

POLICY ISSUE

Should the State Water Resources Control Board (State Water Board) approve the amendment to the Basin Plan to incorporate a TMDL for trash in Machado Lake as adopted under Los Angeles Water Board Resolution No. R4-2007-006?

FISCAL IMPACT

Funding for Los Angeles Water Board and State Water Board staff work associated with or resulting from this action will be addressed with existing and future budgeted resources.

REGIONAL WATER BOARD IMPACT

Yes, approval of this resolution will amend the Basin Plan.

STAFF RECOMMENDATION

That the State Water Board:

1. Approves the amendment to the Basin Plan as adopted under Los Angeles Water Board Resolution No. R4-2007-006.

2. Authorizes the Executive Director or designee to submit the amendment adopted under Los Angeles Water Board Resolution No. R4-2007-006 to the Office of Administrative Law for approval of the regulatory provisions and to USEPA for approval of the TMDL.
WHEREAS:


2. The TMDL for trash in Machado Lake is designed to protect the aquatic life habitat, water contact recreation, and non-contact water recreation beneficial uses of Machado Lake and to achieve the narrative water quality objectives set to protect those uses.

3. The Los Angeles Water Board found that the analysis contained in the Final Project Report, the California Environmental Quality Act (CEQA) “Substitute Document” for the proposed Basin Plan amendment, including the CEQA Checklist, the staff report, and the responses to comments complies with the requirements of the State Water Resources Control Board’s (State Water Board) certified regulatory CEQA process, as set forth in the California Code of Regulations, Title 23, section 3775 et seq.

4. The State Water Board finds that in amending the Basin Plan to establish this TMDL, the Los Angeles Water Board considered the requirements set forth in sections 13240 and 13242, and section 13269 of the California Water Code. The State Water Board also finds that the TMDL is consistent with the requirements of federal Clean Water Act section 303(d).

5. The Los Angeles Water Board found that adoption of this amendment would result in no adverse effect on wildlife, and the amendment would be consistent with the State Antidegradation Policy (State Water Board Resolution No. 68-16) and federal antidegradation requirements.

6. The Los Angeles Water Board established a loading capacity, represented as a numeric target for Machado Lake, at zero trash. Compliance with this trash load will be based on a 5-8 year implementation schedule depending on the method implemented.

7. A Basin Plan amendment does not become effective until approved by the State Water Board and until the regulatory provisions are approved by the Office of Administrative Law (OAL). The TMDL must also be approved by the U.S. Environmental Protection Agency (USEPA).

8. Los Angeles Water Board staff determined that minor, non-substantive changes to the language of the Basin Plan amendment was necessary to correct minor, non-substantive errors, to improve clarity and consistency. The Los Angeles Water Board’s Executive Officer made these minor changes in a memorandum dated September 21, 2007.
THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Approves the amendment to the Basin Plan as adopted under Los Angeles Water Board Resolution No. R4-2007-006.

2. Authorizes the Executive Director or designee to submit the amendment adopted under Los Angeles Water Board Resolution No. R4-2007-006 to OAL for approval of the regulatory provisions and to USEPA for approval of the TMDL.

CERTIFICATION

The undersigned Acting Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on (TBD).

Jeanine Townsend
Acting Clerk to the Board
State of California
California Regional Water Quality Control Board, Los Angeles Region

RESOLUTION NO. R4-2007-006

June 7, 2007

Amendment to the Water Quality Control Plan for the Los Angeles Region to
Incorporate a Total Maximum Daily Load for Trash in
Machado Lake

WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region,
finds that:

1. The Federal Clean Water Act (CWA) requires the California Regional Water Quality
   Control Board, Los Angeles Region (Regional Board) to establish water quality standards
   for each water body within its region. Water quality standards include beneficial uses,
   water quality objectives that are established at levels sufficient to protect those beneficial
   uses, and an antidegradation policy to prevent degrading waters. Water bodies that do
   not meet water quality standards are considered impaired.

2. CWA section 303(d)(1) requires each state to identify the waters within its boundaries
   that do not meet water quality standards. Those waters are placed on the state’s “303(d)
   List” or “Impaired Waters List”. For each listed water, the state is required to establish
   the Total Maximum Daily Load (TMDL) of each pollutant impairing the water quality
   standards in that waterbody. Both the identification of impaired waters and TMDLs
   established for those water must be submitted to U.S. EPA for approval pursuant to CWA
   section 303(d)(2). For all waters that are not identified as impaired, the states are
   nevertheless required to create TMDLs pursuant to CWA section 303(d)(3).

3. A consent decree between the United States Environmental Protection Agency, Heal the
   Bay, Inc. and BayKeeper, Inc. was approved on March 22, 1999, which resolved
   litigation between those parties relating the the pace of TMDL development. The court
   order directs the U.S. EPA to ensure that TMDLs for all 1998-listed impaired waters be
   established within 13 years of the decree. A schedule was established in the consent
   decree for the completion of Trash TMDLs, including completion of a TMDL to reduce
   trash in Machado Lake.

4. The elements of a TMDL are described in 40 CFR 130.2 and 130.7 and section 303(d)
   of the CWA, as well as in U.S. EPA guidance documents (Report No. EPA/440/4-91/001).
   A TMDL is defined as the sum of the individual waste load allocations for point sources,
   load allocations for nonpoint sources and natural background (40 CFR 130.2). TMDLs
   must be set at levels necessary to attain and maintain the applicable narrative and numeric
   water quality standards with seasonal variations and a margin of safety that takes into
   account any lack of knowledge concerning the relationship between effluent limitations
   and water quality (40 CFR 130.7(c)(1)). 40 CFR 130.7 also dictates that TMDLs shall
   take into account critical conditions for stream flow, loading and water quality
   parameters. TMDLs typically include one or more numeric “targets”, i.e., numerical
translations of the existing water quality standards, which represent attainment of those standards, contemplating the TMDL elements described above.

5. Neither TMDLs nor their targets or other components are water quality objectives, and thus their establishment does not implicate Water Code section 13241. Rather, under California Law, TMDLs are programs to implement existing standards (including objectives), and are thus established pursuant to Water Code section 13242. Moreover, they do not create new bases for direct enforcement against dischargers apart from the existing water quality standards they translate. The targets merely establish the bases through which load allocations (LAs) and waste load allocations (WLAs) are calculated. LAs and WLAs are only enforced for a discharger’s own discharges, and then only in the context of the discharger’s relevant National Pollutant Discharge Elimination System (NPDES) permit (or other permit, waiver, or prohibition). NPDES permits must contain effluent limits consistent with the assumptions and requirements of the WLAs (40 C.F.R. 122.44(d)(vii)(B)). The Regional Board will develop NPDES permit requirements through subsequent permit actions that will allow all interested persons, including but not limited to Municipal Separate Stormwater Sewer System permittees, to provide comments on how the WLAs should be translated into permit requirements. LAs will be implemented either through a conditional waiver included in the basin plan amendment or in a subsequent permitting or waiver action.

6. As envisioned by Water Code section 13242, the TMDL contains a “description of surveillance to be undertaken to determine compliance with objectives.” The Monitoring elements of the TMDL recognize that monitoring will be necessary to assess the on-going condition of Machado Lake and to assess the on-going effectiveness of efforts by dischargers to reduce trash loading to Machado Lake.

7. Upon establishment of TMDLs by the State or U.S. EPA, the State is required to incorporate the TMDLS into the State Water Quality Management Plan (40 CFR 130.6(c)(1), 130.7). The Water Quality Control Plan for the Los Angeles Region (Basin Plan) and applicable statewide plans serve as the State Water Quality Management Plans governing the watersheds under the jurisdiction of the Regional Board. Attachment A to this resolution contains the Basin Planning language for this TMDL.

8. Machado Lake is located within the Dominguez Channel watershed bordered by Rosecrans and Dominguez Hills at the north and east, by Palos Verdes Hills at the southwest, and by Port of Los Angeles and Port of Long Beach to the south. Machado Lake is a receiving body of urban and storm water runoff from storm drain system covering an approximately 20 square mile watershed. Wilmington Drain discharges over 50 percent of the water to Machado Lake at northeast corner. The rest of the water enters the lake through other storm drains including Project No. 77 channel, Harbor City Relief Drain located at the west end of the lake, City of Los Angeles drains for runoff from streets and Harbor Park Municipal Golf Course. Current land use includes high density residential, and open space and recreational uses. The 1998 Clean Water Act 303(d) list identified Machado Lake as impaired for trash. This listing was approved by the United States Environmental Protection Agency on May 12, 1999. The proposed TMDL addresses impairments of water quality caused by trash in Machado Lake, and establishes the loading capacity of trash and requires ongoing periodic monitoring to ensure that it continues to attain standards.
9. The Water Quality Control Plan for the Los Angeles Region prescribes narrative water quality objectives that are applicable to trash. These water quality objectives include floating material:

"Waters shall not contain floating materials, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses."

and solid, suspended, or settleable materials:

"Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses."

10. The Regional Board’s goal in establishing the TMDL for trash in Machado Lake is to protect the Water Contact Recreation, Navigation, Non-contact Water Recreation, Commercial and Sport Fishing, Marine Habitat, and Rare, Threatened, or Endangered Species beneficial uses, and to achieve the narrative water quality objectives set to protect those uses.

11. Information regarding the technical document that was generated by Regional Board staff in meetings with stakeholders is contained in a staff report. The staff report, "Trash Total Maximum Daily Load for Machado Lake in the Dominguez Channel Watershed," dated March 20, 2007, includes information regarding the environmental setting of Machado Lake, description of the trash impairments and/or current attainment status as appropriate, and descriptions of best management practices to comply with the trash TMDL.

12. The public has had a reasonable opportunity to participate in the review of the amendment to the Basin Plan. A draft of the TMDL was released for public comment on March 20, 2007; a Notice of Hearing and Notice of Filing were published and circulated on March 20, 2007; Regional Board staff responded to oral and written comments received from the public; and the Regional Board held a public hearing on June 7, 2007 to consider adoption of the TMDL.

13. In amending the Basin Plan to establish this TMDL, the Regional Board considered the requirements set forth in Sections 13240 and 13242, and section 13269 of the California Water Code.

14. Because the TMDL implements existing narrative water quality objectives (i.e., narrative objectives for floating materials and solid, suspended or settleable materials), the Regional Board (along with the State Water Resources Control Board) have determined that adopting a TMDL does not require the water boards to consider the factors of Water Code section 13241. The consideration of the Water Code section 13241 factors, by section 13241's express terms, only applies "in establishing water quality objectives." Here the Regional Board is not establishing water quality objectives, but as required by section 303(d)(1)(C) of the Clean Water Act is adopting a TMDL that will implement the previously established objectives that have not been achieved. In making this determination, the Regional Board has considered and relied upon a legal memorandum from the Office of Chief Counsel to the State Water Board's basin planning staffdetailing why TMDLs cannot be considered water quality objectives. (See Memorandum from the Staff Counsel Michael J. Levy, Office of Chief Counsel, to Ken Harris and Paul Lillebo, Division of Water Quality: The Distinction Between A TMDL's Numeric Targets and Water Quality Standards, dated June 12, 2002.)
15. While the Regional Board is not required to consider the factors of Water Code section 13241, it, nonetheless, has developed and received significant information pertaining to the Water Code section 13241 factors and has considered that information in developing and adopting this TMDL. The past, present, and probable future beneficial uses of water have been considered in that Machado Lake are designated for a multitude of beneficial uses in the Basin Plan. The key beneficial uses for Machado Lake include aquatic life habitat uses and water contact and non-contact water recreation. Nonpoint source discharges of trash improperly deposited in the vicinity of Machado Lake are the predominant sources of trash loading to Machado Lake. The environmental characteristics of Machado Lake are spelled out at length in the Basin Plan and in the technical documents supporting this Basin Plan amendment, and have been considered in developing this TMDL. Water quality conditions that reasonably could be achieved through the coordinated control of all factors which affect water quality in the area have been considered. This TMDL provides several compliance options, including implementation of full capture devices for stormdrain conveyances and a minimum frequency of trash assessment and collection. These options provide flexibility for responsible jurisdictions to select the most effective BMPs that reduce trash loading to Machado Lake. Establishing a plan that will ensure Machado Lake attain and continue to attain water quality standards is a reasonable water quality condition. However, to the extent that there would be any conflict between the consideration of the factor in Water Code section 13241 subdivision (c), if the consideration were required, and the Clean Water Act, the Clean Water Act would prevail. Economic considerations were considered throughout the development of the TMDL. Some of these economic considerations arise in the context of Public Resources Code section 21159 and are equally applicable here. The implementation program for this TMDL recognizes the economic limitations on achieving immediate compliance if structural BMPs are selected to abate point source discharges and allows a flexible implementation schedule of 8 years in that event. A program requiring a minimum frequency of trash assessment and collection is not foreseeably a cost-prohibitive BMP. The need for housing within the region has been considered, but this TMDL is unlikely to affect housing needs because new housing will need to comply with existing county ordinances regarding proper disposal of trash. Whatever housing impacts could materialize are ameliorated by the flexible nature of this TMDL and the implementation schedule.

16. The amendment is consistent with the State Antidegradation Policy (State Board Resolution No. 68-16), in that the changes to water quality objectives (i) consider maximum benefits to the people of the state, (ii) will not unreasonably affect present and anticipated beneficial use of waters, and (iii) will not result in water quality less than that prescribed in policies. Likewise, the amendment is consistent with the federal Antidegradation Policy (40 CFR 131.12). This policy is further promoted by requiring that the amount of trash collected in between collection events cannot increase and is required to decrease by 50% over eight years.

17. Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the Regional Water Boards’ basin planning process as a “certified regulatory program” that adequately satisfies the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000 et seq.) requirements for preparing environmental documents. (14 Cal. Code Regs. § 15251(g); 23 Cal. Code Regs. § 3782.) The Regional Water Board staff has prepared “substitute environmental documents” for this project that contains the required environmental documentation under the State Water Board’s CEQA
regulations. (23 Cal. Code Regs. § 3777.) The substitute environmental documents include the TMDL staff report entitled “Trash Total Maximum Daily Load for Machado Lake”, the environmental checklist, the comments and responses to comments, the basin plan amendment language, and this resolution. The project itself is the establishment of a TMDL for trash in Machado Lake. While the Regional Board has no discretion to not establish a TMDL (the TMDL is required by federal law), the Board does exercise discretion in assigning waste load allocations and load allocations, determining the program of implementation, and setting various milestones in achieving the water quality standards. The CEQA checklist and other portions of the substitute environmental documents contain significant analysis and numerous findings related to impacts and mitigation measures.

18. A CEQA Scoping hearing was conducted on December 6, 2006 at the Los Angeles Regional Water Quality Control Board. A notice of the CEQA Scoping hearing was sent to interested parties including cities and/or counties with jurisdiction in or near Machado Lake on November 7, 2006. This notice was also published in the Los Angeles Times on November 3, 2006.

19. In preparing the substitute environmental documents, the Regional Board has considered the requirements of Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and intends those documents to serve as a tier 1 environmental review. This analysis is not intended to be an exhaustive analysis of every conceivable impact, but an analysis of the reasonably foreseeable consequences of the adoption of this regulation, from a programmatic perspective. Compliance obligations will be undertaken directly by public agencies that may have their own obligations under CEQA. Project level impacts may need to be considered in any subsequent environmental analysis performed by other public agencies, pursuant to Public Resources Code section 21159.2. To the extent applicable, this Tier 1 substitute environmental document may be used to satisfy subsequent CEQA obligations of those agencies.

20. Consistent with the Regional Board’s substantive obligations under CEQA, the substitute environmental documents do not engage in speculation or conjecture, and only consider the reasonably foreseeable environmental impacts, including those relating to the methods of compliance, reasonably foreseeable feasible mitigation measures to reduce those impacts, and the reasonably foreseeable alternative means of compliance, which would avoid or reduce the identified impacts.

21. The proposed amendment could have a potentially significant adverse effect on the environment. However, there are feasible alternatives, feasible mitigation measures, or both, that if employed, would substantially lessen the potentially significant adverse impacts identified in the substitute environmental documents, however such alternatives or mitigation measures are within the responsibility and jurisdiction of other public agencies, and not the Regional Board. Water Code section 13360 precludes the Regional Board from dictating the manner in which responsible agencies comply with any of the Regional Board’s regulations or orders. When the agencies responsible for implementing this TMDL determine how they will proceed, the agencies responsible for those parts of the project can and should incorporate such alternatives and mitigation into any subsequent projects or project approvals. These feasible alternatives and mitigation measures are described in more detail in the substitute environmental documents. (14 Cal. Code Regs. § 15091(a)(2).)
22. From a program-level perspective, incorporation of the alternatives and mitigation measures outlined in the substitute environmental documents will forseeably reduce impacts to less than significant levels.

23. The substitute documents for this TMDL, and in particular the Environmental Checklist, identify broad mitigation approaches that should be considered at the project level.

24. The regulatory action meets the “Necessity” standard of the Administrative Procedures Act, Government Code, Section 11353, Subdivision (b). As specified above, Federal law and regulations require that TMDLs be incorporated into the water quality management plan. The Regional Board’s Basin Plan is the Regional Board’s component of the water quality management plan, and the Basin Plan is how the Regional Board takes quasi-legislative, planning actions. Moreover, the TMDL is a program of implementation for existing water quality objectives, and is, therefore, appropriately a component of the Basin Plan under Water Code section 13242. The necessity of developing a TMDL is established in the TMDL staff report, the section 303(d) list, and the data contained in the administrative record documenting the conditions related to trash in Machado Lake.

25. The Basin Plan amendment incorporating a TMDL for trash for Machado Lake must be submitted for review and approval by the State Water Resources Control Board (State Board), the State Office of Administrative Law (OAL), and the U.S. EPA. The Basin Plan amendment will become effective upon approval by OAL and U.S. EPA. Notice of Decision will be filed with the Resources Agency.

26. If during the State Board’s approval process Regional Board staff, the SWRCB or OAL determines that minor, non-substantive modifications to the language of the amendment are needed for clarity or consistency, the Executive Officer should make such changes consistent with the Regional Board’s intent in adopting this TMDL, and should inform the Board of any such changes.

THEREFORE, be it resolved that pursuant to sections 13240 and 13242, and section 13269 of the Water Code, the Regional Board hereby amends the Basin Plan as follows:

1. Pursuant to Sections 13240 and 13242, and section 13269 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendments to Chapter 7 of the Water Quality Control Plan for the Los Angeles Region, as set forth in Attachment A hereto, to incorporate the elements of the Trash TMDL for Machado Lake.

2. Regional Board staff is directed to develop a monitoring plan to assess accumulation of settleable trash on the bottom of Machado Lake and, if necessary, make recommendations for remediation.

3. The Regional Board hereby approves and adopts the CEQA substitute environmental documentation, including all findings contained therein, which was prepared in accordance with Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and directs the Executive Officer to sign the environmental checklist.
4. The Executive Officer is directed to forward copies of the Basin Plan amendment to the State Board in accordance with the requirements of section 13245 of the California Water Code.

5. The Regional Board requests that the State Board approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward it to OAL and the U.S. EPA.

6. If during the State Board’s approval process, Regional Board staff, the State Board or OAL determines that minor, non-substantive modifications to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Board of any such changes.

7. The Executive Officer is authorized to sign a Certificate of Fee Exemption.

I, Deborah J. Smith, Interim Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on June 7, 2007.

Deborah J. Smith
Interim Executive Officer

7-17-07
Date
Proposed Amendments

to the

Water Quality Control Plan – Los Angeles Region

for the

Machado Lake Trash TMDL
Amendments:

Table of Contents
Add:

Chapter 7. Total Maximum Daily Loads (TMDLs)

7-26 Machado Lake Trash TMDL

List of Figures, Tables and Inserts
Add:

Chapter 7. Total Maximum Daily Loads (TMDLs)
Tables
7-26 Machado Lake Trash TMDL

7-26.1. Machado Lake Trash TMDL, Elements

7-26.2a. Machado Lake Trash TMDL, Implementation Schedule – Full Capture Implementation Schedule

7-26.2b. Machado Lake Trash TMDL, Implementation Schedule – Minimum Frequency Assessment and Collection Schedule

Chapter 7. Total Maximum Daily Loads (TMDLs)
Machado Lake Trash TMDL

This TMDL was adopted by:

The Regional Water Quality Control Board on June 7, 2007.
The State Water Resources Control Board on [Insert Date].
The Office of Administrative Law on [Insert Date].
The U.S. Environmental Protection Agency on [Insert Date].

The elements of the TMDL are presented in Table 7-26.1 and the Implementation Plan in Tables 7-26.2a and 7-26.2b.
Table 7-26.1 Machado Lake Trash TMDL: Elements

<table>
<thead>
<tr>
<th>Element</th>
<th>Machado Lake Trash TMDL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Problem Statement</strong></td>
<td>Current levels of trash discharges into Machado Lake violate water quality objectives and are impairing beneficial uses. Relevant water quality objectives include Floating Material and Solid, Suspended, or Settleable Materials. The following designated beneficial uses are impacted by trash: municipal and domestic supply (MUN); contact water recreation (REC-1); non-contact water recreation (REC-2); warm freshwater habitat (WARM); wildlife habitat (WILD), rare, threatened, or endangered species (RARE), and wetland habitat (WET).</td>
</tr>
<tr>
<td><strong>Numeric Target</strong></td>
<td>Zero trash in Machado Lake, and on the shoreline. Zero is defined as (1) for nonpoint sources, no trash immediately following each assessment and collection event consistent with an established Minimum Frequency of Assessment and Collection Program (MFAC Program), or (2) installing full capture systems on conveyances that discharge to Machado Lake through a progressive implementation schedule. The MFAC Program is established at an interval that prevents trash from accumulating in deleterious amounts that cause nuisance or adversely affect beneficial uses between collections, and (2) for point sources, zero trash discharged into Machado Lake and on the shoreline.</td>
</tr>
<tr>
<td><strong>Source Analysis</strong></td>
<td>Litter from adjacent land areas, roadways and direct dumping and deposition are sources of trash to Machado Lake. Point sources such as storm drains are also sources of trash discharged to Machado Lake.</td>
</tr>
<tr>
<td><strong>Loading Capacity</strong></td>
<td>Zero, as defined in the Numeric Target.</td>
</tr>
<tr>
<td><strong>Waste Load Allocations (for point sources)</strong></td>
<td>Waste Load Allocations (WLAs) are assigned to the California Department of Transportation (Caltrans) and permittees under the Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES permit, including Los Angeles County, Los Angeles Flood Control District, and the Cities of Carson, Lomita, Los Angeles, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, and Torrance. WLAs are zero trash. WLAs may be issued to additional responsible jurisdictions in the future under Phase 2 of the US EPA Stormwater Permitting Program, or other applicable regulatory programs.</td>
</tr>
<tr>
<td><strong>Load Allocations (for nonpoint sources)</strong></td>
<td>Load Allocations (LAs) are assigned to the City of Los Angeles. LAs are zero trash. LAs may be issued to additional responsible jurisdictions in the future under applicable regulatory programs.</td>
</tr>
</tbody>
</table>
Implementation

Implementation of the trash TMDL for Machado Lake includes structural and non-structural best management practices (BMPs) and a program of minimum frequency of assessment and collection (MFAC) to address point and nonpoint trash sources.

Point Sources

WLAs shall be implemented through storm water permits and via the authority vested in the Executive Officer by section 13267 of the Porter-Cologne Water Quality Control Act (Water Code section 13000 et seq.).

If point source dischargers comply with WLAs by implementing an Executive Officer certified full capture system on conveyances that discharge to Machado Lake through a progressive implementation schedule of full capture devices, they will be deemed in compliance with the WLA.

In certain circumstances, (if approved by the Executive Officer), point source dischargers may also comply with WLAs by implementing a program for minimum frequency of assessment and collection in conjunction with best management practices (MFAC/BMPs).

1. Compliance with the final WLA may be achieved through an adequately sized and maintained full capture system, that has been certified by the Executive Officer once the Executive Officer has certified that the system meets the following minimum criteria. A full capture system, at a minimum, consists of any device or series of devices that traps all particles retained by a 5 mm mesh screen and has a design treatment capacity of not less than the peak flow rate (Q) resulting from a one-year, one-hour, storm in the sub-drainage area. The rational equation is used to compute the peak flow rate:

\[ Q = C \times I \times A, \]

where

- Q = design flow rate (cubic feet per second, cfs);
- C = runoff coefficient (dimensionless);
- I = design rainfall intensity (inches per hour); and
- A = subdrainage area (acres).

Point sources that choose to comply via a full capture system, must demonstrate a phased implementation of full capture devices over an 8-year period until the final WLA of zero is attained. Zero will be deemed to have been met if full capture systems have been installed on all conveyances discharging to Machado Lake.

Irrespective of whether point sources employ a full capture system, they may comply with the WLA in any lawful manner.
2. Compliance through an MFAC program in conjunction with BMPs may be proposed to the Regional Board for incorporation into the relevant NPDES permit. The MFAC program must include requirements equivalent to those described in the Conditional Waiver set forth below. Agencies that are listed as responsible for both point and nonpoint sources will be deemed in compliance with both the WLAs and LAs if a MFAC/BMP program, approved by the Executive Officer, is implemented.

Nonpoint Sources

LAs shall be implemented through either (1) a conditional waiver from waste discharge requirements, or (2) an alternative program implemented through waste discharge requirements or an individual waiver or another appropriate order of the Regional Board.

Non-point source dischargers may achieve compliance with the LAs by implementing a MFAC/BMP program approved by the Executive Officer. Responsible jurisdictions that are listed as responsible for both point and nonpoint sources will be deemed in compliance with both the WLAs and LAs if an MFAC/BMP program, approved by the Executive Officer, is implemented.

1) Conditional Waiver: Pursuant to Water Code section 13269, waste discharge requirements are waived for any responsible jurisdiction that implements a MFAC/BMP Program which, to the satisfaction of the Executive Officer, meets the following criteria:

a) The MFAC/BMP Program includes an initial minimum frequency of trash assessment and collection and suite of structural and/or nonstructural BMPs. The MFAC/BMP program shall include collection and disposal of all trash found in the water and on the shoreline. Responsible jurisdictions shall implement an initial suite of BMPs based on current trash management practices in land areas that are found to be sources of trash to Machado Lake. For Machado Lake, the initial minimum frequency shall be set as follows:

1. Five days per week on the shoreline and in the Ken Malloy Harbor Regional Park, as defined in the Executive Officer approved Trash Monitoring and Reporting Plan (TMRP).

2. Twice per week on waters of Machado Lake.

b) The MFAC/BMP Program includes reasonable assurances that it will be implemented by the responsible jurisdiction.

c) The MFAC/BMP Program includes a Trash Monitoring and Reporting Plan, as described below,
and a requirement that the responsible jurisdictions will self-report any non-compliance with its provisions. The results and report of the Trash Monitoring and Reporting Plan must be submitted to Regional Board on an annual basis.

d) MFAC protocols may be based on SWAMP protocols for rapid trash assessment, or alternative protocols proposed by dischargers and approved by the Executive Officer.

e) Implementation of the MFAC/BMP program should include a Health and Safety Plan to protect personnel. The MFAC/BMP shall not require responsible jurisdictions to access and collect trash from areas where personnel are prohibited.

The Executive Officer may approve or require a revised assessment and collection frequency and definition of the critical conditions under the waiver:

(a) To prevent trash from accumulating in deleterious amounts that cause nuisance or adversely affect beneficial uses between collections;
(b) To reflect the results of trash assessment and collection;
(c) If the amount of trash collected does not show a decreasing trend, where necessary, such that a shorter interval between collections is warranted; or
(d) If the amount of trash collected is decreasing such that a longer interval between collections is warranted.

At the end of the implementation period, a revised MFAC/BMP program may be required if the Executive Officer determines that the amount of trash accumulating between collections is causing nuisance or otherwise adversely affecting beneficial uses.

With regard to (a), (b) or (c), above, the Executive Officer is authorized to allow responsible jurisdictions to implement additional structural or non-structural BMPs in lieu of modifying the monitoring frequency.

Any waivers implementing the TMDL shall expire pursuant to Water Code section 13269 five years after the effective date of this TMDL, unless reissued. The Regional Board may reissue this waiver through an order consistent herewith, instead of readopting these regulatory provisions.

(2) Alternatively, responsible jurisdictions may propose, or the Regional Board may impose, an alternative program which would be implemented through waste discharge requirements an individual waiver, a cleanup and abatement order, or any other appropriate order or orders,
provided the program is consistent with the assumptions and requirements of the reductions described in Table 7-26.2b, below.

Within six months of the effective date of this TMDL, the Executive Officer shall require responsible jurisdictions to submit either a notice of intent to be regulated under the conditional waiver with their proposed MFAC/BMP Program and Trash Monitoring and Reporting Plan (TMRP), or a report of waste discharge.

| Monitoring and Reporting Plan | Responsible jurisdictions will develop a TMRP for Executive Officer approval that describes the methodologies that will be used to assess and monitor trash in Machado Lake and/or within responsible jurisdiction land areas. The TMRP shall include a plan to establish the trash Baseline WLAs for non-Caltrans entities, or an alternative to the default trash baseline for Caltrans to prioritize installation of full capture devices. The default trash baseline WLA for Caltrans is 6677.4 gallons per square mile per year.

Requirements for the TMRP shall include, but are not limited to, assessment and quantification of trash collected from the surfaces and shoreline of Machado Lake or from responsible jurisdiction land areas. The monitoring plan shall provide details of the frequency, location, and reporting of trash monitoring. Responsible jurisdictions shall propose a metric (e.g., weight, volume, pieces of trash) to measure the amount of trash in Machado Lake and on the land area surrounding Machado Lake, as defined in the Executive Officer approved TMRP.

The TMRP shall include a prioritization of areas that have the highest trash generation rates. The TMRP shall give preference to this prioritization when scheduling the installation of full capture devices, BMPs, or trash collection programs.

The TMRP shall also include an evaluation of effectiveness of the MFAC/BMP program to prevent trash from accumulating in deleterious amounts that cause nuisance or adversely affect beneficial uses between collections, proposals to enhance BMPs, and a revised MFAC for Executive Officer review.

Responsible Jurisdictions may coordinate their TMRP activities for Machado Lake.

| Margin of Safety | Zero is a conservative numeric target which contains an implicit margin of safety.

| Seasonal Variations and Critical Conditions | Discharge of trash from the conveyances occurs primarily during or shortly after a major rain event. Discharge of trash from nonpoint sources occurs during all seasons, but can be increased during or shortly after high wind events, which are defined as periods of wind advisories
<p>| issued by the National Weather Service, and the period from May 15 to October 15. |  |</p>
<table>
<thead>
<tr>
<th>Task No.</th>
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<th>Responsible Jurisdiction</th>
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<tbody>
<tr>
<td>1</td>
<td>Submit Trash Monitoring and Reporting Plan, including a plan for defining the trash baseline WLA and a proposed definition of “major rain event”.</td>
<td>California Department of Transportation (Caltrans) and Municipal Separate Storm Sewer System (MS4) Permittees including: Los Angeles County, Los Angeles County Flood Control District, and the Cities of Carson, Lomita, Los Angeles, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, and Torrance</td>
<td>6 months from effective date of TMDL. If a plan is not approved by the Executive Officer within 9 months, the Executive Officer will establish an appropriate monitoring plan.</td>
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<tr>
<td>2</td>
<td>Implement Trash Monitoring and Reporting Plan.</td>
<td>California Department of Transportation (Caltrans) and Municipal Separate Storm Sewer System (MS4) Permittees including: Los Angeles County, Los Angeles County Flood Control District, and the Cities of Carson, Lomita, Los Angeles, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, and Torrance</td>
<td>6 months from receipt of letter of approval from Regional Board Executive Officer, or the date a plan is established by the Executive Officer.</td>
</tr>
<tr>
<td>3</td>
<td>Submit results of Trash Monitoring and Reporting Plan, recommend trash baseline WLA, and propose Full Capture System prioritization.</td>
<td>California Department of Transportation (Caltrans) and Municipal Separate Storm Sewer System (MS4) Permittees including: Los Angeles County, Los Angeles County Flood Control District, and the Cities of Carson, Lomita, Los Angeles, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, and Torrance</td>
<td>2 years from receipt of letter of approval for the Trash Monitoring and Reporting Plan from Regional Board Executive Officer.</td>
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<tr>
<td>4</td>
<td>Installation of Full Capture Systems to achieve 20% reduction of trash from Baseline WLA*.</td>
<td>California Department of Transportation (Caltrans) and Municipal Separate Storm Sewer System (MS4) Permittees including: Los Angeles County, Los Angeles County Flood Control District, and the Cities of Carson, Lomita, Los Angeles, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, and Torrance</td>
<td>Four years from effective date of TMDL.</td>
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<td>5</td>
<td>Installation of Full Capture Systems</td>
<td>California Department of Transportation (Caltrans) and Municipal Separate Storm Sewer System (MS4) Permittees including: Los Angeles County, Los Angeles County Flood Control District, and the Cities of Carson, Lomita, Los Angeles, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, and Torrance</td>
<td>Five years</td>
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<tr>
<td>Capture Systems to achieve 40% reduction of trash from Baseline WLA*</td>
<td>Transportation (Caltrans) and Municipal Separate Storm Sewer System (MS4) Permittees including: Los Angeles County, Los Angeles County Flood Control District, and the Cities of Carson, Lomita, Los Angeles, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, and Torrance</td>
<td>from effective date of TMDL.</td>
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<tr>
<td>Evaluate the effectiveness of Full Capture Systems, and reconsider the WLA*.</td>
<td>Regional Board.</td>
<td>Five years from effective date of TMDL.</td>
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<tr>
<td>Installation of Full Capture Systems to achieve 60% reduction of trash from Baseline WLA*.</td>
<td>California Department of Transportation (Caltrans) and Municipal Separate Storm Sewer System (MS4) Permittees including: Los Angeles County, Los Angeles County Flood Control District, and the Cities of Carson, Lomita, Los Angeles, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, and Torrance</td>
<td>Six years from effective date of TMDL.</td>
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<tr>
<td>Installation of Full Capture Systems to achieve 80% reduction of trash from Baseline WLA*.</td>
<td>California Department of Transportation (Caltrans) and Municipal Separate Storm Sewer System (MS4) Permittees including: Los Angeles County, Los Angeles County Flood Control District, and the Cities of Carson, Lomita, Los Angeles, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, and Torrance</td>
<td>Seven years from effective date of TMDL.</td>
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<tr>
<td>Installation of Full Capture Systems to achieve 100% reduction of trash from Baseline WLA*.</td>
<td>California Department of Transportation (Caltrans) and Municipal Separate Storm Sewer System (MS4) Permittees including: Los Angeles County, Los Angeles County Flood Control District, and the Cities of Carson, Lomita, Los Angeles, Palos Verdes Estates, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, and Torrance</td>
<td>Eight years from effective date of TMDL.</td>
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* Compliance with percent reductions from the Baseline WLA will be assumed wherever full capture systems are installed in corresponding percentages of the conveyance discharging to Machado Lake. Installation will be prioritized based on the greatest point source loadings.
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<tbody>
<tr>
<td>1</td>
<td>Conditional Waiver in effect.</td>
<td>City of Los Angeles</td>
<td>Regional Board adoption of TMDL</td>
</tr>
<tr>
<td>2</td>
<td>Submit Notice of Intent to Comply with Conditional Waiver of Discharge Requirements, including MFAC/BMP Program and Trash Monitoring and Reporting Plan.</td>
<td>City of Los Angeles</td>
<td>Six months from TMDL effective date.</td>
</tr>
<tr>
<td>3</td>
<td>Implement MFAC/BMP Program.</td>
<td>City of Los Angeles</td>
<td>Six months from receipt of Notice of Acceptance from Regional Board Executive Officer.</td>
</tr>
<tr>
<td>4</td>
<td>Submit annual TMRP reports including proposal for revising MFAC/BMP for Executive Officer approval.</td>
<td>City of Los Angeles</td>
<td>Two years from effective date of TMDL, and annually thereafter.</td>
</tr>
<tr>
<td>5</td>
<td>Reconsideration of Trash TMDL based on evaluation of effectiveness of MFAC/BMP program.</td>
<td>Regional Board.</td>
<td>Five years from effective date of TMDL.</td>
</tr>
</tbody>
</table>

* At Task 3, all Responsible Jurisdictions must be attaining the zero trash target after each required trash assessment and collection event. At Task 4, all Responsible Jurisdictions must demonstrate full compliance and attainment of the zero trash target including that trash is not accumulating in deleterious amounts between the required trash assessment and collection events. Based on Responsible Jurisdiction monitoring reports, the Executive Officer may adjust the minimum frequency of assessment and collection as necessary to ensure compliance between the required trash assessment and collection events.