

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street San Francisco, CA 94105-3901

August 1, 2002

Ms. Celeste Cantú **Executive Director** State Water Resources Control Board P.O. Box 100 Sacramento, CA 95812-0100

Dear Ms. Cantú:

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Thank you for submitting the Basin Plan Amendments containing total maximum daily loads (TMDLs) for trash and associated implementation plans for Los Angeles River Watershed and Ballona Creek and Wetland. The TMDL and implementation plan submittal, which contained portions of the State Board and Regional Board administrative records, was dated July 15, 2002. The State Office of Administrative Law concurrence memoranda were received on July 16 and July 18, 2002. Finally, the State provided a letter clarifying several aspects of its decisions on July 29, 2002. The State adopted TMDLs for the following water bodies:

Los Angeles River Reaches 1, 2, 3, 4, and 5; Los Angeles River Estuary; Tujunga Wash (Hansen Dam to Los Angeles River); Burbank Western Channel; Verdugo Wash Reaches 1 and 2; Arroyo Seco Reaches 1 and 2; Rio Hondo Reach 1; Peck Road Lake: Echo Park Lake: Lincoln Park Lake; Ballona Creek; and Ballona Wetland.

Based on EPA's review of the TMDL submittal under Section 303(d), I have concluded that the TMDLs adequately address the pollutant of concern and, upon implementation, will result in attainment of the water quality standards adopted by the State. These TMDLs include wasteload and load allocations as needed, take into consideration seasonal variations and critical conditions, and provide adequate margins of safety. The State has provided adequate opportunities for public review and comment on the TMDL and demonstrated how public comments were considered in the final TMDLs. All required elements are adequately addressed; therefore, the TMDLs are hereby approved pursuant to Clean Water Act Section 303(d)(2).

The TMDL submittal also contains a detailed plan for implementing the trash TMDLs. Current federal regulations do not define TMDLs as containing implementation plans; therefore, EPA is not taking action on the implementation plan provided with the TMDLs. However, EPA appreciates the State's commitment to working with the regulated entities to implement the TMDLs. EPA concurs with the State's conclusion that the TMDLs are reasonable and achievable using currently available technology as described in the TMDL implementation plans. EPA commends the Regional Board's commitment to review the TMDLs and associated data and information upon (1) the completion of baseline monitoring for the TMDL; and (2) attainment of a 50 percent reduction in trash generation.

As you are aware, on March 19, 2002, EPA established TMDLs for trash for the Los Angeles River Watershed and Ballona Creek and Wetland in order to meet the March 22, 2002 consent decree deadline specified in the Heal the Bay, et al v. Browner lawsuit. The approved State TMDLs for trash for Los Angeles River Watershed and Ballona Creek and Wetland now supercede the TMDLs established by EPA in March; therefore, the State's TMDLs are now the applicable TMDLs for Clean Water Act purposes.

We would like to continue working with you and the Regional Boards to ensure that future TMDLs are adopted and submitted to EPA on schedule and, in particular, ensure that TMDLs required under the consent decrees are adopted by the State in time to meet the relevant deadlines.

The enclosed review discusses the basis for this decision in greater detail. I appreciate the State and Regional Boards' work to complete and adopt these TMDLs and look forward to our continuing partnership in TMDL development. If you have questions concerning this approval, please call me at (415) 972-3572 or David Smith at (415) 972-3416.

Sincerely,

ets Dranss Strauss / Angms / 2002 Director

Water Division

enclosures

cc: Dennis Dickerson

Staff Report Supporting Approval of TMDLs: Los Angeles River Watershed, California TMDLs for Trash July 30, 2002

Background

The Los Angeles Regional Water Quality Control Board (Regional Board) and California Water Resources Control Board (State Board) listed the Los Angeles River, several tributaries to the River, and several lakes in the watershed as water quality limited due to trash in California's 1998 Clean Water Act Section 303(d) list. Consistent with the requirements of Clean Water Act Section 303(d)(1), the Regional Board staff developed the TMDLs for these listed waters and one additional segment (Los Angeles River estuary) which the State later determined to be impaired by trash. These TMDLs were adopted by the Regional Board and the State Board on September 19, 2001 and February 19, 2002, respectively. Because the State of California was unable to complete adoption of these TMDLs by the March 22, 2002 consent decree deadline specified in Heal the Bay, et al. v. Browner, Northern District of California, C 98-4825 SBA, (March 22, 1999). EPA established TMDLs for trash on March 19, 2002 in order to fulfill its obligations under the decree. The decree required EPA to establish these TMDLs if the State failed to adopt and submit the TMDLs in time to meet the deadline set in the decree. Because the State did not adopt and submit final TMDLs in time to meet the decree schedule, EPA was obliged to establish them at that time. EPA's TMDLs were based largely on the TMDLs for trash adopted by the Regional Board.

California adopted and submitted for EPA approval TMDLs for trash for the Los Angeles River Watershed on July 15, 2002. The specific waters covered by this action include:

Los Angeles River Reaches 1, 2, 3, 4, and 5;
Los Angeles River Estuary;
Tujunga Wash (Hansen Dam to Los Angeles River);
Burbank Western Channel;
Verdugo Wash Reaches 1 and 2;
Arroyo Seco Reaches 1 and 2;
Rio Hondo Reach 1;
Peck Road Lake;
Echo Park Lake; and
Lincoln Park Lake.

EPA is approving these TMDLs because they meet the requirements of Clean Water Act Section 303(d) and federal regulations at 40 CFR 130.2 and 130.7. EPA finds that the State's identification of the Los Angeles River Estuary as a water quality limited segment needing a TMDL is appropriate and consistent with the requirements of Section 303(d) and 40 CFR 130.7.

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TMDL Review

EPA reviewed the State TMDL submittal package to ensure that all required TMDL elements have been adequately addressed. EPA's review is presented in the attached checklist, which determines that all required TMDL elements and an adequate level of technical justification for each element are included.

The TMDL submittal for Los Angeles River watershed includes TMDLs for several water body segments that were listed due to trash impairment on the 1998 Section 303(d) list. In addition, the State adopted a trash TMDL for the Los Angeles River estuary. The estuary was not listed in 1998. However, the State determined that based on information gathered during the TMDL development process, the estuary is impaired due to trash. The State indicated that the Los Angeles River estuary would have been included in the 1998 list due to trash if the evidence of impairment had been available at the time of the listing (see Staff Report, p. 16 and letter dated July 29, 2002). EPA has reviewed the documentation submitted by the State and has concluded that identifying the estuary as water quality limited is consistent with the requirements of 40 C.F.R. 130.7.

In addition, the State's TMDLs include wasteload allocations for all urban stormwater discharges in the urbanized portion of the Los Angeles River watershed. These wasteload allocations cover stormwater discharges directly into the segments for which TMDLs are adopted as well as stormwater discharges to segments that are tributary to TMDL segments. The State's rationale for this wasteload allocation approach is that (1) trash discharges from all urban stormwater outlets in the Los Angeles River watershed flow downstream and contribute to impairment in the segments for which TMDLs were adopted, and (2) trash discharges from all stormwater outlets to waters tributary to TMDL waters need to be controlled in order to meet the TMDLs and associated water quality standards (letter dated July 29, 2002). Moreover, the information compiled by the Regional Board indicates that most tributary streams are themselves impaired due to trash (see Staff Report, pp. 12, 17 and letter dated July 29, 2002). EPA concludes that this approach to setting wasteload allocations is permissible because the State has made a reasonable finding that it would be infeasible to meet the TMDLs without including all of the adopted wasteload allocations. Moreover, the State is authorized to adopt this approach because of the requirement in Clean Water Act Section 303(d)(1)(C) that TMDLs be established at levels necessary to implement applicable water quality standards. Absent allocations to upstream sources, the State would lack the assurance that the TMDL for downstream listed waters would result in the attainment of water quality standards.

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TMDL Checklist

State: California
Pollutant(s): trash/litter

Water bodies: Los Angeles River Watershed Date of State Submission: July 15, 2002; July 16,

2002; July 29, 2002

EPA Reviewers: Sharon Lin and David Smith

Review Criteria	Comments
1. Submittal Letter: Letter indicates final TMDL(s) for specific water(s)/pollutant(s) were adopted by state and submitted to EPA for approval under 303(d).	Letters dated July 15, 2002, July 16, 2002, and July 29, 2002. TMDLs were adopted by the Los Angeles Regional Water Quality Control Board (Regional Board) through resolution 01-013 on September 19, 2001, and by the State Water Resources Control Board (State Board) through resolution 2002-0038 on February 19, 2002. The TMDL was approved by the State Office of Administrative Law on July 16, 2002.
	The State adopted trash TMDLs for each segment within the Los Angeles River watershed listed on the 1998 Section 303(d) list for trash (Staff report, p. 12 and letter dated July 29, 2002). The State also adopted a trash TMDL for the Los Angeles River Estuary based on its findings that the Estuary is water quality limited due to trash (clarification letter dated July 29, 2002). The State indicated that it would have included the Estuary on the 1998 list if currently available documentation had been available at the time of the listing decision (letter dated July 29, 2002). EPA has concluded that the State's identification of the Estuary as impaired due to trash and determination that a TMDL should be established for the Estuary segment as part of the watershed TMDLs are reasonable and consistent with the requirements of Section 303(d).
	In addition, we note that the TMDL submission identified designated beneficial uses for each of the waters addressed in the TMDL and indicated that State water quality standards apply to each of them (TMDL Report, table 1, pp. 8-11).
2. Water Quality Standards Attainment: TMDL(s) and associated allocations are set at levels adequate to result in attainment of applicable standards.	TMDL Report, dated September 19, 2001 and Basin Plan Amendment Summary. The TMDLs are designed to implement the existing narrative water quality standards for Floating Material and for Solid, Suspended, or Settleable Material in the Basin Plan for the Los Angeles Regional Water Quality Control Board (TMDL Report, p. 12). The State interpreted these narrative WQS to include trash and found that trash is settleable or floating material that causes impairment of designated beneficial uses.

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The State permissibly concluded that attainment of the specified numeric target and associated TMDLs, load allocations, and wasteload allocations, that call for the effective elimination of any trash discharges, will result in elimination of the adverse effects associated with trash in the water and bring about attainment of the applicable narrative standards.

3. Numeric Target(s): Submission describes applicable water quality standards, including beneficial uses, applicable numeric and/or narrative criteria. Numeric water quality target(s) for TMDL(s) identified, and adequate basis for target(s) as interpretation of water quality standards is provided.

TMDL Report dated September 19, 2001, pp. 4-12, 16 and Basin Plan Amendment Summary. TMDLs implement narrative WQS for Floating Material and Solid, Suspended, or Settleable Material. The TMDL Report analysis concludes that excessive trash can adversely affect beneficial uses including recreation and aquatic habitat and that even small amounts of trash can cause adverse impacts. (see TMDL Report, pp. 12-16). Based on the evidence that even a small quantity of trash could adversely affect beneficial uses, the State set a numeric target of zero trash in the River (see TMDL Report, pp. 12-13 and Response to Comments. September 7, 2001, pp. 8-9). The State's approach is a permissible and environmentally protective approach for accounting for uncertainty in the relationship between pollutant loading levels and attainment of water quality standards, as required by CWA Section 303(d)(1)(C), especially in the absence of information which supports establishment of a higher numeric target. The Regional Board TMDL document describes this approach in the numeric target, TMDLs, and margin of safety sections (TMDL Report, sections III and IV, see also transcript of proceedings, Regional Board public hearing, January 25, 2001, pp. 11-13, September 19, 2001, pp. 54-58).

waterways are already prohibited by local ordinances in the areas covered by these TMDLs.

TMDL Report, pp. 17. The TMDL analysis considered existing information concerning the sources of track

4. Source Analysis: Point, nonpoint, and background sources of pollutants of concern are described, including the magnitude and location of sources. Submittal demonstrates all significant sources have been considered.

TMDL Report, pp. 17. The TMDL analysis considered existing information concerning the sources of trash impairing the River. Source analysis identifies all potential sources and determined that point source urban runoff is the dominant source of trash (Staff Report pp. 14-17). The source analysis provides an effective basis for targeting trash generation in the watershed and appropriate controls to prevent the trash impairment in the watershed, and clearly provides a sound basis for baseline monitoring in order to obtain representative trash generation rate.

EPA notes that littering and disposal of trash in

The problem statement and source analysis sections of the TMDL staff report indicate that trash also reaches water bodies through wind action and direct disposal (pp. 14-17). These sources are considered nonpoint sources because they are not the result of trash deposition in waterways through storm drain or other discharge points. The staff report indicates that trash is found in all reaches of the River, its tributaries, the estuary, and the 3 lakes for which TMDLs were established (Staff Report pp. 14-17, see also letter dated July 29, 2002).

5. Allocations: Submittal identifies appropriate wasteload allocations for point sources and load allocations for nonpoint sources. If no point sources are present, wasteload allocations are zero. If no nonpoint sources are present, load allocations are zero.

TMDL Report, p. 17-18 and Basin Plan Amendment Summary, see also letter of July 29, 2002. The TMDLs include both specific wasteload allocations and a general load allocation.

Wasteload Allocations

The basin plan amendment specifies the "wasteload allocations" for municipal permittees and Caltrans in table 7-2.2. The specific wasteload allocations apply to stormwater runoff regulated under two stormwater NPDES permits:

- Municipal permittees including discharges covered by the Los Angeles County Municipal Stormwater Permit and Long Beach Municipal Stormwater Permit
- Caltrans Stormwater Permit.

Storm drains have been identified as the major source of trash in the Los Angeles River (Staff Report, pp. 16-17). Therefore, in order to meet the numeric target of zero, the TMDLs conclude permissibly that final wasteload allocations are zero. The State adopted wasteload allocations for all stormwater discharges in the urbanized portion of the watershed as defined on page 3 of the staff report (clarification letter of July 29, 2002). This approach is permissible because the State found evidence that significant amounts of trash are discharged into waters that flow to the segments for which TMDLs are adopted. These trash discharges flow into the impaired segments; therefore, the State found it is necessary to adopt WLAs for all trash discharges in the urbanized portion of the watershed in order to ensure that the TMDLs and associated water quality standards can be attained.

Load Allocations

The basin plan amendment containing the TMDL decisions includes a table describing the elements of the adopted TMDLs (table 7-2.1). This table indicates the "load allocations" are "phased reduction for a period of 10 years, from existing baseline load to zero (0)." The load allocation is expressed as a gross allotment which applies to trash loading from windblown trash and direct deposit of trash to water bodies. Trash loading from

nonpoint sources was found to be relatively insignificant in comparison with point source loadings (Staff report, p. 17 and letter dated July 29, 2002). The expression of the LA as a gross allotment is consistent with the provisions of 40 C.F.R. 130.2(g).

The TMDLs incorporate a phased approach to implementation of the TMDLs and associated allocations (see Staff Report, sections VII-VIII).

Based on the information in the TMDL Report, Basin Plan Amendment, and clarifying letter of July 29, 2002, EPA concludes that the TMDLs include as appropriate wasteload and load allocations which are consistent with the TMDLs and with the provisions of the Clean Water Act and federal regulations. The State's TMDL acknowledges the presence of trash discharges from both point and nonpoint sources. "TMDL" is defined in the federal regulations as the sum of all wasteload allocations for point sources and load allocations for nonpoint sources and natural background (40 CFR 130.2(i)). There are no naturally occurring sources of trash because the State defines trash to include only "man-made litter" and excludes naturally occurring vegetation matter (Staff Report, p. 2). Therefore, the State has treated the load allocation as a gross allotment accounting for nonpoint sources of trash discharges, consistent with the provisions of 40 CFR 130.2(g), which suggests load allocations may be expressed as gross allotments. The State's TMDL focuses permissibly, and in EPA's view properly, on point source loadings of trash based on its finding that point source loadings are the dominant source of trash discharges to the water bodies..

6. Link Between Numeric Target(s) and Pollutant(s) of Concern: Submittal describes relationship between numeric target(s) and identified pollutant sources. For each pollutant, describes analytical basis for conclusion that sum of wasteload allocations, load allocations, and margin of safety does not exceed the loading capacity of the receiving water(s).

Because the numeric target, TMDL, and allocations are each zero trash in the Los Angeles River and the other TMDL waters, it was unnecessary to provide a sophisticated linkage analysis or separate estimate of loading capacity. As described above, the TMDL analysis' conclusion that there is zero assimilative capacity for trash delivery to the River constitutes a permissible approach absent appropriate studies or research identifying the ability of aquatic life to tolerate trash and identifying a level of trash that could be present while ensuring attainment of all designated beneficial uses of the Los Angeles River. Moreover, the record indicates that even at small quantities, trash/debris can have adverse environmental impacts on aquatic life, wildlife, humans and the aesthetic enjoyment of the waterbody (Staff Report, p. 12).

7. Margin of Safety: Submission describes explicit and/or implicit margin of safety for each pollutant.

Despite the State's efforts to identify research or study results which could assist in setting a non-zero numeric target and associated TMDL, no such studies were found in the preparation of this TMDL or provided by commenters. Given this key source of uncertainty, the analysis provides an implicit margin of safety by setting the TMDL at zero trash in the River. EPA considers this a permissible way of dealing with the fact that, on the one hand, there is very little quantifiable data on trash impact on the environment and no such information specific to the Los Angeles River, but on the other hand, there is clear indication in the record supporting the State's determination that small amounts of trash may result in significant adverse effects on aquatic life, wildlife, humans and the aesthetic enjoyment of the waterbody (Staff report, pp. 12-13, Response to Comments, September 7, 2001, pp. 8-9).

8. Seasonal Variations and Critical Conditions: Submission describes method for accounting for seasonal variations and critical conditions in the TMDL(s) The Source Analysis and Problem Statement sections describe seasonal variations in trash generation patterns. However, because the TMDL and numeric target are set at zero throughout the year, the TMDL adequately accounts for seasonal variations and critical conditions without need for detailed analysis.

9. Public Participation: Submission documents . provision of public notice and public comment opportunity; and explains how public comments were considered in the final TMDL(s).

Regional Board documents: Regional Board Resolution 01-013, September 19, 2001; Notice of the hearings was published in the Los Angeles Times on June 19, 20, and 21, 2001 for a September 13, 2001 hearing. This hearing was rescheduled for September 19, 2001 and notice of this change was published in the Los Angles Times on September 6, 2001.

Transcripts of public hearings, January 25, 2001, and September 19, 2001, and summary of responses to public comments on November 25, 2000 and June 18, 2001 drafts of the TMDL;

Seven public workshops and ten meetings with individual stakeholders and agencies (meetings were held with every individual stakeholder who requested one).

State Board documents: State Board Resolution 2002-0038, February 19, 2002. Public workshop on February 6, 2002. State Board Response to Comments received during the State Board Approval Process.

The Regional Board and State Board both provided public notice and opportunities to comment on the TMDL through mailings to the Basin Plan mailing lists, by holding many public meetings, and by holding several public hearings to hear public comments on the TMDL. Several public comments were received in writing and in oral testimony. The State demonstrated how it considered these comments in its final decision by providing reasonably detailed responsiveness summaries

	which include responses to each comment.
10. Technical Analysis: Submission provides appropriate level of technical analysis supporting TMDL elements.	The TMDL analysis provides a thorough review and summary of available information about trash/debris impact and trash generation in the specific areas of concern. We conclude the State was reasonably diligent in its technical analysis of trash generation in the watershed and its analysis of viable approaches for setting a protective trash TMDL. Neither the State nor public commenters identified research or study results which provided an analytical basis for setting the TMDL at a level higher than zero at this time.
11. Monitoring Plan: EPA encourages states to identify monitoring plan and schedule for considering revisions to TMDLs that will be implemented over time.	Baseline monitoring program will collect watershed specific and land use representative data on trash generation for the first 2 years. The implementation plan requires a 10% reduction from the baseline trash quantity for the subsequent 12 implementation years. Compliance monitoring will help ensure that the WLAs are achieved.
12. Reasonable Assurances (for waters affected by both point and nonpoint sources): Where point source(s) receive less stringent wasteload allocations because nonpoint source reductions are expected and reflected in load allocations, record provides reasonable assurances that nonpoint implementation actions are sufficient to result in attainment of load allocations in a reasonable period of time. Reasonable assurances may be provided through use of regulatory, non-regulatory, or incentive based implementation mechanisms as appropriate.	This provision is not applicable because there are no point sources which receive less stringent wasteload allocations based on expected nonpoint source reductions.

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Staff Report Supporting Approval of TMDLs: Ballona Creek and Ballona Wetland, California, TMDLs for Trash July 30, 2002

Background

The Los Angeles Regional Water Quality Control Board (Regional Board) and California Water Resources Control Board (State Board) listed Ballona Creek and Ballona Wetland as water quality limited due to trash in California's 1998 Clean Water Act Section 303(d) list. Consistent with the requirements of Clean Water Act Section 303(d)(1), the Regional Board staff developed the TMDLs for these waters. These TMDLs were adopted by the Regional Board and the State Board on September 19, 2001 and February 19, 2002, respectively. Because the State of California was unable to complete adoption of these TMDLs by the March 22, 2002 consent decree deadline specified in *Heal the Bay, et al. v. Browner*, Northern District of California, C 98-4825 SBA, (March 22, 1999), EPA established TMDLs for trash for these waterbodies on March 19, 2002 in order to fulfill its obligations under the decree. The decree required EPA to establish these TMDLs if the State failed to adopt and submit the TMDLs in time to meet the deadline set in the decree. Because the State did not adopt and submit final TMDLs in time to meet the decree schedule, EPA was obliged to establish them at that time. EPA's TMDLs were based largely on the TMDLs for trash adopted by the Regional Board.

California adopted and submitted for EPA approval TMDLs for trash for Ballona Creek and Ballona Wetland on July 15, 2002. EPA is approving these TMDLs because they meet the requirements of Clean Water Act Section 303(d) and federal regulations at 40 CFR 130.2 and 130.7.

TMDL Review

EPA reviewed the State TMDL submittal package to ensure that all required TMDL elements have been adequately addressed. EPA's review is presented in the attached checklist, which determines that all required TMDL elements and an adequate level of technical justification for each element are included.

The TMDL submittal for Ballona Creek and Wetland includes TMDLs for the water body segments which were listed due to trash impairment on the 1998 Section 303(d) list.

In addition, the State's TMDLs include wasteload allocations for all urban stormwater discharges in the Ballona Creek watershed. These wasteload allocations cover stormwater discharges directly into the segments for which TMDLs are adopted as well as stormwater discharges to segments that are tributary to TMDL segments. The State's rationale for this wasteload allocation approach is that (1) trash discharges from all urban stormwater outlets in the Ballona Creek watershed flow downstream and contribute to impairment in the segments for which TMDLs were adopted, and (2) trash discharges from all stormwater outlets to waters tributary to TMDL waters need to be controlled in order to meet the TMDLs and

associated water quality standards (letter dated July 29, 2002). Moreover, the information compiled by the Regional Board indicates that most tributary streams are themselves impaired due to trash (see Staff Report, pp. 7, 11-12 and letter dated July 29, 2002). EPA concludes that this approach to setting wasteload allocations is permissible because the State has made a reasonable finding that it would be infeasible to meet the TMDLs without including all of the adopted wasteload allocations. Moreover, the State is authorized to adopt this approach because of the requirement in Clean Water Act Section 303(d)(1)(C) that TMDLs be established at levels necessary to implement applicable water quality standards. Absent controls on upstream sources, the State would lack the assurance that the TMDL for downstream waters would result in the attainment of water quality standards.

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TMDL Checklist

State: California

Pollutant(s): trash/litter

Waterbodies: Ballona Creek and Wetland Date of State Submission: July 15, 2002;

July 18, 2002, July 29, 2002

EPA Reviewer: Sharon Lin and David Smith

Review Criteria	Comments
1. Submittal Letter: Letter indicates final TMDL(s) for specific water(s)/pollutant(s) were adopted by state and submitted to EPA for approval under 303(d).	Letters dated July 15, 2002, July 18, 2002, July 29, 2002. TMDL was adopted by the Los Angeles Regional Water Quality Control Board (Regional Board) through resolution 01-014 on September 19, 2001, and by the State Water Resources Control Board (State Board) through resolution 2002-0039 on February 19, 2002. The TMDL was approved by the State Office of Administrative Law on July 18, 2002.
	The State adopted trash TMDLs for Ballona Creek (listed in the Basin Plan as Ballona Creek and Ballona Creek to estuary) and Ballona Wetland (letter dated July 29, 2002). These segments are listed on the 1998 CWA Section 303(d) list for trash (Staff Report p. 1).
	We note that the TMDL submission identified designated beneficial uses for each of the waters addressed in the TMDL and indicated that State water quality standards apply to each of them (TMDL Report, table 1, pp. 4-6).
2. Water Quality Standards Attainment: TMDL(s) and associated allocations are set at levels adequate to result in attainment of applicable standards.	TMDL Report, dated September 19, 2001 and Basin Plan Amendment Summary. The TMDLs are designed to implement the existing narrative water quality standards for Floating Material and Solid, Suspended, or Settleable Material in the Basin Plan for the Los Angeles Regional Water Quality Control Board (TMDL Report, p. 7). The State interpreted these narrative WQS to include trash and found that trash is settleable or floating material that causes impairment of designated beneficial uses (Staff Report, pp. 7-8). The State permissibly concluded that attainment of the specified numeric target and associated TMDLs, load allocations, and wasteload allocations, that call for the effective elimination of any trash discharges, will result in elimination of the adverse effects associated with trash in the water and bring about
	attainment of the applicable narrative standards.
3. Numeric Target(s): Submission describes applicable water quality standards, including	TMDL Report dated September 19, 2001, pp. 4-7, 11; and Basin Plan Amendment Summary. TMDLs

beneficial uses, applicable numeric and/or narrative criteria. Numeric water quality target(s) for TMDL identified, and adequate basis for target(s) as interpretation of water quality standards is provided.

implement narrative WQS for Floating Material and Solid, Suspended, or Settleable Material. The TMDL Report analysis concludes that excessive trash can adversely affect beneficial uses including recreation and aquatic habitat and that even small amounts of trash can cause adverse impacts (see TMDL Report, pp. 7-11). Based on the evidence that even a small quantity of trash could adversely affect beneficial uses, the State set a numeric target of zero trash in the Creek and wetland (see TMDL Report, pp. 11-12). The State's approach is a permissible and environmentally protective approach for accounting for uncertainty in the relationship between pollutant loading levels and attainment of water quality standards, as required by CWA Section 303(d)(1)(C), especially in the absence of information which supports establishment of a higher numeric target. The Regional Board TMDL document describes this approach in the numeric target, TMDL, and margin of safety sections (TMDL Report, Sections III and IV, see also transcript of proceedings, Regional Board public hearing, January 25, 2001, p. 11-13, September 19, 2001, p. 54-58).

EPA notes that littering and disposal of trash in waterways are already prohibited by local ordinances in the areas covered by these TMDLs.

4. Source Analysis: Point, nonpoint, and background sources of pollutants of concern are described, including the magnitude and location of sources. Submittal demonstrates all significant sources have been considered.

TMDL Report, pp. 7-12. The TMDL analysis considered existing information concerning the sources of trash impairing the Ballona Creek and wetland. Source analysis identifies all potential sources and determined that point source urban runoff is the dominant source of trash (Staff Report, pp. 11-12). The source analysis provides an effective basis for targeting trash generation in the watershed and appropriate controls to prevent the trash impairment in the watershed, and clearly provides a sound basis for baseline monitoring in order to obtain representative trash generation rate.

The problem statement and source analysis sections of the TMDL Staff Report indicated that trash also reaches water bodies through wind action and direct disposal (pp. 11-12). These sources are considered nonpoint sources because they are not the result of trash deposition in waterways through storm drains or other discharge points. The Staff Report indicates that trash is found in all reaches of the creek and its tributaries (Staff Report, p. 8 and letter dated July 29, 2002). 5. Allocations: Submittal identifies appropriate wasteload allocations for point sources and load allocations for nonpoint sources. If no point sources are present, wasteload allocations are zero. If no nonpoint sources are present, load allocations are zero.

TMDL Report, p. 12 and Basin Plan Amendment Summary, see also letter dated July 29, 2002. The TMDL includes both specific wasteload allocations and a general load allocation.

Wasteload Allocations

The basin plan amendment specifies the "wasteload allocations" for municipal permittees and Caltrans in table 7-3.2. The specific wasteload allocations apply to stormwater runoff regulated under stormwater NPDES permits for:

- Municipal permittees, including discharges regulated under the Los Angeles County stormwater permit
- Caltrans stormwater permit

Storm drains have been identified as the major source of trash in the Ballona Creek and wetland (Staff Report, pp. 11-12). Therefore, in order to meet the numeric target of zero, the TMDL concludes permissibly that final wasteload allocations for all stormwater discharges in the urbanized portion of the watershed as defined on page 3-4 of the staff report (see also letter dated July 29, 2002). This approach is permissible because the State found evidence that significant amounts of trash are discharged into waters that flow to the segments for which TMDLs are adopted. These trash discharges flow into the impaired segments; therefore, the State found it is necessary to adopt WLAs for all trash discharge sources in the urbanized portion of the watershed in order to ensure that the TMDLs and associated water quality standards can be attained.

Load Allocations

The basin plan amendment containing the TMDL decisions includes a table describing the elements of the adopted TMDLs (table 7-3.1). This table indicates the "load allocations" are "phased reduction for a period of 10 years, from existing baseline load to zero (0)." The load allocation is expressed as a gross allotment which applies to trash loading from windblown trash and direct deposit of trash to water bodies. Trash loading from nonpoint sources was found to be relatively insignificant in comparison with point source loadings (Staff report, p. 11 and letter dated July 29, 2002). The expression of the LA as a gross allotment is consistent with the provisions of 40 C.F.R. 130.2(g).

The TMDLs incorporate a phased approach to implementation of the TMDLs and associated allocations

(see Staff Report, sections VII-VIII).

Based on the information in the TMDL Report, Basin Plan Amendment, and clarifying letter of July 29, 2002, EPA concludes that the TMDLs include as appropriate wasteload and load allocations which are consistent with the TMDLs and with the provisions of the Clean Water Act and federal regulations. The State's TMDL acknowledges the presence of trash discharges from both point and nonpoint sources. "TMDL" is defined in the federal regulations as the sum of all wasteload allocations for point sources and load allocations for nonpoint sources and natural background (40 CFR 130.2(i)). There are no naturally occurring sources of trash because the State defines trash to include only "man-made litter" and excludes naturally occurring vegetation matter (Staff Report, p. 2). Therefore, the State has treated the load allocation as a gross allotment accounting for nonpoint sources of trash discharges, consistent with the provisions of 40 CFR 130.2(g). which suggests load allocations may be expressed as gross allotments. The State's TMDL focuses permissibly, and in EPA's view properly, on point source loadings of trash based on its finding that point source loadings are the dominant source of trash discharges to the water bodies.

6. Link Between Numeric Target(s) and Pollutant(s) of Concern: Submittal describes relationship between numeric target(s) and identified pollutant sources. For each pollutant, describes analytical basis for conclusion that sum of wasteload allocations, load allocations, and margin of safety does not exceed the loading capacity of the receiving water(s).

Because the numeric target, TMDL, and allocation are each zero trash in the Ballona Creek and wetland, it was unnecessary to provide a sophisticated linkage analysis or separate estimate of loading capacity. As described above, the TMDL analysis' conclusion that there is zero assimilative capacity for trash delivery to the Creek constitutes a permissible approach absent appropriate studies or research identifying the ability of aquatic life to tolerate trash identifying the level of trash which can be present while ensuring attainment of all designated beneficial uses of the Ballona Creek and wetland. Moreover, the record indicates that even at small quantities, trash/debris can have adverse environmental impact on aquatic life, wildlife, humans and the aesthetic enjoyment of the waterbody (Staff Report, pp. 7-8).

7. Margin of Safety: Submission describes explicit and/or implicit margin of safety for each pollutant.

Despite the State's efforts to identify research or study results which could assist in setting a non-zero numeric target and associated TMDL, no such studies were found in the preparation of this TMDL or provided by commenters. Given this key source of uncertainty, the analysis provides an implicit margin of safety by setting the TMDL at zero trash in the Creek and wetland. EPA considers this a permissible way of dealing with the fact that, on the one hand, there is very little quantifiable data

	on trash impact on the environment and no such information specific to the Ballona Creek and wetland, but on the other hand, there is clear indication in the record supporting the State's determination that small amounts of trash may result in significant adverse effects on aquatic life, wildlife, humans and the aesthetic enjoyment of the waterbody (Staff report, pp. 7-8, Response to Comments, September 7, 2001, p. 13).
8. Seasonal Variations and Critical Conditions: Submission describes method for accounting for seasonal variations and critical conditions in the TMDL(s)	The Source Analysis and Problem Statement sections describe seasonal variations in trash generation patterns. However, because the TMDL and numeric target are set at zero throughout the year, the TMDL adequately accounts for seasonal variations and critical conditions without need for detailed analysis.
9. Public Participation: Submission documents provision of public notice and public comment opportunity; and explains how public comments were considered in the final TMDL(s).	Regional Board documents: Regional Board Resolution 01-014, September 19, 2001; Notice of the hearings were published in the Los Angeles Times on June 21, 22, and 23, 2001 for September 13, 2001 hearing. The hearing was rescheduled for September 19, 2001 and notice of this change was published in the Los Angeles Times on September 6, 2001. Transcript of public hearings: September 19, 2001. Summary of response to comments on June 22, 2001 modifications to the draft Ballona Creek and wetland trash TMDL. In conjunction with Los Angeles River Trash TMDL, Regional Board conducted seven public workshops and ten meetings with individual stakeholders (meetings were held with each individual stakeholder who requested one). State Board documents: State Board Response to Comments received during the State Board Approval Process. Workshop on February 6, 2002. State Board Resolution 2002-0039 on February 19, 2002. The Regional Board and State Board both provided public notice and opportunities to comment on the TMDL through mailings to the Basin Plan mailing lists, by holding many public meetings, and by holding several public hearings to hear public comments on the TMDL. Several public comments were received in writing and in oral testimony. The State demonstrated how it considered these comments in its final decision by providing reasonably detailed responsiveness summaries which include responses to each comment.
10. Technical Analysis: Submission provides appropriate level of technical analysis supporting TMDL elements.	The TMDL analysis provides a thorough review and summary of available information about trash/debris impact and trash generation in the specific areas of concern. We conclude the State was reasonably diligent in its technical analysis of trash generation in the

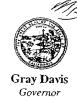
	watershed and its analysis of viable approaches for setting a protective trash TMDL. Neither the State nor public commenters identified research or study results which provided an analytical basis for setting the TMDL at a level higher than zero at this time.
11. Monitoring Plan: EPA encourages states to identify monitoring plan and schedule for considering revisions to TMDLs that will be implemented over time.	Baseline monitoring program will collect watershed specific and land use representative data on trash generation for the first 2 years. The implementation plan requires a 10% reduction from the baseline trash quantity for the subsequent 12 implementation years. Compliance monitoring will ensure that the WLAs are achieved.
12. Reasonable Assurances (for waters affected by both point and nonpoint sources): Where point source(s) receive less stringent wasteload allocations because nonpoint source reductions are expected and reflected in load allocations, implementation plan provides reasonable assurances that nonpoint implementation actions are sufficient to result in attainment of load allocations in a reasonable period of time. Reasonable assurances may be provided through use of regulatory, non-regulatory, or incentive based implementation mechanisms as appropriate.	This provision is not applicable because there are no point sources which receive less stringent wasteload allocations based on expected nonpoint source reductions.



Los Angeles Region

Winston H. Hickox Secretary for Environmental Protection

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TO:

David W. Smith

USEPA, Region IX

FROM:

Jonathan Bishop

DATE:

July 29, 2002

SUBJECT:

Los Angeles River Watershed and Ballona Creek Trash TMDLs

This memo is intended to provide clarification on specific aspects of the Los Angeles River Trash TMDL.

1. A TMDL was established for the reaches of the Los Angeles River, tributaries and lakes listed on the 1998 303(d) list as described on page 12, paragraph 3, of the staff report. In addition, a TMDL was established for the Los Angeles River estuary in the City of Long Beach. As described on page 12, paragraph 2 of the report, staff found that the impairment in the estuary due to trash is "even more acute in Long Beach where debris flushed down by the upper reaches collects."

The impairment in the estuary was well documented during TMDL development, as shown in the attached pictures taken from the banks of the estuary and the Long Beach Harbor. The Los Angeles River estuary would have been included in the 1998 303(d) list if the attached photographic evidence had been available at the time of the listing.

- 2. A TMDL was established for the Ballona Creek (listed in the Basin Plan as Ballona Creek and Ballona creek to estuary and for the Ballona Creek Wetlands.
- 3. As described in Section V of the staff report, both point sources and non-point sources of trash were identified. The identified point sources were the municipal storm drains that drain the urban portion of the watershed and the Caltrans storm drain system. As described on page 17, paragraph 3 of the staff report, urban runoff was determined to be the dominant source of trash, as evidenced by the amount of trash that accumulates at the base of the storm drains. Non-point sources were identified as wind blown trash and direct deposit of trash into the water. Since the numeric target is zero, implicitly both the Load Allocation and the Waste Load Allocation must be zero. This clearly was our intent. As described in Table 7-2.1 of the Basin Plan Amendment the "Load Allocations" are zero. However, as the non-point sources

California Environmental Protection Agency

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