

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER WQ 2020-XXXX

In the Matter of Review of

Approval of Watershed Management Programs and an Enhanced Watershed Management Program Submitted Pursuant to
Los Angeles Regional Water Quality Control Board Order R4-2012-0175

SWRCB/OCC FILES A-2386, A-2477 & A-2508

BY THE BOARD:

In this order, the State Water Resources Control Board (State Water Board) reviews the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) Executive Officer's approval of nine Watershed Management Programs (WMPs)¹ and one Enhanced Watershed Management Program (EWMP) pursuant to Order No. R4-2012-0175 (NPDES Permit No. CAS004001). Order No. R4-2012-0175 (modified in 2015 by Order WQ 2015-0075) regulates discharges of storm water and non-storm water from the municipal separate storm sewer systems (MS4s) located within the coastal watersheds of Los Angeles County, with the exception of the City of Long Beach MS4, and is hereinafter referred to as the "Los Angeles MS4 Order" or "the Order."² The WMPs and EWMP approved pursuant to the Los Angeles MS4 Order are collaborative watershed-based storm water control and pollution prevention plans.

¹ The contested WMPs were submitted by the Los Angeles River Upper Reach 2 Watershed Management Group, the Lower Los Angeles River Watershed Management Group, the Lower San Gabriel River Watershed Management Group, the City of El Monte, the Alamitos Bay/Los Cerritos Channel Watershed Management Group, the East San Gabriel Valley Watershed Management Group, the Los Cerritos Channel Watershed Management Group, the Santa Monica Bay Watershed Jurisdictional Group 7, and the City of Walnut. Of these nine WMPs, Petitioners made specific substantive objections to the Lower Los Angeles River WMP, the Lower San Gabriel River WMP, and the Los Angeles River Upper Reach 2 WMP.

The City of El Monte WMP, the Los Cerritos Channel WMP, the Lower Los Angeles River WMP, and the Lower San Gabriel WMP were updated in 2017 through the adaptive management process. Our references and citations to these plans are to their initial iterations, approved in 2015. While the updates in some instances altered the obligations of the Permittees in achieving certain of their milestones, they do not impact our analyses or conclusions. The versions of the WMPs approved in 2015 by the Executive Officer are available through the Los Angeles Water Board's website at https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/index.html [as of Apr. 10, 2019].

² On September 24, 2019, the Superior Court of Orange County issued a pair of judgments ordering the Los Angeles MS4 Order be set aside. (*City of Gardena, et al. v. State Water Resources Control Board, et al* (Super. Ct. Orange

December 6, 2019

We received one petition (the original WMP petition) and one petition addendum (the WMP petition addendum) (collectively referred to as “the WMP petition”) filed by the Natural Resources Defense Council, Inc., Heal the Bay, and Los Angeles Waterkeeper (Petitioners) challenging the Executive Officer’s approval of the WMPs on procedural and substantive grounds.³

We received two more petitions (the first⁴ and second⁵ EWMP petitions) filed by the Natural Resources Defense Council, Inc., and Los Angeles Waterkeeper challenging, respectively, the Los Angeles Water Board Executive Officer’s approval of the North Santa Monica Bay EWMP and the Los Angeles Water Board’s subsequent decision to take no further action to review that approval.

Almost every program discussed below is insufficient in some way. The problems include incomplete discussions and presentations of background information, insufficient analyses, and inadequate compliance schedules. To address these issues, we order the implementation of changes detailed herein. Failure to implement these changes in conformance with the schedule below will result in the disapproval of the WMPs and EWMP. In the meantime, in the interest of not prejudicing permittees who relied in good faith on different understandings of the Los Angeles MS4 Order’s requirements and on the approvals of the Los Angeles Water Board Executive Officer, we modify but do not entirely remove, except in three cases, the deemed-compliance statuses of the permittees implementing the programs

County, 2019, No. 30-2016-00833722-CU-WM-CJC; *The Cities of Duarte and Huntington Park, et al. v. State Water Resources Control Board* (Super. Ct. Orange County, 2019, No. 30-2016-00833614-CU-WM-CJC.) Those judgments followed a ruling concluding the Los Angeles MS4 Order contains numeric effluent limitations that are more stringent than what is required by federal law and that are not adequately supported by a Water Code section 13241 analysis. Upon petition, the Fourth District Court of Appeal granted a Writ of Supersedeas asking that the Superior Court’s judgment be stayed during the pendency of an appeal. As a result, the Los Angeles MS4 Order remains in effect.

Importantly, the Superior Court’s decision is not directly related to the controversy at hand - the Los Angeles Water Board Executive Officer’s approvals of nine WMPs and one EWMP. This order is not related to the numeric effluent limitations; rather, it follows-up on our Order WQ 2015-0075 outlining general principles for alternative compliance paths in municipal storm water permitting. Regardless of the outcome of the litigation surrounding the Los Angeles MS4 Order, it is important that we illustrate the level of rigor we expect in and provide guidance to the Regional Boards and municipalities on the implementation of alternative compliance approaches.

³ SWRCB/OCC Files A-2386; Original WMP petition, WMP petition addendum, and related documents available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/a2386_losangeles_wmp.shtml [as of Apr. 10, 2019].

⁴ SWRCB/OCC Files A-2477; petition available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/petitions/a2477petition.pdf [as of Apr. 10, 2019].

⁵ SWRCB/OCC Files A-2508; petition available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/petitions/a2508petition.pdf [as of Apr. 10, 2019].

discussed in this order. No deemed-compliance is afforded to the permittees implementing the Santa Monica Bay Jurisdictional Group 7 WMP, as it identifies no existing water quality issues in its jurisdictional area and, as a result, includes no reasonable assurance analysis and no compliance schedule. Neither the North Santa Monica Bay EWMP nor City of El Monte WMP contain compliance schedules that are adequate to demonstrate implementation progress. Therefore, until the identified issues are corrected, neither program justifies any grant of deemed-compliance for implementing permittees except, in the case of the North Santa Monica Bay EWMP, as it applies to the area addressed by the Legacy Park best management practice (BMP) sized in conformance with the Los Angeles MS4 Order's EWMP standards.

While the rest of the programs discussed below are insufficient, they contain enough detail and analysis to justify some continued deemed-compliance while carrying out the changes ordered below. We first identify appropriately addressed water body-pollutant combinations; for these, permittees have earned deemed-compliance contingent on continued implementation of their programs. We then identify those water body-pollutant combinations that permittees intended to address in their programs through a schedule designed for another water body-pollutant combination but for which such treatment was not sufficiently justified. We identify the shortcomings in the required analyses and allow the permittees to retain their deemed-compliance statuses for these combinations for six months from the date of this order's adoption, by which point the permittees must submit documentation to the Los Angeles Water Board Executive Officer demonstrating compliance with their 2017 milestones. Achievement of these milestones will allow the permittees an additional six months to continue receiving deemed-compliance for water body-pollutant combinations for which insufficient analyses were performed. Failure to demonstrate achievement of these milestones will result in a loss of deemed-compliance for every water body-pollutant combination addressed by the milestones. Failure to comply with WMP or EWMP milestones is a violation of the Los Angeles MS4 Order and subjects Permittees to potential enforcement. Permittees out of compliance with the water quality-based requirements of their WMPs may, however, at any time request time schedule orders or propose modifications to their WMPs for good cause. Permittees must, by 12 months from the date of this order's adoption, submit to the Los Angeles Water Board Executive Officer proposed changes to their programs to bring them into conformance with this order. These changes to the WMPs and all future amendments are subject to review by the Los Angeles Water Board and petition to the State Water Board. Starting within one year of the date of this order's approval and annually thereafter until all the programs addressed below are either updated to conform with this order or disapproved, we require the Los Angeles Water Board

Executive Officer to report to us on the progress of the Los Angeles Water Board, the WMP Groups, and the EWMP Group in complying with this order.

I. BACKGROUND

The Los Angeles MS4 Order regulates discharges from the MS4s operated by the Los Angeles Flood Control District, Los Angeles County, and 84 municipal permittees (Permittees) in a drainage area that encompasses more than 3,000 square miles and multiple watersheds. The Los Angeles MS4 Order was issued by the Los Angeles Water Board in accordance with section 402(p)(3)(B) of the Clean Water Act and sections 13263 and 13377 of the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) as a National Pollutant Discharge Elimination System (NPDES) permit to control storm water and non-storm water discharges that enter the area's water bodies from the MS4s owned or operated by the multiple governmental entities named in the Order. The Los Angeles MS4 Order superseded Los Angeles Water Board Order No. 01-182, and is the fourth iteration of the NPDES permit for MS4 discharges in the relevant area.⁶

The Los Angeles MS4 Order incorporates most of the pre-existing requirements of Order No. 01-182, including the water quality-based requirements to not cause or contribute to exceedances of water quality standards in the receiving water (receiving water limitations). The Los Angeles MS4 Order also requires Permittees to comply with water quality-based effluent limitations (WQBELs) and other requirements, most new, to implement 33 watershed-based total maximum daily loads (TMDLs) for the region (WQBELs and other TMDL-specific limitations).⁷ The Los Angeles MS4 Order links both of these sets of requirements to the

⁶ The Los Angeles MS4 Order as adopted on November 8, 2012 is at RB-AR1 et seq. of the administrative record. The administrative record was prepared by the Los Angeles Water Board and is available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/Consideration_of_petition/index.shtml [as of Apr. 10, 2019]. The Los Angeles Water Board has since amended the Los Angeles MS4 Order twice, on June 16, 2015, and September 8, 2016. The June 16, 2015, amendment incorporated changes we ordered in our Order WQ 2015-0075, discussed extensively below. We take official notice of the version of the Los Angeles MS4 Order as amended on June 16, 2015, and our references and citations to the Los Angeles MS4 Order are to this version. The amendment on September 8, 2016, which makes changes to the Order's implementation of the Los Angeles River Watershed Trash TMDL and the Ballona Creek Watershed Trash TMDL, is not reflected in this order because the changes are not relevant to our order. The June 16, 2015, version was not submitted as part of the administrative record prepared by the Los Angeles Water Board but is available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/la_ms4/2015/6948_R4-2012-0175_WDR_PKG_amd.pdf [as of Apr. 10, 2019].

⁷ Some of the TMDL limitations of the Los Angeles MS4 Order are expressed not as WQBELs but as standards to be met in the receiving water. The Los Angeles MS4 Order refers to these limitations as "receiving water limitations;" however, in order to avoid confusion with the general receiving water limitations in Part V.A, we will use the term "other TMDL-specific limitations." Accordingly, while the Los Angeles MS4 Order uses the term "receiving water limitations" to refer to both the receiving water limitations in Part V.A and some of the TMDL-based requirements in Attachments L-R, when we use the term we refer only to the receiving water limitations in Part V.A.

programmatic elements of the Order by allowing Permittees to comply with the water quality-based requirements, in part, by developing and implementing a WMP or an EWMP.

A. Order WQ 2015-0075: Upholding the Los Angeles MS4 Order’s Alternative Compliance Structure

Following adoption of the Los Angeles MS4 Order, we received 37 timely petitions challenging various provisions of the Los Angeles MS4 Order, in particular the provisions implementing TMDLs and integrating water quality-based requirements and watershed-based program implementation.⁸ A central aspect of the petitions was the appropriateness of the WMP/EWMP provisions as an “alternative compliance path” for meeting water quality requirements.

In precedential State Water Board Order WQ 99-05 (*Environmental Health Coalition*),⁹ we directed that all MS4 permits contain specific language that explains how the receiving water limitations will be implemented. The Los Angeles MS4 Order contained new provisions that authorized Permittees to develop and implement WMPs or EWMPs in lieu of requiring direct compliance with the receiving water limitations provisions generally and the WQBELs and other TMDL-specific limitations imposed on water bodies with TMDLs (which also have the goal of achieving water quality standards in the receiving water but in accordance with a compliance schedule). We addressed the validity of these new provisions as well as other issues in Order WQ 2015-0075.¹⁰ The portions of Order WQ 2015-0075 relevant to this order are summarized below.

1. Engaging in the Iterative Process Does Not, By Itself, Constitute Compliance with Receiving Water Limitations

The Los Angeles MS4 Order’s receiving water limitations provisions, consistent with our direction in Order WQ 99-05, provide, in part, as follows:

V.A. Receiving Water Limitations

⁸ SWRCB/OCC Files A-2236 (a)-(kk); petitions and related documents available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/a2236_la_ms4_order.shtml [as of Apr. 10, 2019].

⁹ State Water Board Order WQ 99-05, at https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/1999/wq1999_05.pdf [as of Apr. 10, 2019].

¹⁰ State Water Board Order WQ 2015-0075, at https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2015/wqo2015_0075.pdf [as of Apr. 10, 2019].

1. Discharges from the MS4 that cause or contribute to the violation of receiving water limitations are prohibited.
2. Discharges from the MS4 of storm water, or non-storm water, for which a Permittee is responsible [footnote omitted], shall not cause or contribute to a condition of nuisance.
3. The Permittees shall comply with Parts V.A.1 and V.A.2 through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the storm water management program and its components and other requirements of this Order including any modifications¹¹

Petitions filed by Permittees argued that the above language should be understood to mean that good faith engagement in the requirements of Part V.A.3, traditionally referred to as the “iterative process,” constituted compliance with Parts V.A.1 and V.A.2. We disagreed and stated, “the iterative process . . . does not provide a ‘safe harbor’ to MS4 dischargers. When a discharger is shown to be causing or contributing to an exceedance of water quality standards, that discharger is in violation of the permit’s receiving water limitations and potentially subject to enforcement . . . , regardless of whether or not the discharger is actively engaged in the iterative process.”¹²

However, we recognized that this position may result in many years of permit noncompliance due to the time and effort it may take to achieve compliance with receiving water limitations. This concern is mitigated by the WMP/EWMP provisions of the Los Angeles MS4 Order.

2. The WMP and EWMP Provisions of the Los Angeles MS4 Order Provide a Well-Defined, Transparent, and Finite Alternative Compliance Path to Permit Compliance

The Los Angeles MS4 Order’s WMP/EWMP provisions allow Permittees to choose an integrated, watershed-based approach to meeting the Order’s requirements, including the water quality limitations, by developing a plan, either collaboratively or individually, that addresses water quality priorities within a watershed. By complying with these provisions during the development and implementation of a WMP or EWMP, Permittees are deemed in compliance with the Order’s receiving water limitations and WQBELs and other TMDL-specific

¹¹ Los Angeles MS4 Order, Part V.A, p. 38.

¹² State Water Board Order WQ 2015-0075, p. 12.

limitations. By deeming Permittees in compliance with the above receiving water limitations provisions, Permittees are provided with regulatory certainty and can design long-term, forward-looking plans unique to their jurisdictions, with locally tailored pollution controls and the opportunity to efficiently allocate their limited funds in ways that are calculated to achieve long-term benefits. Deemed-compliance is not a right; it is an accommodation based on the time and effort required to undertake the complex planning and implementation efforts needed to improve water quality. It is meant to encourage significant investment in collaborative regional- and watershed-based BMP implementation, leading eventually to all receiving waters meeting final receiving water limitations.

To begin the WMP/EWMP development process, water quality issues are prioritized within each watershed. Permittees may use the WMP/EWMP to address water body-pollutant combinations for which a TMDL has been developed, giving highest priority to those with interim and final compliance deadlines within the Order's term. Permittees may additionally address water body-pollutant combinations for which no TMDL has been developed, but where the water body is impaired or shows exceedances of the standards for the relevant pollutant from an MS4 source. Once prioritization is complete, Permittees assess the sources of the pollutants and select watershed strategies designed to eliminate pollutant-contributing non-storm water discharges to the MS4 and to ensure all applicable WQBELs and other TMDL-specific limitations are met pursuant to corresponding compliance schedules discharges from the MS4 do not cause or contribute to exceedances of receiving water limitations.

Except as described below for storm water retention projects, Permittees conduct a "reasonable assurance analysis" (RAA) for each water body-pollutant combination addressed by a WMP/EWMP to demonstrate the ability of the program to meet those objectives. Permittees additionally implement an integrated monitoring and assessment program to evaluate progress, adapting strategies and measures as necessary.¹³

In addition to all the requirements above, Permittees that choose to develop and implement an EWMP must, individually or collaboratively, implement multi-benefit regional projects and, wherever feasible, retain all non-storm runoff, as well as all storm water runoff from the 85th percentile, 24-hour storm event (hereinafter "storm water retention approach") for the drainage areas tributary to the projects.¹⁴ While the Permittees must include an RAA that addresses "drainage areas within the EWMP area where retention of the 85th percentile 24-hour

¹³ Los Angeles MS4 Order, Part VI.C, pp. 47-70.

¹⁴ Los Angeles MS4 Order, Part VI.C.1.g, pp. 49-50.

storm event is not feasible,”¹⁵ no RAA is required to address those drainage areas where such retention is feasible.¹⁶ This approach is designed to incentivize public projects requiring investment of significant magnitude and achieving benefits beyond water quality, including water supply, that would not otherwise be implemented.¹⁷

The primary controversy regarding the WMP/EWMP provisions raised in the 37 petitions challenging the Los Angeles MS4 Order was the manner in which they interact with the receiving water limitations provisions and the WQBELs and other TMDL-specific limitations. Under conditions detailed in the Los Angeles MS4 Order and summarized in the following list, Permittees developing and implementing a WMP or EWMP may be deemed in compliance with receiving water limitations provisions and WQBELs and other TMDL-specific limitations, without demonstrating that these limitations are actually being achieved.

1. Permittees that develop and implement a WMP/EWMP approved by the Los Angeles Water Board and fully comply with all requirements and dates of achievement for the WMP/EWMP as established in the Los Angeles MS4 Order are deemed to be in compliance with the receiving water limitations in Part V.A for the water body-pollutant combinations addressed by the WMP/EWMP.¹⁸
2. Permittees fully in compliance with the requirements and dates of achievement of the WMP/EWMP are deemed in compliance with the *interim* WQBELs and other TMDL-specific limitations in Attachments L-R for the water body-pollutant combinations addressed by the WMP/EWMP.¹⁹
3. Permittees implementing an approved EWMP and utilizing the storm water retention approach in a drainage area tributary to the applicable water body are deemed in compliance with the *final* WQBELs and other TMDL-specific limitations in Attachments L-R for the water body-pollutant combinations addressed by the storm water retention approach.²⁰

¹⁵ Los Angeles MS4 Order, Part VI.C.1.g, p. 49.

¹⁶ State Water Board Order WQ 2015-0075, pp. 42-43.

¹⁷ State Water Board Order WQ 2015-0075, p. 44.

¹⁸ Los Angeles MS4 Order, Part VI.C.2.b, p. 53.

¹⁹ Los Angeles MS4 Order, Parts VI.C.3.a, p. 54 & VI.E.2.d.i.(4), pp. 146-47. The Los Angeles MS4 Order establishes separate requirements for Trash TMDLs; the WMP/EWMP are not a means of achieving compliance with the Trash TMDL provisions. (See Part VI.E.5, pp. 147-154.) References to TMDLs in this section of this Order exclude the Trash TMDLs.

²⁰ Los Angeles MS4 Order, Part VI.E.2.e.i.(4), p. 148. As with Part VI.E.2.d.i.(4), this Part does not apply to Trash TMDLs. A Permittee's deemed compliance with final WQBELs and other TMDL-specific limitations is not guaranteed indefinitely. "Where[, after full implementation of the EWMP,] there is still a gap in needed water quality improvement, we expect the Executive Officer of the Los Angeles Water Board to require appropriate actions, consistent with the provisions of the Los Angeles MS4 Order and the Los Angeles Water Board's stated interpretation of those provisions,

4. Because the Order additionally provides that full compliance with the general TMDL requirements in Part VI.E and the WQBELs and other TMDL-specific limitations in Attachments L through R constitutes compliance with the receiving water limitations in V.A for the specific pollutants addressed by the relevant TMDL,²¹ compliance with provisions 2 and 3 above also constitutes compliance with the receiving water limitations for the particular water body-pollutant combinations.
5. Finally, Permittees that have declared their intention to develop a WMP/EWMP may be deemed in compliance with receiving water limitations and with interim WQBELs and other TMDL-specific limitations with compliance deadlines occurring prior to approval of the WMP/EWMP if they meet certain conditions during the development phase.²²

Following a review of the WMP/EWMP provisions, we found that with some modifications they were designed to ensure the appropriate rigor, transparency, and accountability, and that they are designed to ultimately achieve receiving water limitations and WQBELs and other TMDL-specific limitations. We upheld the Los Angeles MS4 Order, with relatively minor modifications.

We emphasized in our order that any alternative compliance path should “encourage watershed-based approaches, address multiple contaminants, . . . incorporate TMDL requirements,” “encourage the use of green infrastructure and the adoption of low impact development principles,” and require Permittees, “through a transparent process, to show that they have analyzed the water quality issues in the watershed, prioritized those issues, and proposed appropriate solutions.”²³ We further stated that Permittees should be required, “again through a transparent process, to monitor the results and return to their analysis to verify assumptions and update the solutions.”²⁴ We found the Los Angeles MS4 Order provisions required the development of WMPs with the rigor and accountability we expected. We declined, however, to review the WMPs, which had been newly conditionally approved by the Executive Officer. Our 2014-2015 review of the Los Angeles MS4 Order did not extend to a review of the implementation of that permit. We declined to take official notice of or supplement

[footnote omitted] to close that gap with additional control measures in order for the Permittee to be considered in compliance with the WQBEL or other TMDL-specific limitations.” (State Water Board Order WQ 2015-0075, p. 45.)

²¹ Los Angeles MS4 Order, Part VI.E.2.c.ii, p. 146.

²² Los Angeles MS4 Order, Part VI.C.2.d, pp. 53-54.

²³ State Water Board Order WQ 2015-0075, p. 52.

²⁴ State Water Board Order WQ 2015-0075, pp. 51-52.

the record with submissions related to WMP development and approval, stating that “with regard to factual evidence regarding actions taken by Permittees to comply with the Los Angeles MS4 Order after it was adopted, we believe it appropriate to close the record with the adoption of the Los Angeles MS4 Order.”²⁵ We continued:

[W]e are keenly aware that the success of the Los Angeles MS4 Order in addressing water quality issues depends primarily on the careful and effective development and implementation of programs consistent with the requirements of the Order.²⁶

Our task now is to determine whether the approved programs are in fact clear, enforceable documents, with appropriate analyses and schedules, warranting the conclusion that Permittees are in compliance with the WMP/EWMP provisions of the Los Angeles MS4 Order and should therefore be deemed in compliance with receiving water limitations and WQBELs and other TMDL-specific limitations. The WMPs and EWMPs must in particular be clear as to which components constitute definite, enforceable benchmarks, such that failure to achieve those components means that Permittees are *not* fully implementing the program and must instead comply immediately with receiving water limitations and WQBELs and other TMDL-specific limitations. We review the WMP petition and EWMP petition with these purposes in mind. While we will address specific challenges raised by Petitioners,²⁷ the ultimate metric of the WMPs’ and EWMP’s sufficiency will be whether the WMPs and EWMP comply with the Order and thus set out clear, enforceable commitments for structural and non-structural improvements designed to achieve applicable water quality requirements.

²⁵ State Water Board Order WQ 2015-0075, p. 7.

²⁶ State Water Board Order WQ 2015-0075, p. 7.

²⁷ Petitioners heavily rely on Los Angeles Water Board staff comments on the draft WMPs and a purported lack of responsive revisions in the final WMPs to argue that the WMPs do not comply with applicable requirements. We consider Petitioners’ arguments as to whether a staff comment was fully addressed, but do not limit our analysis to such consideration. A major reason for the perceived lack of responsiveness is the frequent lack of a clear progression from comment to WMP content because, in many cases, Los Angeles Water Board staff concluded their “comment was better addressed through an explanation, an alternative approach to address the issue, or a commitment to data collection under the [CIMPs] of this new Permit, and the adaptive management provisions” (Renee Purdy, address to Los Angeles Regional Water Quality Control Board (Sept. 10, 2015) Consideration of Petition for Review of the Executive Officer’s Action to Approve, with conditions, Nine Watershed Management Programs pursuant to the Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit, Order No. R4-2012-0175 (Los Angeles Water Board Hearing on Original WMP Petition), pp. 250:7-250:11.) For that reason, a comment may have been addressed to the Los Angeles Water Board’s satisfaction despite the WMP not appearing directly responsive to the staff comment. Of course, “[w]e expect regional water board members to formulate their own solutions when appropriate.” (State Water Board Order WQ 2013-0101, p. 12.) Staff comments are not binding on the final Water Board decision and do not necessarily reflect the views of a Water Board or its Executive Officer. An unaddressed staff comment is not by itself an indication that a WMP has failed to satisfy the Los Angeles MS4 Order’s requirements.

B. The Los Angeles Water Board Executive Officer's Approval of Nine Watershed Management Programs and the Subsequent Filing of The WMP Petition

The Los Angeles MS4 Order was adopted on November 8, 2012, and became effective on December 28, 2012. Drafts of the nine contested WMPs were submitted in June 2014.²⁸ The Los Angeles Water Board released comments on the drafts in October 2014. Permittees submitted revised WMPs in January 2015. In March 2015, Petitioners submitted a letter (Petitioners' comment letter) to the Los Angeles Water Board commenting on perceived failures of the Lower Los Angeles River (LLAR), Lower San Gabriel River (LSGR), and Los Angeles River Upper Reach 2 (LAR UR2) WMPs to address staff comments. On April 28, 2015, the Los Angeles Water Board Executive Officer conditionally approved the nine WMPs. Permittees submitted final drafts of the nine WMPs from May 28, 2015, to June 12, 2015. The Executive Officer issued approval confirmations from June 21, 2015, to August 13, 2015. In the interim, on June 16, 2015, we adopted Order WQ 2015-0075.²⁹

On May 28, 2015, between the Los Angeles Water Board Executive Officer's conditional approvals and approval confirmations, Petitioners filed the original WMP petition challenging the Executive Officer's conditional approvals with both the State Water Board and the Los Angeles Water Board.³⁰ Petitioners submitted a request to place the original WMP petition as filed with the State Water Board in abeyance on August 24, 2015. This request was granted on September 17, 2015, effective as of August 24, 2015.

The original WMP petition challenged the conditional approvals of the nine WMPs as procedurally unlawful and, as to the three WMPs identified in their comment letter, substantively deficient.³¹ The original WMP petition concludes that the only lawful course for the Executive Officer was to deny the WMPs.³² Following review of the original WMP petition, Los Angeles Water Board staff issued a response addressing both the contentions in the original

²⁸ The required schedule for WMP development is contained in the Los Angeles MS4 Order, Table 9, p. 55.

²⁹ WMPs, Petitioners' comment letter, and related documents are available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/index.shtml [as of Apr. 10, 2019].

³⁰ Memorandum of Points and Authorities in Support of Petition for Review of Los Angeles Regional Water Quality Control Board Executive Officer's Action to Conditionally Approve Nine WMPs Pursuant to the L.A. County MS4 Permit (May 28, 2015) (Original WMP Petition); available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2386/a2386petition.pdf [as of Apr. 10, 2019].

³¹ For Petitioners' procedural objections to the conditional approval, see Original WMP Petition, pp. 6-11. For Petitioners' substantive objections to the three named WMPs, see Original WMP Petition, pp. 11-15. Petitioners made clear that they believe similar deficiencies exist with the other six WMPs. (Original WMP Petition, p. 11, fn. 38.)

³² Original WMP Petition, p. 5.

WMP petition and the alleged deficiencies identified in Petitioners' comment letter.³³ On September 10, 2015, the Los Angeles Water Board ratified the Executive Officer's approval confirmations of the nine WMPs at a public hearing.

Following a conversation with the State Water Board's Office of Chief Counsel,³⁴ Petitioners filed the WMP petition addendum with the State Water Board.³⁵ The WMP petition addendum generally updated the original WMP petition to respond to the Los Angeles Water Board staff response. We deemed the WMP petition complete by letter dated November 10, 2015.

On June 17, 2016, we proposed an own motion order regarding the WMP petition for the purposes of allowing us more time to fully consider the merits and to clear any procedural objections regarding the filing of the WMP petition addendum. Following receipt of comments, the own motion order was adopted at a State Water Board meeting on July 19, 2016.³⁶ That same day, Petitioners both requested the WMP petition be placed in abeyance and granted the State Water Board a 60-day extension for its consideration of the WMP petition.

C. The Los Angeles Water Board Executive Officer's Approval of the North Santa Monica Bay EWMP and the Subsequent Filing of the EWMP Petitions

On June 27, 2013, the North Santa Monica Bay Coastal Watersheds EWMP Group (NSMB Group), which includes the City of Malibu, Los Angeles County, and the Los Angeles County Flood Control District, submitted its Notice of Intent to develop an EWMP. A draft plan was submitted on June 29, 2015. On January 19, 2016, and then on April 1, 2016, the NSMB Group submitted revised draft EWMPs. The final EWMP was submitted on April 7,

³³ Staff Response to Petition for Review of Executive Officer's approval, with conditions, of nine WMPs (Sept. 2, 2015); available at [https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/Consideration_of_petition/Item16_PetitionResponse\(final\).pdf](https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/Consideration_of_petition/Item16_PetitionResponse(final).pdf) [as of Apr. 10, 2019].

³⁴ After learning of this exchange, a set of Permittees filed a Public Records Act request on February 1, 2016. Responsive documents were transmitted on February 26, 2016. The request and the responsive documents are available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/a2386_losangeles_wmp.shtml [as of Apr. 10, 2019].

³⁵ Addendum for Petition for Review of Los Angeles Regional Water Quality Control Board Executive Officer's Action to Conditionally Approve Nine WMPs Pursuant to the L.A. County MS4 Permit (Oct. 30, 2015) (WMP Petition Addendum); available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2386/petition_addendum_103015_final.pdf [as of Apr. 10, 2019].

³⁶ State Water Board Order WQ 2016-0077, at https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2016/wqo2016_0077.pdf [as of Apr. 10, 2019].

2016.³⁷ The Los Angeles Water Board’s Executive Officer approved the final EWMP on April 19, 2016.³⁸

Following this approval, Petitioners filed the first EWMP petition on May 19, 2016, with both the Los Angeles Water Board and the State Water Board.³⁹ This petition alleged that the Executive Officer’s approval of the EWMP was unlawful because the EWMP failed to appropriately comply with the State Water Board’s regulations concerning discharges into Areas of Special Biological Significance (ASBS) by failing to appropriate incorporate storm water and non-storm water standards and consider relevant, available storm water and non-storm water data. As will be discussed in more detail, discharges into ASBS are allowed only in certain circumstances, including when in compliance with Attachment B of State Water Board Resolution No. 2012-0012, the Special Protections for Areas of Special Biological Significance, Governing Point Source Discharges of Storm Water and Nonpoint Source Waste Discharges (hereinafter referred to as the “General Exception”).⁴⁰ ASBS cover much of the length of California’s coastal waters. They support an unusual variety of aquatic life, and often host unique individual species. The General Exception contains a non-storm water discharge prohibition, a requirement that Permittees not alter natural ocean water quality, monitoring requirements, and a requirement to submit and update, as needed, an ASBS Compliance Plan subject to approval by the State Water Board’s Executive Director or the Executive Officer of the appropriate regional water quality control board (referred to hereinafter as “regional board”). On August 5, 2016, Petitioners requested that the first EWMP petition be placed in abeyance with the State Water Board while the Los Angeles Water Board determined whether it would address the petition’s merits.

³⁷ North Santa Monica Bay Coastal Watersheds EWMP Group, Enhanced Watershed Management Program (EWMP) for North Santa Monica Bay Coastal Watersheds (March 2016) (NSMB EWMP); available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/consideration_of_petition/nsm_adminrecord/Section20aNSMBCWEWMP_March2016-April716final.pdf [as of Apr. 10, 2019].

³⁸ Samuel Unger, Approval of the North Santa Monica Bay Watershed Management Group’s Enhanced Watershed Management Program (EWMP), Pursuant to Part VI.C of the Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit (NPDES Permit No. CAS004001; Order No. R4-2012-0175) (Apr. 28, 2015), available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/consideration_of_petition/nsm_adminrecord/Section21merged.pdf [as of Apr. 10, 2019].

³⁹ SWRCB/OCC File A-2477; petition available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/petitions/a2477petition.pdf [as of Apr. 10, 2019].

⁴⁰ State Water Board Resolution 2012-0012, Special Protections for Areas of Special Biological Significance, Governing Point Source Discharges of Storm Water and Nonpoint Source Waste Discharges (2012) (General Exception); available at https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2012/rs2012_0031.pdf [as of Apr. 10, 2019].

On August 18, 2016, Petitioners requested that the Los Angeles Water Board use separate counsel for itself and for the staff involved with the development and Executive Officer's approval of the EWMP while considering whether to address the petition on its merits, claiming that a lack of separation between the Board attorney's adjudicative and advisory functions threatened their due process rights, contravened the Administrative Procedure Act, and violated California common law.⁴¹

On August 29, 2016, Los Angeles Water Board staff responded to the first EWMP petition, rejecting Petitioners' substantive claims and not addressing the request for separate counsel. On September 7, 2016, the Los Angeles Water Board voted to take no further action to review their Executive Officer's approval of the North Santa Monica Bay EWMP. This led to the filing of the second EWMP petition with the State Water Board on October 7, 2016. This petition was finalized on October 14, 2016, with a Notice of Errata to correct clerical errors and simplify references to the second EWMP petition's exhibits. On January 5, 2017, we sent Petitioners a notice that both EWMP petitions were complete and the first EWMP petition would be removed from abeyance and consolidated for review with the second EWMP petition, as Petitioners requested. We notified Petitioners that, because all the issues raised in the first EWMP petition are contained in the second EWMP petition, we would treat the second EWMP petition as the operative petition for the purposes of requesting responses and the administrative record. The administrative record was submitted on February 23, 2017.

The second EWMP petition repeated the allegations of the first EWMP petition while adding claims related to the Petitioners' request for separate counsel; specifically, Petitioners allege that the Los Angeles Water Board denied Petitioners a fair hearing, failed to separate their adjudicative and advisory functions, failed to comply with the Administrative Procedures Act and California case law, failed to provide proper notice of their September 7, 2016, meeting, and applied an inappropriate standard of review. For simplicity, we refer to the first and second EWMP petitions generally as "the EWMP petition" from this point on, except where specifically noted.

Both petitions were placed in abeyance for two years on October 2, 2017, at the request of Petitioners. By this order, we consolidate the EWMP petition with the WMP petition.

⁴¹ E-mail from Arthur S. Pugsley, Los Angeles Waterkeeper, to Jennifer Fordyce (July 29, 2016); available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/Consideration_of_petition/nsm_adminrecord/Section26merged.pdf [as of Apr. 10, 2019].

We address the issues raised by the WMP petition first and then move on to the issues raised by the EWMP petition.

II. WMP PETITION ISSUES AND FINDINGS

The WMP petition raises dozens of issues, procedural and substantive, with the nine WMPs approved by the Los Angeles Water Board's Executive Officer. This order addresses the most significant points. To the extent Petitioners raised issues that are not discussed in this order, such issues are dismissed as not raising substantial issues appropriate for State Water Board review.⁴²

Before proceeding to the merits of the WMP petition, we will resolve several procedural issues.

Request to Take Official Notice

We received a request from the Los Angeles Water Board to take notice of four documents not in the administrative record of the WMP petition (hereinafter WMP Administrative Record).⁴³ We reviewed the request with consideration of whether the documents were appropriate for notice based on the legal standards governing our proceedings.⁴⁴ Finding that they do, we grant the request with regard to all documents, each of which constitutes an official act of an executive department of either the United States or California.⁴⁵

1. The Los Angeles Water Board's minutes from its September 10, 2015 Board Meeting;⁴⁶
2. Resolution No. R14-005, "Delegation of Authority to the Executive Officer";⁴⁷
3. Chapter 6 (Procedures for Review and Revision of Water Quality Standards) of the United States Environmental Protection Agency's (USEPA's) Water Quality Standards Handbook;⁴⁸

⁴² *People v. Barry* (1987) 194 Cal.App.3d 158, 175-77; *Johnson v. State Water Resources Control Bd.* (2004) 123 Cal.app.4th 1107, 1114; Cal. Code Regs., tit. 23, § 2052, subd. (a)(1).

⁴³ Los Angeles Water Board Request for State Water Board to Take Official Notice of or Accept as Supplemental Evidence Exhibits A through D (January 15, 2016) (Los Angeles Water Board Request for Official Notice); available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2386/comments011516/larwqcb_ntc.pdf [as of Apr. 10, 2019].

⁴⁴ For official notice see Cal. Code Regs., tit. 23 § 648.2; Gov. Code, § 11515; Evid. Code, § 452.

⁴⁵ Evid. Code, § 452, subd. (c).

⁴⁶ Los Angeles Water Board Request for Official Notice, Exh. A. These minutes were inadvertently omitted from the administrative record for the WMP petition. (Los Angeles Water Board Request for Official Notice, p. 2.)

⁴⁷ Los Angeles Water Board Request for Official Notice, Exh. B.

⁴⁸ Los Angeles Water Board Request for Official Notice, Exh. C.

4. Letter, dated July 7, 2015, from Thomas Howard, Executive Director of the State Water Board, to Ron Milligan, U.S. Bureau of Reclamation, approving, with conditions, the June 25, 2015 Sacramento River Temperature Management Plan.⁴⁹

On November 4, 2016, we received another request for official notice, this time from Petitioners. Petitioners requested that the State Water Board take official notice of *Natural Resources Defense Council et al vs. County of Los Angeles et al.*, No. 15-55562 (9th Cir., Oct. 31, 2016), arguing that it “confirms one of [Petitioners’] central arguments concerning the [WMP] approvals: the failure of the WMPs to ensure compliance with receiving water limitations if made contingent on funding that is uncertain at best.”⁵⁰ We grant Petitioners’ request. As we address later in this order, we disapprove of any language in the WMPs that could be read to create a funding-contingent obligation, as has the Los Angeles Water Board, and no such language is given any effect.

Request to Supplement WMP Petition Addendum

We received a request from Petitioners to supplement the WMP petition addendum with citations to the Certified Transcript of the September 10, 2015, Board Meeting when it became available. We reviewed the request with consideration of whether it was appropriate for admission based on the legal standards governing our proceedings.⁵¹ We granted this request and, on February 8, 2016, Petitioners submitted the supplement. We posted it on the State Water Board’s website the following day.⁵²

Motion to Reject the Original WMP Petition and WMP Petition Addendum

A group of Permittees⁵³ filed a motion on January 8, 2016, urging the State Water Board to reject Petitioners’ original WMP petition as moot and WMP petition addendum

⁴⁹ Los Angeles Water Board Request for Official Notice, Exh. D.

⁵⁰ Request for Official Notice of *Natural Resources Defense Council et al. vs. County of Los Angeles et al.*, No. 15-55562 (9th Cir., Oct. 31, 2016) (Nov. 4, 2016); available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2386/rqst_ntc_a2386_111016.pdf [as of Apr. 10, 2019].

⁵¹ For admission of supplemental evidence see Cal. Code Regs., tit. 23, § 2050.6.

⁵² Notice of Submission of Record Citations for Petition Addendum of Natural Resources Defense Council, Inc., Los Angeles Waterkeeper, and Heal the Bay for Review of Watershed Management Program Approvals (February 8, 2016); available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2386/nrdc_pa_reccites.pdf [as of Apr. 10, 2019].

⁵³ Four members of the LSGR Group (Artesia, La Mirada, Norwalk, and Pico Rivera), one member of the LLAR Group (the City of Signal Hill), and two members of the LAR UR2 Group (the Cities of Bell Gardens and Huntington Park).

as untimely and new.⁵⁴ Petitioners filed a response to this motion on January 29, 2016.⁵⁵ For the following reasons, we decline to reject the original WMP petition and WMP petition addendum and will instead address their merits.

The Permittees claim the original WMP petition objecting to the Executive Officer's conditional approvals is moot because the Executive Officer subsequently issued approval confirmations for the nine WMPs.⁵⁶ First, we note that the doctrine of mootness itself does not apply here because our own motion review allows us to review whatever elements of a regional board's action or inaction we choose.⁵⁷ Even if the doctrine were applicable, however, the WMP petition would not be moot. "A case is moot when any ruling . . . can have no practical impact or provide the parties effectual relief."⁵⁸ That is not the case here. If we agree the conditional approvals were unlawful, we could disapprove the WMPs in whole or in part, find that the Permittees were not protected by the Los Angeles MS4 Order's alternative compliance provisions, or order modifications to the WMPs. Further, even if the WMP petition were moot, it would qualify for a mootness exception for controversies capable of repetition yet evading review.⁵⁹ Given our direction in Order WQ 2015-0075 that other regional water boards follow the Los Angeles MS4 Order's alternative compliance example, this controversy is capable of repetition and, due to the possibility of a very short window between conditional and final approvals, may evade review on subsequent challenges.⁶⁰

The Permittees next argue that because the WMP petition addendum seeks to overturn the Los Angeles Water Board's September 10, 2015, ratification of the Executive

⁵⁴ Motion and Supporting Memorandum to Reject as Untimely and Moot Challenge Filed by Natural Resources Defense Council, Inc., Los Angeles Waterkeeper, and Heal the Bay to Los Angeles Water Board Decision on WMPs (January 8, 2016) (Motion to Reject); available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2386/comments011516/cities_mtn.pdf [as of Apr. 10, 2019].

⁵⁵ Petitioners' Opposition to Motion to Reject Addendum as Untimely and To Dismiss Petition of Natural Resources Defense Council, Inc., Los Angeles Waterkeeper, and Heal the Bay for Review of Watershed Management Program Approvals as Moot (January 29, 2016) (Opposition to Motion to Reject); available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2386/pttnr_mtn_rspns.pdf [as of Apr. 10, 2019].

⁵⁶ Motion to Reject, p. 10.

⁵⁷ Wat. Code, § 13320, subd. (a); Cal. Code Regs. tit. 23, § 2050.5, subd. (c).

⁵⁸ *Woodward Park Homeowners Association v. Garreks, Inc.* (2000) 77 Cal.App.2d 880, 888.

⁵⁹ *People v. Alsafar* (2017) 8 Cal.App.5th 880, 883.

⁶⁰ The City of Claremont suggests that because Petitioners made no specific substantive objections to the East San Gabriel Valley WMP, it would be improper for the State Water Board to render a decision impacting it. We are empowered to and we do in this order changes to the six WMPs to which no substantive challenges were made. The State Water Board's authority to review issues on its own motion, which has been exercised here, allows the State Water Board to review those issues not explicitly raised in a petition and issues not raised in a petition at all. (See Wat. Code, § 13320, subd. (a); Cal. Code Regs., tit. 23, § 2050.5, subd. (c).)

Officer's April 28, 2015, conditional approvals,⁶¹ rather than the conditional approvals themselves as in the original WMP petition,⁶² it is a new petition entirely and, because it was not filed by October 10, 2015, it is untimely.⁶³ We disagree. The core issue - the lawfulness of the Executive Officer's approval of the WMPs - is the same. Petitioners' procedural and substantive objections from the original WMP petition and Petitioners' comment letter have carried over to the WMP petition addendum.⁶⁴ To the extent that Petitioners raise new objections to the contents of the WMPs,⁶⁵ we are free to consider those per our own motion authority.⁶⁶ Lastly, the WMP petition addendum is not untimely. We approved Petitioners' filing of an addendum that would supplement the original WMP petition by updating it in response to the Los Angeles Water Board's decision. On September 24, 2015, counsel for the Natural Resources Defense Council, Inc., sent a letter to the State Water Board's Office of Chief Counsel memorializing a telephone conversation in which an attorney for the Office of Chief Counsel indicated that such an update would be permitted.⁶⁷ This understanding was confirmed via email by the Office of Chief Counsel on September 28, 2015.⁶⁸

Petitioners' Color-Coded Deficiency Table

Petitioners listed Los Angeles Water Board staff's draft WMP comments in tables organized by WMP and tracked the responsiveness of subsequent drafts to those comments.⁶⁹ The final entry in each comment row contains Petitioners' analysis of whether the comment was adequately addressed. Comment rows that end in green indicate that Petitioners believe the

⁶¹ WMP Petition Addendum, p. 1.

⁶² Original WMP Petition, p. 1.

⁶³ See Cal. Code Regs., tit. 23, § 2050 for 30-day requirement for challenging a Water Board action.

⁶⁴ Most of the issues raised by Petitioners in the WMP petition addendum were raised in the original WMP petition (either in the Memorandum of Points and Authorities or in Exhibit D) or in Petitioners' comment letter, both of which Los Angeles Water Board staff addressed.

⁶⁵ In its response to the WMP petition addendum, the City of Claremont lists eight substantive challenges Petitioners have made to the Los Angeles River Upper Reach 2 WMP, the Lower Los Angeles River WMP, and the Lower San Gabriel River WMP that the City claims were not raised at the regional board. (City of Claremont's Response to Amended Petition (January 15, 2016), pp. 3-4; available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2386/comments011516/clrmnt_rspns.pdf [as of Apr. 10, 2019]). Of those claims, five were raised in either the original WMP petition or Petitioners' comment letter; two, while new, are responses to points made by the Los Angeles Water Board at the September 10, 2015, hearing; and one of the claims (the third of the purportedly new claims listed under the Los Angeles River Upper Reach 2 WMP) is entirely new.

⁶⁶ Wat. Code, § 13320, subd. (a); Cal. Code Regs. tit. 23, § 2050.5, subd. (c).

⁶⁷ Opposition to Motion to Reject, Exh. A.

⁶⁸ Email from Emel Wadhvani, Office of Chief Counsel, to Becky Hayat (Sept. 24, 2015), at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2386/pra_dcmnts022516.pdf [as of Apr. 10, 2019]; Opposition to Motion to Reject, Exh. B.

⁶⁹ WMP Petition Addendum, Exh. B.

comment was adequately addressed during WMP development. The rest of the rows are varying shades of red, with the deeper reds marking those alleged deficiencies that Petitioners view as most egregious. The Cities of Artesia, La Mirada, and Norwalk argue that the tables should not be considered at all but, to the extent they are considered, the color-coding should be disregarded.⁷⁰

We will not disregard the tables in their entirety. The tables are helpful collections of Petitioners' claims regarding the WMPs' alleged substantive deficiencies. We will, however, disregard the color-coding except to determine which comments Petitioners believe were adequately addressed.

Consideration of Costs

Although not raised in the petitions, the costs associated with municipal storm water control warrant a brief discussion in this order because the subject has recently received significant scrutiny.

In March 2018, the California State Auditor released a report entitled "State and Regional Water Boards: They Must Do More to Ensure That Local Jurisdiction's Costs to Reduce Storm Water Pollution Are Necessary and Appropriate."⁷¹ The State Auditor made several key findings related to the Water Boards' permitting role, including that the regional water boards have not adequately considered the cost of implementing pollution control requirements,⁷² the State Water Board has not provided guidance to local jurisdictions for tracking storm water costs,⁷³ the Water Boards collectively have taken actions that have imposed unnecessary costs on local jurisdictions,⁷⁴ and the Statewide Trash Policy has resulted in unnecessary redirection of resources for storm water management in some local jurisdictions.⁷⁵ The State Auditor made several recommendations to ameliorate these concerns. As we said in our response to the State Auditor's Report, these recommendations, "once

⁷⁰ Cities of Artesia, Norwalk, and La Mirada, Respondents' Memorandum in Opposition to Petition and Addendum to Petition Filed by Natural Resources Defense Council, Inc., Los Angeles Waterkeeper, and Heal the Bay to Los Angeles Water Board's Decision on Lower San Gabriel River Watershed Management Program (January 15, 2016); available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2386/comments011516/cities_rspns.pdf [as of Apr. 10, 2019].

⁷¹ California State Auditor, "State and Regional Water Boards: They Must Do More to Ensure That Local Jurisdiction's Costs to Reduce Storm Water Pollution Are Necessary and Appropriate," Report 2017-118 (2018) (State Auditor's Report); available at <https://www.auditor.ca.gov/pdfs/reports/2017-118.pdf> [as of Apr. 10, 2019].

⁷² State Auditor's Report, p. 17.

⁷³ State Auditor's Report, p. 20.

⁷⁴ State Auditor's Report, p. 23.

⁷⁵ State Auditor's Report, p. 29.

implemented, will promote greater efficiency, consistency, and transparency related to the [State Water Board] and [regional water boards'] regulation of a significant source of pollution."⁷⁶

We understand the challenges posed to municipalities in working to reduce storm water pollution in California. Per federal requirements, municipal pollutant reduction requirements are customized based on local conditions, leading to varying requirements between communities. That this customization inherently makes standardization difficult is recognized by the State Auditor. The regional water boards act as incubators for different water quality protection approaches and, as the State Auditor's Report notes, successful approaches are replicated across the state as best practices or are recognized by the State Water Board in precedential decisions. As the State Auditor's Report further notes, the distinct water quality control plans in each region as well as the variety of maximum pollutant levels and TMDLs drive differences between the various municipal storm water permits. Additional fine-tuning to develop more tailored pollutant levels and control plans, as recommended by the Report, will often require updates to regional water quality control plans. This is a resource-limited, resource-intensive, and time-consuming process subject to prioritization of already scarce resources.

However, the Water Boards recognize that, under certain circumstances, water body-specific special studies can provide adequate protections for beneficial uses at reduced compliance costs to local jurisdictions. Though doing this for every waterbody-pollutant combination would be impracticable, the regional water boards have at different times developed pollutant control plans for specific water bodies. These result from phased approaches that allow initial coordination with stakeholders to develop tailored local information that will inform later phases. In the Los Angeles region, such an approach was a solution to the fast-paced schedule to develop pollutant control plans required by a federal consent decree. The State Auditor's Report in this way builds off work the Water Boards have already undertaken, and provide an organizing principle to do it more proactively.

As initial steps to implement the specific recommendations of the State Auditor's Report, the State Water Board has begun efforts to develop cost-estimating guidance to be incorporated into the regional water boards' permitting processes and guidance on reporting and tracking of municipal storm water costs. Additionally, the Water Boards will work to develop an annual review process for the information the regional water boards receive because of this guidance.

⁷⁶ State Auditor's Report, p. 43.

We discuss the State Auditor’s Report to emphasize that, while we know the costs of implementing municipal storm water permits will be high, the inherent variability and evolution of our municipal storm water permits make estimating costs difficult and we are working to address that problem. Despite this difficulty, the regional water boards went well beyond what is required of them by law to assess the costs associated with their permits and assist municipalities in creating a manageable pathway to address water quality concerns.

Water Code section 13241 requires that “economic considerations,” among other things, be considered by regional water boards establishing water quality objectives.⁷⁷ This requirement, however, does not apply when the requirements imposed by the regional board are not more stringent than required by federal law,⁷⁸ as is the case here. Despite this, the Los Angeles Water Board conducted an analysis more than sufficient to satisfy that section’s requirements.

It is important that we first discuss how courts have interpreted Water Code section 13241. Section 13241 “does not define ‘economic considerations’ or specify a particular manner of compliance, and thus . . . the matter is within a regional board’s discretion.”⁷⁹ There is “no authority for the proposition that a consideration of economic factors under Water Code section 13241 must include an analysis of every conceivable compliance method or combinations thereof or the fiscal impacts on permittees.”⁸⁰ Water Code section 13241 does not require a cost-benefit analysis. Economics is a factor to be considered.⁸¹ Were this requirement applicable to the regional board’s action here, the Los Angeles Water Board’s detailed analysis in the Order’s Fact Sheet would meet it.

⁷⁷ Wat. Code, § 13241, subd. (d).

⁷⁸ *Department of Finance v. Commission on State Mandates* (2016) 1 Cal.4th 749, 768-769. The California Supreme Court held here that the determination of what permit conditions are necessary to satisfy the federal permitting standard is entrusted to the discretion of the permitting regional board. The court here referred to *City of Rancho Cucamonga v. Regional Water Quality Control Board – Santa Ana Region* (2006) 135 Cal.App.4th 1377 and *Building Industry Association of San Diego County v. State Water Resources Control Board* (2004) 124 Cal.App.4th 866. *Rancho Cucamonga* held that an MS4 permit could require compliance with water quality standards under federal law. (*City of Rancho Cucamonga, supra*, 135 Cal.App.4th at pp. 1380, 1388-89.) In *Building Industry Association of San Diego County*, a trade association challenged the 2001 San Diego County MS4 permit, which prohibited pollutant discharges that would cause the receiving water to exceed applicable water quality standards by arguing the provisions were “too stringent and impossible to satisfy.” (*Building Industry Association of San Diego, supra*, 124 Cal.App.4th 871, 876.) The Fourth District Court of Appeal disagreed, holding that the “Permit’s Water Quality Standards provisions are proper under federal law[.]” (*Id.* at p. 880.)

⁷⁹ *City of Arcadia v. State Water Resources Control Board* (2006) 135 Cal.App.4th 1392, 1415.

⁸⁰ *Id.* at p. 1417. See also *California Association of Sanitation Agencies v. State Water Resources Control Board* (2008) Cal.App.4th 1438, 1464-1465 [“Section 13241 does not specify how a water board must go about considering the specified factors. Nor does it require the board to make specific findings on the factors.”]

⁸¹ *San Joaquin River Exchange Contractors Water Authority v. State Water Resources Control Board* (2010) 183 Cal.App.4th 1110.)

The Los Angeles Water Board noted its past efforts to incorporate economic considerations into decision-making processes that form the basis of several of the Order's requirements, such as its adoption of water quality objectives and TMDL wasteload allocations.⁸² The Board went on to consider the economics of regulating MS4 discharges as compared to the economics of *not* regulating MS4 discharges. The Board considering municipal funding sources and studies on the costs and benefits of MS4 pollutant control, concluding that the “[c]osts are anticipated to be borne over many years . . . [but] the benefits of the programs are expected to considerably exceed their costs.”⁸³

The Los Angeles Water Board considered the information then available, including information reported by the permittees themselves prior to the issuance of the Los Angeles MS4 Order. One effect of the significant flexibility afforded to permittees on how to comply with the Order's requirements is an inherent impossibility for the Board to predict the cost that would result to each of the 86 permittees. The Order's WMPs and EWMPs, however, are structured specifically to allow Permittees to develop plans to address pollutants in their jurisdiction based, in part, on the costs of implementation. In developing schedules to address water body-pollutant combinations not addressed in a TMDL, for example, permittees are directed to identify a timeframe “that is as short as possible taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary.”⁸⁴ As we discuss in detail later in this order, funding issues are not sufficient to create contingencies in WMPs or EWMPs; however, funding concerns may be sufficient for the Los Angeles Water Board's Executive Officer to approve extensions and modifications of deadlines as long as such extensions and modifications are consistent with any underlying TMDL.

The Water Boards are very aware of the high cost of treating pollution in storm water runoff. That is one of the reasons why municipal storm water permits are designed to maximize the efficiency and effectiveness of control measures while deferring to the needs and unique characteristics of each municipality. We look forward to implementing the recommendations of the State Auditor in the hope that the guidance to be developed will lead to more accurate information and more efficient opportunities for permittees to address pollutants in their storm water runoff.

⁸² Los Angeles MS4 Order, Att. F, p. F-152.

⁸³ Los Angeles MS4 Order, Fact Sheet, p. F-156.

⁸⁴ Los Angeles MS4 Order, Part VI.C.2.a.ii.(4), p. 48.

Having resolved the preliminary issues, we turn to the merits of the WMP petition.

A. The Executive Officer's Authority to Conditionally Approve the WMPs

Before we address Petitioners' claimed substantive deficiencies, we first address Petitioners' objections to the process used to approve these nine WMPs.

Petitioners claim that because the WMPs were conditionally approved, they failed to comply with the Los Angeles MS4 Order's program development requirements. Specifically, Petitioners claim that the conditional approvals exceeded the authority delegated to the Executive Officer by the Los Angeles Water Board and the conditional approvals unlawfully modified the Order by granting Permittees an additional 45 days to complete their WMPs.⁸⁵ We disagree on both points. Conditional approvals are a necessary and pragmatic part of the administrative approval process, inherent in the authority to approve or deny.⁸⁶

Per California Water Code section 13223, regional water boards, with some exceptions, may delegate their powers and duties to their executive officers.⁸⁷ Here, the Order

⁸⁵ Original WMP Petition, pp. 6-9.

⁸⁶ Petitioners further claim that any approval of the WMPs is a permit modification because "once approved, the contents of the WMPs become enforceable, substantive terms of the [Order]" and, therefore, adopting the WMPs was akin to modifying permit terms, a non-delegable duty. Therefore, Petitioners argue, the Los Angeles Water Board was required to follow the "substantive and procedural" steps needed when an "NPDES permit is reissued," including adoption at a "properly-noticed public hearing before the . . . Board." (Original WMP Petition, pp. 9-10.) For this proposition, Petitioners rely on *Environmental Defense Center, Inc. v. EPA*, 344 F.3d 832, 853 (9th Cir. 2003), which held that NPDES notices of intent that required the inclusion of a proposed storm water management program are subject to the public participation requirements of the Clean Water Act because they are functionally equivalent to NPDES permit applications and because they contain substantive information about how the operator will reduce its discharges to the maximum extent practicable.

The process provided for review and comment on the WMPs is consistent with the holding of *Environmental Defense Center*. Precisely because WMPs contain substantive information on how Permittees will comply with the Los Angeles MS4 Order, the Order provides for public participation in the WMP approval process. (Los Angeles MS4 Order, Parts VI.A.5, p. 42, VI.C.4.d, p. 58 & VI.C.6, p. 67.) However, the Order provides a more streamlined approach that allows for Executive Officer approval after a required 30-day minimum public comment period. (Los Angeles MS4 Order, Part VI.A.5.b, p. 42.) *Environmental Defense Center* specifically referenced 33 U.S.C. section 1342, subdivision (j)'s requirement that "[a] copy of each permit application and each permit issued under [the NPDES permitting program] . . . shall be available to the public," and subdivision (a)(1)'s requirement that the public have an opportunity for a hearing before a permit application is approved. (*Environmental Defense Center*, at p. 856.) Each WMP and EWMP was made available to the public for comment (RB-AR1934-1937, 1998, and 2565-2581), Los Angeles Water Board staff held a public workshop on October 9, 2014 (RB-AR1998), and a publicly noticed hearing before the Los Angeles Water Board was held on April 13, 2015 (RB-AR2582-2674). Following this, the Los Angeles MS4 Order provides an option for the public to request review by the Los Angeles Water Board (Los Angeles MS4 Order, Part VI.A.6, p. 39), as was done in this case. The extensive public outreach and interaction involved in the development of the WMPs more than satisfies the requirements of the Clean Water Act as outlined in *Environmental Defense Center*.

⁸⁷ Wat. Code, § 13223, subd. (a). The Los Angeles Water Board has provided such general delegation through Resolution R14-005, granting to the Executive Officer "all powers and duties to conduct and to supervise the activities of the Regional Board," including the power to "exercis[e] any powers and duties of the Regional Board." (R14-005, p. 2.)

gives the Los Angeles Water Board or its Executive Officer the authority to approve or deny a final WMP or EWMP.⁸⁸

The crux of Petitioners' argument is that because the power to conditionally approve WMPs and EWMPs was not explicitly delegated to the Executive Officer or identified in the Order, the Executive Officer was constrained to an all-or-nothing approval or denial of the plans.⁸⁹ We disagree. Delegated authority is broadly construed, absent specific imitations, and the Executive Officer here was granted extensive authority to oversee WMP development and approval. The Executive Officer has the authority to approve or deny WMPs,⁹⁰ requests for modifications to WMP deadlines,⁹¹ integrated monitoring programs and coordinated integrated monitoring programs,⁹² to require and/or approve modifications to WMPs and associated RAAs,⁹³ and to extend the deadline for submission of a final WMP.⁹⁴

More specifically, however, it is a principle of administrative law that the power to conditionally approve a plan is implicit in the power to approve or deny.⁹⁵ USEPA's administration of the Clean Water Act reflects this principle. Despite there being no express "conditional approval" language in section 303(c) of the Clean Water Act, for example, USEPA's Water Quality Standards Handbook suggests the use of conditional approvals in limited circumstances⁹⁶ including the correction of "minor deficiencies."⁹⁷ The State Water Board also uses conditional approvals, where appropriate.⁹⁸

⁸⁸ Los Angeles MS4 Order, Part VI.C.4.d, pp. 58-59.

⁸⁹ Original WMP Petition, p. 6.

⁹⁰ Los Angeles MS4 Order, Part VI.C.4.d, pp 58-59.

⁹¹ Los Angeles MS4 Order, Parts VI.C.4.g, p. 59, VI.C.6.a, p. 67 & VI.C.8.a.iii, p. 69.

⁹² Los Angeles MS4 Order, Part VI.C.7, p. 67.

⁹³ Los Angeles MS4 Order, Part VI.C.8.b.i, pp. 69-70.

⁹⁴ Los Angeles MS4 Order, Part VI.C.4.g, p. 59. This is distinguished from the current situation, where Permittees submitted what they believed to be the final plan in line with the WMP development schedule (*Id.*, Table 9, p. 55), but the Executive Officer wished to make additional modifications before issuing his final approval. When an extension is granted, Permittees are expected to comply with baseline receiving water limitations. Here, the Executive Officer ordered Permittees to begin implementing their respective WMPs while addressing the conditions of the conditional approval.

⁹⁵ See *County of San Diego v. Bowen* (2008) 166 Cal.App.4th 501, 509-510, holding that the broad delegation of authority to the Secretary of State to issue approvals and denials of voting systems included the authority to make those approvals conditional.

⁹⁶ United States Environmental Protection Agency, Water Quality Standards Handbook (2014), § 6.2.1, p. 11.

⁹⁷ Mem. From Martha G. Prothro, Office of Water Regulations and Standards, to Water Division Directors (June 20, 1989), at <https://www.epa.gov/sites/production/files/2015-01/documents/standards-approvalmemo.pdf> [as of Apr. 10, 2019].

⁹⁸ See State Water Board Executive Director Thomas Howard's 2015 conditional approval of the Sacramento River Temperature Management Plan; available at https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/sacramento_river/docs/tmp_mgt_plan.pdf [as of Apr. 10, 2019].

We are cognizant of the concerns underlying Petitioners' objection to the conditional approvals. The conditional approvals did not foreclose the possibility that the Executive Officer would issue another conditional approval, further extending the development period of the WMPs and potentially validating the fears we addressed in Order WQ 2015-0075 that providing deemed-compliance during the WMP planning phase "could weaken the incentive for Permittees to efficiently and timely seek approval of a WMP/EWMP and to move on to implementation."⁹⁹ For that reason, we want to make clear that the conditional approval is not a panacea. It should not be used to fundamentally alter the WMPs or to fix egregious deficiencies. While a plan does not have to be "approvable" to be conditionally approved, the terms of the conditional approval should address problems within the scope of the plan as submitted. Additionally, as occurred here, WMP implementation should begin immediately upon the Executive Officer's conditional approval.

These conditional approvals did not exceed this limitation. We reviewed the terms of the conditional approvals and found nothing that constituted a major substantive change. The conditions were focused on providing greater clarity, providing more information to the reader, and fixing a variety of relatively minor oversights and mistakes. The most significant conditions imposed by the Executive Officer were the requirements that some WMP Groups¹⁰⁰ insert additional milestones for TMDLs or specific categories of projects. While important, these conditions do not alter the fundamental assumptions of the WMPs or their RAAs. The conditions were aimed at making the existing WMPs more effective, rigorous, and enforceable. Conditional approvals should include clearly defined conditions, as occurred here, and should not allow for an endless process of additional extensions. They should provide a finite amount of time for applicants to fix the issues identified, and if those issues are not addressed within the timeframe provided, the plan should be disapproved.

B. The Lower Los Angeles River, Lower San Gabriel River, and Los Angeles River Upper Reach 2

We next turn to a review of the adequacy and enforceability of the WMPs. We will begin with a close examination of the three WMPs to which Petitioners made specific, substantive challenges, and we require specific modifications to these WMPs for the reasons discussed herein. Later in this order, we also consider the six additional WMPs that have been

⁹⁹ State Water Board Order WQ 2015-0075, p. 49.

¹⁰⁰ WMP Groups are those groups and individual permittees referred to in footnote 1 of this order.

generally challenged through these proceedings without specific objections, but we limit our review to whether they require similar modifications.

As discussed above, as a result of the following review, while we do not disapprove the WMPs, we find numerous deficiencies requiring significant revisions. We also clarify the specific enforceable components of the WMPs and water body-pollutant combinations to which they apply. We have determined that allowing the permittees until 12 months from the date of this order's adoption provides an appropriate amount of time for these changes to be submitted for approval to the Los Angeles Water Board's Executive Officer. Following this time, the WMP Groups will not be afforded deemed-compliance for any water body-pollutant combination not addressed in conformance with this order. This timeframe will allow the WMP Groups to address the issues identified in this order without being prejudiced by their good faith reliance on a different understanding of the Order's requirements and on the Los Angeles Water Board Executive Officer's approval of their plans. Until then, provided that the WMP Groups can, within six months of the adoption of this order, demonstrate to the Executive Officer that they have met the 2017 milestones in their WMPs, they will remain deemed in compliance with those water body-pollutant combinations addressed by a compliance schedule for implementation of BMPs, even if the milestones were based on a flawed limiting pollutant approach, as discussed below.

1. Overview

A general outline of the structure and substance of the three primary WMPs at issue will help frame the analysis that follows.

The WMP provisions require the WMP Groups to "identify strategies, control measures, and BMPs to implement through their individual storm water management programs, and collectively on a watershed scale, with the goal of creating an efficient program to focus individual and collective resources on watershed priorities."¹⁰¹ All of the WMP Groups are responsible for implementing a suite of mostly non-structural controls specified in the Los Angeles MS4 Order's Minimum Control Measures (MCMs) provisions, and must additionally consider measures to prohibit or reduce non-storm water discharges as well as control measures identified in applicable TMDLs.¹⁰² The MCMs include a host of measures applicable to the Los Angeles County Flood Control District, a member of every WMP Group, including a

¹⁰¹ Los Angeles MS4 Order, Part VI.C.5.b, p. 62.

¹⁰² Los Angeles MS4 Order, Part VI.C.5.b.iv, p. 63.

Public Information and Participation Program, an Industrial/Commercial Facilities Program, a Public Agency Activities Program, and an Illicit Connections and Illicit Discharge Elimination Program.¹⁰³ The MCMs for cities are similar, including the Public Information and Participation Program, the Industrial/Commercial Facilities Program, the Public Agency Activities Program, and the Illicit Connections and Illicit Discharges Elimination Program, as well as a Development Construction Program.¹⁰⁴ Some Permittees, in their approved WMPs, proposed modifications to the MCMs to tailor them to jurisdictional characteristics and preferences.¹⁰⁵ The only structural MCM is the Planning and Land Development Program, which includes a variety of low-impact development (LID) and hydromodification requirements.¹⁰⁶ Each Group has proposed a series of additional non-structural control measures. The LLAR and LSGR Groups' "Targeted Control Measures" and the LAR UR2 Group's BMP "program enhancements" include a variety of measures, such as adoption of ordinances, implementation of pollutant reduction practices, trainings, and more.¹⁰⁷ The LLAR and LSGR Groups each have a series of planned structural BMPs that have not been incorporated into their modeling.¹⁰⁸

Paired with the WMPs are the Integrated Monitoring Programs and Coordinated Integrated Monitoring Programs (IMPs and CIMPs) required by the Los Angeles MS4 Order's WMP provisions.¹⁰⁹ Each IMP/CIMP contains requirements for receiving water monitoring, storm water outfall monitoring, aquatic toxicity testing, and non-storm water outfall monitoring, among other provisions. Per the Order's requirements, the outfall monitoring provisions will be used to monitor and report on flow, pollutants assigned a WQBEL derived from a TMDL WLA, 303(d) listed pollutants, field measurements such as hardness, pH, dissolved oxygen, temperature, and specific conductivity, and pollutants identified by the Order-required Toxicity Identification Evaluation.¹¹⁰ Additionally, monitoring will have to be conducted on any of certain

¹⁰³ Los Angeles MS4 Order, Part VI.D.4, pp. 73-89.

¹⁰⁴ Los Angeles MS4 Order, Parts VI.D.5-10, pp. 89-144.

¹⁰⁵ Lower Los Angeles River Watershed Group, Lower Los Angeles River Watershed Management Program (June 12, 2015) (LLAR WMP) § 3.2.2, pp. 3-4 to 3-7, § 3.2.4.2, pp. 3-8 to 3-19; Lower San Gabriel River Watershed Group, Lower San Gabriel River Watershed Management Program (June 12, 2015) (LSGR WMP) § 3.2.2, pp. 3-4 to 3-7, § 3.2.4.2, pp. 3-8 to 3-19; Los Angeles River Upper Reach 2 Watershed Management Group, Los Angeles River Upper Reach 2 Watershed Management Program (WMP) Plan (June 12, 2015) (LAR UR2 WMP) § 3.1.1, pp. 35-39, § 3.3.1, pp. 67-70.

¹⁰⁶ Los Angeles MS4 Order, Part VI.D, p. 70.

¹⁰⁷ LLAR WMP, § 5.1.3, pp. 5-2 to 5-4; LSGR WMP, § 5.1.3, pp. 5-2 to 5-3; LAR UR2 WMP, § 3.3.1, pp. 67-70.

¹⁰⁸ LLAR WMP, § 5.2, pp. 5-4 to 5-6; LSGR WMP, § 5.2, pp. 5-4 to 5-5.

¹⁰⁹ Los Angeles MS4 Order, Part VI.C.7, pp. 67-68.

¹¹⁰ Los Angeles MS4 Order, Att. E, § VIII.B.1.c, pp. E-22 to E-23. In addition to the already named pollutants, the LAR UR2 Group is monitoring for *E. coli*, TSS, cadmium, copper, lead, zinc, ammonia, nitrate-N, nitrite-N, nitrate-N + nitrite-N, and oil; both the LLAR Group and LSGR Group are monitoring for oil and grease, total petroleum

parameters that exceed the lowest applicable water quality objective at the nearest downstream receiving water monitoring station.¹¹¹

The WMP provisions of the Los Angeles MS4 Order require that the WMP Groups implement the structural and non-structural controls in accordance with a schedule of interim and final milestones and deadlines.¹¹² Regarding their specific pollutant reduction plans, the WMP Groups generally focused their schedules on treatment of what the WMP Groups determined to be the most appropriate TMDL pollutant with the largest estimated needed reduction, generally referred to as a “limiting pollutant,” a concept which will be discussed in detail below. To summarize for this outline, the limiting pollutant approach assumes that a plan to control the selected pollutant will necessarily control pollutants with lesser needed reductions. For the LLAR and LSGR Groups, that pollutant is zinc. For the LAR UR2 Group’s Rio Hondo drainage area, that pollutant is zinc, and for its Los Angeles River drainage area, that pollutant is bacteria.

With zinc identified as the limiting pollutant, the LLAR Group used the Los Angeles River Metals TMDL compliance schedule as the basis for its WMP pollutant reduction plan. The LLAR WMP therefore aims to have zinc and all of the pollutants for which it is limiting in compliance with final receiving water limitations and WQBELs and other TMDL-specific limitations by the Los Angeles River Metals TMDL final compliance deadline in 2028.¹¹³ Because there is no TMDL deadline within the current term of the current Order, the LLAR Group identified an interim date at the end of 2017, per the Order’s requirements.¹¹⁴ By the end of 2017, the Group was to demonstrate the implementation of actions intended to attain a 31% load reduction milestone. To meet this milestone, the Group assumed a 10% load reduction

hydrocarbon, cyanide, TSS, total dissolved solids, volatile suspended solids, total organic carbon, chemical oxygen demand, alkalinity, specific conductance, total hardness, MBAS, chloride, *E. coli*, cadmium, copper, lead, mercury, selenium, and zinc with the LLAR Group additionally monitoring for total and fecal coliform, enterococcus *E. coli*, nitrogen compounds, aluminum, antimony, nickel, and bis(2-ethylhexyl)phthalate, and the LSGR Group additionally monitoring for ammonia and diazinon. For more information on each Group’s outfall monitoring, see Lower Los Angeles River Watershed Group, Coordinated Integrated Monitoring Program for the Lower Los Angeles River Watershed Monitoring Group (July 28, 2015) Table 9-1, p. 77; Lower San Gabriel Watershed Group, Coordinated Integrated Monitoring Program for Lower San Gabriel River Watershed Group (July 28, 2015) Table 9-1, p. 62; Los Angeles River Upper Reach 2 Watershed Management Group, Approved Coordinated Integrated Monitoring Program (CIMP) Plan (Feb. 12, 2016) Table 4-17, p. 42.

¹¹¹ Los Angeles MS4 Order, Att. E, Part VIII.B.1.d, p. E-23.

¹¹² Los Angeles MS4 Order, Part VI.C.5.c, pp. 66-67.

¹¹³ LLAR WMP, p. xi. As will be discussed later in this order, it is not entirely clear what pollutants the LLAR Group intends its zinc-based pollutant reduction plan to control.

¹¹⁴ Los Angeles MS4 Order, Part VI.C.5.b.iv.(5)(b), p. 65.

would result from implementation of non-modeled and non-structural controls.¹¹⁵ The remainder of the reductions, for both the 2017 milestone and future milestones, were proposed to be met through implementation of a suite of structural BMPs. Rather than committing to specific projects, the compliance schedule identifies the volumetric capture/treatment targets required by the RAA for each Permittee and the specific RAA-identified subwatersheds in which the BMPs should be implemented to attain interim and final goals.¹¹⁶ By the final Los Angeles River Metals TMDL deadline, the LLAR Group projects it will need to have implemented BMPs capable of treating or capturing 803.2 acre-feet of storm water¹¹⁷ in addition to the 8.8 acre-feet addressed between completion of the RAA and approval of the WMP.¹¹⁸ In his conditional approval, the Los Angeles Water Board Executive Officer listed a non-exclusive series of WMP sections he viewed as containing enforceable requirements. These included the Pollutant Reduction Plan to Attain Interim & Final Limits;¹¹⁹ the Nonstructural BMP Schedule, including Table 5-1: Nonstructural TCM Compliance Schedule;¹²⁰ the List of Nonstructural Targeted Control Measures, including Table 3-11: Nonstructural TCMs;¹²¹ Prop. 84 Grant Award LID BMPs;¹²² the Structural BMP Schedule;¹²³ and RAA Attachment B: Detailed Jurisdictional Compliance Tables.¹²⁴ Following our review of the WMP, we also point to the following additional enforceable WMP sections: Table 3-2: New Fourth Term MS4 Permit Nonstructural

¹¹⁵ LLAR WMP, § 4.3, p. 4-4. These non-modeled, non-structural controls include the Los Angeles MS4 Order's MCMs and non-storm water discharge outfall screening and source investigations. Half of this assumed reduction is credited to "targeted control measures" (TCMs), a set of non-structural controls that involve reducing or incentivizing the reduction of discharges of total suspended solids, thereby helping to control the metals they carry. (*Id.*, at pp. 3-32 to 3-36.) These actions are generally characterized as ongoing or open-ended, with a minority having due dates of no later than December 28, 2017. (*Id.*, at p. 5-3.)

¹¹⁶ LLAR WMP Appendix 4, LSGR WMP Appendix 4, and LCC WMP Appendix 4, A-4-1 Reasonable Assurance Analysis (June 12, 2015) (LLAR/LSGR/LCC RAA), Att. B. Because the same consultant developed the LLAR and LSGR RAAs, as well as the RAA for the Los Cerritos Channel Watershed Group (discussed below), the RAAs for the three Groups are included in the same document. As a result, the RAAs for these three Groups will be cited together.

¹¹⁷ LLAR WMP, § 4.1, pp. 4-1 to 4-2.

¹¹⁸ LLAR/LSGR/LCC RAA, Table 9-4, p. 60. The 8.8 acre-feet figure is obtained from adding together all of the values in the "Existing Distributed BMP Volume" column.

¹¹⁹ LLAR WMP, § 5.4, pp. 5-9 to 5-18.

¹²⁰ LLAR WMP, § 5.1, pp. 5-1 to 5-4.

¹²¹ LLAR WMP, § 3.4.2, pp. 3-3 to 3-43.

¹²² LLAR WMP, § 5.2, pp. 5-4 to 5-6.

¹²³ LLAR WMP, § 5.3, pp. 5-6 to 5-8.

¹²⁴ LLAR/LSGR/LCC RAA, Att. B.

MCMs (Cities only) and NSWDs¹²⁵ and Control Measures Identified in TMDLs/Implementation Plans.¹²⁶

The LSGR WMP compliance schedule is similarly organized. Zinc is the limiting pollutant and the San Gabriel River and Impaired Tributaries Metals and Selenium TMDL (San Gabriel River Metals TMDL) is the basis for the pollutant reduction plan.¹²⁷ The LSGR Group's first milestone, on September 30, 2017, consisted of implementation of non-structural BMPs projected to result in a 10% load reduction.¹²⁸ The LSGR Group's structural BMP implementation plan, like the LLAR Group's, identifies subwatershed-specific volumetric capture or treatment targets for each Permittee.¹²⁹ By 2026, the Group must implement controls capable of treating or capturing 118.6¹³⁰ acre-feet of water in addition to the BMPs addressing 7.1 acre-feet, implemented between RAA modeling completion and WMP approval.¹³¹ The Los Angeles Water Board Executive Officer's non-exclusive list of enforceable WMP sections contained the Pollutant Reduction Plan to Attain Interim & Final Limits;¹³² the Non-structural Best Management Practices Schedule;¹³³ Table 3-2: New Fourth Term MS4 Permit Non-structural MCMs (Cities only) and NSW D Measures;¹³⁴ the Non-structural Targeted Control Measures, including Table 3-5: Non-structural TCMs,¹³⁵ Proposition 84 Grant Award LID BMPs,¹³⁶ Structural Best Management Practice Schedule;¹³⁷ and RAA Attachment B: Detailed Jurisdictional Compliance Tables.

The LAR UR2 WMP does not rely on volumetric capture/treatment milestones. Milestones are instead expressed as concentration-based percentage reductions from baseline

¹²⁵ LLAR WMP, Table 3.2, pp. 3-9 to 3-11.

¹²⁶ LLAR WMP, § 3.4.1, pp. 3-22 to 3-31.

¹²⁷ The San Gabriel River Metals TMDL, as a USEPA established TMDL, does not include a compliance schedule or final compliance deadline. Permittees were therefore permitted to create a schedule for implementation of the TMDL and incorporate it into their WMP, which they have done here. (State Water Board Order WQ 2015-0075, pp. 59-60.)

¹²⁸ LSGR WMP, § 5.4, pp. 5-10 to 5-24. These are largely the same as those discussed above in relation to the LLAR Group's compliance schedule.

¹²⁹ LSGR WMP, § 5.4, pp. 5-9 to 5-23; LLAR/LSGR/LCC RAA, Att. B.

¹³⁰ LSGR WMP, § 4.1, pp. 4-1 to 4-2.

¹³¹ LLAR/LSGR/LCC RAA, Table 9-6, pp. 62-63. The 7.1 acre-feet figure is obtained from adding together all of the values in the "Existing Distributed BMP Volume" column.

¹³² LSGR WMP, § 5.4, pp. 5-9 to 5-23.

¹³³ LSGR WMP, § 5.1, pp. 5-1 to 5-3.

¹³⁴ LSGR WMP, Table 3.2, pp. 3-9 to 3-11.

¹³⁵ LSGR WMP, § 3.4.1, pp. 3-22 to 3-34.

¹³⁶ LSGR WMP, § 5.2, pp. 5-4 to 5-5.

¹³⁷ LSGR WMP, § 5.3, pp. 5-6 to 5-8.

loading to target loading.¹³⁸ The LAR UR2 Group identifies two limiting pollutants – bacteria for the Los Angeles River drainage area and zinc for the Rio Hondo drainage area.¹³⁹ The LAR UR2 Group’s first milestones were proposed to be met via implementation of non-structural BMPs.¹⁴⁰ Future milestones will be met via continued implementation of non-structural BMPs and new structural BMPs.¹⁴¹ In place of the volumetric criteria used by the LLAR and LSGR Groups, the LAR UR2 Group instead identifies specific projects that will be implemented in order to meet targets.¹⁴² The Los Angeles Water Board Executive Officer’s non-exclusive list of enforceable WMP sections contained the Proposed Control Measures;¹⁴³ Table 3-1: the LAR Metals TMDL Jurisdictional Group 2 Non-Structural BMPs Phased Implementation Plan;¹⁴⁴ Table 3-8: Non-Structural BMP Enhanced Implementation Efforts;¹⁴⁵ Table 4-10: LID Street Required Tributary Area by LAR UR2 WMA Permittees;¹⁴⁶ Tables 4-20 to 4-23: presenting load reductions associated with non-structural BMPs, regional BMPs, and distributed BMPs;¹⁴⁷ and Table 5-1: Control Measures Implementation Schedule.¹⁴⁸ Following our review of the WMP, we also point to the following enforceable WMP sections: Table 1-6, the Schedule of TMDL Compliance Milestones Applicable to the LAR UR2 WMA;¹⁴⁹ Tables 4-9 and 4-11, detailing

¹³⁸ What these projected reductions are, however, is unclear, because they are presented in bar graphs with the actual numeric values not indicated. (LAR UR2 WMP, Figures 5-1 to 5-5, pp. 118-120.) The LAR UR2 Group must provide actual numeric milestones for all monitored pollutants to allow the Los Angeles Water Board and others to determine whether the compliance schedule is producing the expected reductions.

¹³⁹ LAR UR2 WMP, § 4.5, p. 113.

¹⁴⁰ LAR UR2 WMP, Figures 5-1 to 5-6, pp. 118-120. These non-structural BMPs include the “City of Commerce Pavement Management System,” “Enhanced Non-MS4 NPDES Parcel Inspections,” “Other Non-Modeled,” copper load reduction as a result of SB 346, and “Annual Ordinance Based LID Redevelopment.” (*Id.*, Table 5-1, p. 117.) “Other Non-Modeled” seems to include reductions assumed to result from efforts by other NPDES permittees (*Id.*, § 4.4.1, p. 97) and “LAR UR2 WMA Agency Implemented Non-Structural BMPs and MCMs,” (*Id.*, Table 3-8, pp. 69-70 and § 4.4.4, pp. 100-101) largely consisting of “enhanced implementation” of street sweeping, inspections, outreach, and enforcement, although this link is not clearly drawn in the control measure implementation schedule.

¹⁴¹ LAR UR2 WMP, Figures 5-1 to 5-6, pp. 118-120.

¹⁴² LAR UR2 WMP, Table 5-1, p. 117.

¹⁴³ LAR UR2 WMP, § 3.3, pp. 67-72. This includes Table 3-8: Non-Structural BMP Enhanced Implementation Efforts and Dates, Section 3.3.2: Proposed Non-Stormwater Discharge Control Measures, and Section 3.3.3: Proposed Structural Control Measures.

¹⁴⁴ LAR UR2 WMP, Table 3-1, p. 42.

¹⁴⁵ LAR UR2 WMP, § 3.3, pp. 69-70.

¹⁴⁶ LAR UR2 WMP, Table 4-10, p. 99. “WMA” is shorthand for “watershed management area,” generally referring to the WMP’s jurisdictional area.

¹⁴⁷ LAR UR2 WMP, Tables 4-20 to 4-23, pp. 114-115. The Los Angeles Water Board Executive Officer cited Tables 4-17 to 4-20 because his list was based off the revised WMP. We updated the list to reflect the table numbers found in the final WMP.

¹⁴⁸ LAR UR2 WMP, Table 5-1, p. 117.

¹⁴⁹ LAR UR2 WMP, Table 1-6, p. 18.

annual averages and a 2037 milestone for LID based redevelopment;¹⁵⁰ the list of proposed Structural Regional BMPs, identifying specific structural BMP commitments made by the LAR UR2 Group;¹⁵¹ and Table 4-19, identifying required conversions of tributary area to LID streets for each LAR UR2 Permittee.¹⁵²

With these frameworks in mind, we turn to the substantive issues raised regarding the WMPs, focusing particularly on clarity, completeness, and enforceability.

2. WMP Development

Permittees are required to conduct an RAA “for each water body-pollutant combination addressed by the [WMP].”¹⁵³ The RAA is a quantitative analysis which utilizes peer-reviewed models, a decade of relevant, available subwatershed data, and watershed control measure performance data to allow Permittees to create a compliance schedule that ensures eventual compliance with applicable receiving water limitations and WQBELs and other TMDL-specific limitations.¹⁵⁴ The RAA allows Permittees to demonstrate that their identified control measures will achieve timely compliance with applicable TMDL WQBELs and receiving water limitations with deadlines occurring during the Order’s term and that the control measures will achieve non-TMDL receiving water limitations “as soon as possible.”¹⁵⁵ The Los Angeles Water Board issued guidelines for the preparation of an RAA (RAA Guidelines) on March 25, 2014.¹⁵⁶

To develop their RAA, Permittees must categorize water body-pollutant combinations into Category 1 (combinations for which WQBELs and/or receiving water limitations are established by the Order’s TMDL provisions), Category 2 (combinations for which data indicate water quality impairments according to the State Water Board’s Water Quality Control Policy for Developing California’s Clean Water Act Section 303(d) List [State 303(d) Listing Policy] and for which MS4 discharges may be causing or contributing to the impairment, but for which no TMDL has been developed), or Category 3 (combinations for which there are

¹⁵⁰ LAR UR2 WMP, Tables 4-9 & 4-11, p. 99.

¹⁵¹ LAR UR2 WMP, § 4.5.1, pp. 101-111.

¹⁵² LAR UR2 WMP, Table 4-19, p. 112.

¹⁵³ Los Angeles MS4 Order, Part VI.C.5.b.iv.(5), p. 65.

¹⁵⁴ Los Angeles MS4 Order, Part VI.C.5.b.iv.(5), p. 65.

¹⁵⁵ Los Angeles MS4 Order, Part VI.C.5.b.iv.(5)(a) & (c), p. 65.

¹⁵⁶ Nguyen et al., Guidelines for Conducting Reasonable Assurance Analysis in a Watershed Management Program, Including an Enhanced Watershed Management Program (March 25, 2014) (RAA Guidelines); available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/docs/RevisedRAAModelingCriteriaFinal-withAtts.pdf [as of Apr. 10, 2019].

insufficient data to indicate receiving water quality impairment according to the State 303(d) Listing Policy, but which exceed applicable receiving water limitations contained in the Order and for which MS4 discharges may be causing or contributing to the exceedance).¹⁵⁷ The RAA Guidelines encourage Permittees to identify Category 2 or 3 combinations which are similar to Category 1 combinations and could be addressed simultaneously.¹⁵⁸ Permittees must then use existing information to identify potential sources within the watershed of the categorized pollutants to or from the MS4.¹⁵⁹ These data are then used to select watershed control measures in order to attain receiving water limitations and interim and final WQBELs and other TMDL-specific limitations.¹⁶⁰ This process is heavily reliant on modeling. Several models are available to Permittees,¹⁶¹ including the Watershed Management Modeling System (WMMS),¹⁶² the Structural BMP Prioritization and Analysis Tool (SBPAT),¹⁶³ and the Hydrologic Simulation Program-FORTRAN (HSPF).¹⁶⁴

The RAA, particularly in its early iterations, is not and cannot be expected to be precise. Permittees are working with incomplete data and models that, while advanced, are

¹⁵⁷ Los Angeles MS4 Order, Part VI.C.5.a.ii, p. 60.

¹⁵⁸ RAA Guidelines, p. 2.

¹⁵⁹ Los Angeles MS4 Order, Part VI.C.5.a.iii, p. 60.

¹⁶⁰ Los Angeles MS4 Order, Part VI.C.5.b, pp. 62-64.

¹⁶¹ Los Angeles MS4 Order, Part VI.C.5.b.(5), p. 65.

¹⁶² Geared specifically to facilitating water quality improvement efforts in Los Angeles County, WMMS was developed by Los Angeles County Flood Control District to “simulate[] hydrologic and multipollutant transport processes in a watershed while evaluating benefits and costs of different [BMP] options, to ultimately identify a combination of the most cost-effective BMP solutions to a specific management objective such as [TMDL] attainment.” (Department of Public Works, *About: Regional Optimization System* <https://dpw.lacounty.gov/wmd/wmms/about.aspx> [as of Apr. 10, 2019].) WMMS relies on the Loading Simulation Program C++ (LSPC), which simulates hydrology, sediment, and general water quality on land combined with a stream fate and transport model, and the Regional Optimization System, which is designed to find the “optimal distribution of BMP treatment capacity within each of the 2,655 sub-watershed[s] such that the TMDL targets for a variety of pollutants are simultaneous attained at the lowest possible BMP implementation cost.” (*Ibid.*) The Los Angeles County Department of Public Works contracted with Tetra Tech and worked with the Los Angeles Water Board, USEPA, and the Southern California Coastal Water Research Project to develop WMMS and to perform hydrology calibration and validation. (Tetra Tech, Inc., *Los Angeles County Watershed Model Configuration and Calibration-Part I: Hydrology* (Aug. 6, 2010) https://dpw.lacounty.gov/wmd/wmms/docs/Final_Phase_I_Modeling_Report_Part_I.pdf [as of Apr. 10, 2019], p.3.)

¹⁶³ SBPAT “is a public domain, ‘open source’ GIS-based water quality analysis tool intended to 1) facilitate the prioritization and selection of [BMPs] in urbanized watersheds, and 2) quantify benefits, costs, uncertainties and potential risks associated with stormwater quality projects. [¶] The prioritization methodology is geared toward optimizing the water quality return on investment . . . for user-defined priorities and multiple pollutant types . . . [¶] The quantification/analysis module utilizes land use based Event Mean Concentrations, [USEPA] Stormwater Management Model . . . , [USEPA]/American Society of Civil Engineers . . . International BMP Database, site data, and a Monte Carlo approach to quantify water quality benefits and uncertainties.” (Geosyntec, *About Structural BMP Prioritization and Analysis Tool (SBPAT)* (2013) <http://www.sbp.at.net/> [as of Apr. 10, 2019].)

¹⁶⁴ HSPF performs the same function as LSPC, described above. (Center for Exposure Assessment Models, *Exposure Assessment Models: HSPF* <https://www.epa.gov/exposure-assessment-models/hspf> [as of Apr. 10, 2019].) None of the nine contested WMPs utilized HSPF for their modeling.

imperfect. While we expect the RAAs to be developed through a rigorous process, we recognize that their initial iterations will necessarily be imprecise. As the Los Angeles Water Board stated in its response to the WMP petition, “[T]he very purpose of a model is to aid in evaluating conditions and outcomes over space and time when limited data are available. As data continue to be collected, model results are validated and model inputs and assumptions are adjusted if necessary.”¹⁶⁵ The Los Angeles MS4 Order has multiple controls to allow Permittees and the Los Angeles Water Board to update RAAs, amend WMPs, and ensure that receiving water limitations and WQBELs and other TMDL-specific limitations will be achieved. Nevertheless, while we do not expect the initial iterations of an RAA to be perfect, an RAA that incompletely utilizes existing reliable information and data does not provide an acceptable foundation for a WMP.

Petitioners raise a variety of issues with the RAAs of the challenged WMPs. We decline to address every issue; the State Water Board is not in a position to micromanage every model input and each Los Angeles Water Board decision. With that said, there are issues raised by Petitioners we will address, as well as some issues we encountered independently during our review.¹⁶⁶ In this section, we emphasize thoroughness, transparency, rigor, and accountability. We require that Permittees explain how the information discussed in their WMPs was used, identify the relevant information that was not used, and make enforceable commitments to obtaining and incorporating new relevant information. Most significantly, we require a reevaluation of the Groups’ limiting pollutant approaches. The Groups must justify their use of certain limiting pollutants in accordance with the Los Angeles MS4 Order’s requirements. In each case, the WMP Groups have failed to support their use of limiting pollutants and, as a result, have failed to demonstrate reasonable assurance for many water body-pollutant combinations addressed by their WMPs. As discussed above, the Groups will have six months from the date of this order to demonstrate to the Los Angeles Water Board Executive Officer that they have met their 2017 milestones as written. If met, the Groups will continue to receive deemed-compliance even for those pollutants addressed by a flawed limiting pollutant approach. In all cases, the Groups have until 12 months from the date of this order’s adoption to propose comprehensive updates to their programs for compliance with this order.

¹⁶⁵ Los Angeles Water Board Response to Petition and Addendum (Jan. 15, 2016) (Los Angeles Water Board Response to Petition and Addendum), p. 7; available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2386/comments011516/larwqcb_rspns.pdf [as of Apr. 10, 2019].

¹⁶⁶ John L. Hunter and Associates, Inc., prepared both the LLAR and LSGR WMPs and RAAs while CWE prepared the LAR UR2 WMP and RAA. For that reason, the LLAR and LSGR WMPs and RAAs will, for the most part, be discussed together while the LAR UR2 WMP and RAA will be discussed separately.

a. Source Assessments

Petitioners raise several issues regarding the LAR UR2 WMP's development and RAA, particularly regarding the source assessment.¹⁶⁷ While we disagree with Petitioners that any of the issues they identified required the Los Angeles Water Board Executive Officer to disapprove the WMP, they do expose a need for additional clarity and thoroughness in the writing of the WMP. WMPs are more than planning documents; they are justifications for allowing the participating Permittees to avoid being held to strict compliance with receiving water limitations while the plans are implemented. Without clear explanations of processes and justifications for decisions, the Water Boards and the public cannot be confident that the plans will achieve their goals. As such, the WMP Groups must show their work.

For example, Petitioners take issue with the LAR UR2 Group's refusal to incorporate TMDL monitoring results and Statewide Industrial Storm Water General Permit (IGP) monitoring data into their source assessment and estimates of pollutant loadings. While we are not inclined to second-guess the Los Angeles Water Board's decision to allow the LAR UR2 Group to exclude this data, we do take issue with the level of detail provided – no adequate justification for the decision appears in the WMP itself. The Group states that it is “apparent” that the TMDL pollutant source assessments were “inconclusive and overly broad upon which to take actionable source determinations or source control efforts.”¹⁶⁸ Saying it is “apparent,” however, is not enough – the Group must explain why the data is unreliable.¹⁶⁹ Similarly, we do not fault the determination that IGP monitoring information was too unreliable to be useful in a source assessment,¹⁷⁰ a decision for which adequate justification was provided – but not in the WMP itself.¹⁷¹ As explained in the Los Angeles Water Board staff's response to the original WMP petition, the LAR UR2 Group was permitted to rely on regional event mean concentrations rather than IGP monitoring information to determine baseline loading from the subwatershed's industrial areas.¹⁷² As we stated, the WMP Groups must show their work. In

¹⁶⁷ This section focuses primarily on the LAR UR2 WMP's source assessment because Petitioners did not raise similar issues with the LLAR and LSGR WMP source assessments.

¹⁶⁸ LAR UR2 WMP, § 2.3, p. 29.

¹⁶⁹ The excerpt from the Los Angeles River Nitrogen Compounds and Related Effects TMDL, for example, identifies three Waste Reclamation Plants as the principal sources of nitrogen, yet this data is “apparent[ly]” inconclusive and overly broad. (LAR UR2 WMP, § 2.3, p. 32.)

¹⁷⁰ LAR UR2 WMP, § 2.3, p. 30.

¹⁷¹ We are hopeful that the quality of this data will improve to the point that it is usable in a source assessment and calibration of models because of changes made in the most recent iteration of the IGP.

¹⁷² Board Staff's Response to Petition for Review of the Executive Officer's approval, with conditions, of nine Watershed Management Programs (WMPs) pursuant to the Los Angeles County MS4 Permit (Order No. R4-2012-

the source assessment section, that means describing how the source assessment was actually done rather than just what was not considered, and it requires an explanation for why the WMP Group chose to disregard any “relevant, available” data.¹⁷³ For each unused piece of relevant data, the WMP Group must submit an explanation. If that information is discussed elsewhere in the WMP, the source assessment should at least refer the reader to the section containing that discussion. When the WMP Groups make an assumption because reliable data is unavailable, an enforceable commitment to evaluating that assumption and updating the WMP and RAA should be included.¹⁷⁴ While the standard of using “relevant, available” data in the development of an alternative compliance plan has not before been mandated by the State Water Board, we endorse its use as the standard to be applied throughout the state as other regional water boards develop and implement alternative compliance programs.¹⁷⁵

The need for clarity and thoroughness in the source assessments (and the WMPs as a whole) extends further, however, than a simple description of what information was considered. It must also, either directly or via citations to the appropriate WMP or RAA section, explain how the information considered was ultimately used. If, for example, the LAR UR2

0175), Att. 2: Assessment of NRDC/LAWK/HTB March 25, 2015 Letter Commenting on Revised Watershed Management Programs (WMP), (2) Los Angeles River Upper Reach 2, pp. 2-3.

¹⁷³ This same defect exists with the LAR UR2 Group’s Permit-required water-quality prioritization. Priority 1(a) is assigned to TMDLs with WQBELs or receiving water limitations with interim or final compliance deadlines within the Order term or unachieved TMDL compliance deadlines. Priority 1(b) is assigned to TMDLs with WQBELs or receiving water limitations with interim or final compliance deadlines between September 6, 2012, and October 25, 2017. Lastly, Priority 2 is assigned to all other controlling pollutants for which the source assessment has implicated MS4 discharges in impairments or exceedances of receiving water limitations in the receiving water. (Los Angeles MS4 Order, Part VI.C.5.a.iv, pp. 61-62.) Petitioners object to the classification of the Los Angeles River Metals TMDL pollutants as Priority 2 rather than 1(a). (LAR UR2 WMP, Table 2-7, p. 34.) Pollutants were prioritized, but no explanation was given for the priorities assigned. (LAR UR2 WMP, § 2.4, p. 33.) Where based off a TMDL, for example, the prioritization for a pollutant should at least include a reference to the TMDL document. The Group, when submitting the other changes required by this order, shall submit to the Executive Officer for inclusion in the WMP a justification for the designated priority for each pollutant or group of pollutants, as appropriate. The LAR UR2 Group should review the prioritization justifications explanations given in sections 2.1.1-2.1.3 of the LLAR and LSGR WMPs as an example of the level of discussion required.

¹⁷⁴ The LAR UR2 Group did this in the conditionally approved draft of its WMP in response to the Los Angeles Water Board Executive Officer’s request that the Group provide model simulations for dry-weather conditions. The LAR UR2 Group explained that dry-weather flows are not generally present in the Rio Hondo drainage area and that it was unable to reliably simulate dry-weather flows in the Los Angeles River drainage areas, noting that other groups, like the LSGR Group, were able to model such flows based on predictable irrigation runoff. The Revised WMP included a commitment to demonstrate dry-weather compliance “by the Los Angeles River Bacteria TMDL Load Reduction study, Los Angeles River Metals TMDL CMP Annual Reports, and continue[d assessment] through CIMP implementation” (Los Angeles River Upper Reach 2 Watershed Management Group, Los Angeles River Upper Reach 2 Revised Watershed Management Program (WMP) Plan (Jan. 27, 2015) § 4.3, p. 75.) This commitment is not present in the WMP’s current iteration and should be reinserted, along with a date by which an update should be expected.

¹⁷⁵ The Los Angeles MS4 Order specifically requires the use of relevant, available subwatershed data from the ten years prior to the development of a WMP/EWMP. While we endorse the use of all relevant, available data, we do not stipulate that it must be from the prior ten-year period; regional water boards are free to determine the appropriate period from which data should be gathered.

Group concluded that TMDL source investigations were useful, that information should be used in the WMP in some way (for example, to more accurately calibrate its chosen model to the WMA or to aid in its pollutant classifications, discussed below). It is not enough to simply state that information was considered. If it was considered and incorporated into the planning process, the WMP Groups must describe how that was done. If the model already sufficiently accounts for data obtained through review of TMDL source investigations or other sources of information, that conclusion should be explained. The need for this additional level of explanation is apparent in the LLAR and LSGR Groups' source assessments. Both source assessments discuss a large amount of information; they do not, however, explain how the information was incorporated into the WMP planning process.¹⁷⁶ We expect more out of the source assessments than a summary of the information available – for the source assessment to be a meaningful exercise, Permittees must show that the information they considered was used or explain why it was not used. The Los Angeles Water Board and its Executive Officer should use their oversight role to review these plans and their updates to ensure that the source assessments are meaningful components of the WMPs. Where source assessments fail to meet the standards discussed above, we expect the Executive Officer to disapprove the plans.

b. Water Quality Calibration

The LAR UR2 Group used SPBAT and WMMS for its modeling.¹⁷⁷ Petitioners contend that the Group failed to perform enough, if any, required model calibration.¹⁷⁸ Model calibration is the process of using local data to adjust a model so that the output of the model has greater applicability to the system modeled. While Petitioners are correct that the LAR UR2 Group performed no additional calibration of the WMMS model, they are incorrect in claiming that this is a deficiency warranting WMP denial.

The LAR UR2 Group relied on WMMS's default hydrology calibration. In defending its decision to rely on a regionally calibrated model "clipped" to fit the WMA,¹⁷⁹ the LAR UR2 Group argues Petitioners "neglect[] to acknowledge that most monitoring, current or

¹⁷⁶ LLAR WMP, § 2.3, pp. 2-34 to 2-42; LSGR WMP, § 2.3, pp. 2-33 to 2-40.

¹⁷⁷ LAR UR2 WMP, § 4.1.1, p. 74.

¹⁷⁸ WMP Petition Addendum, p. 5. This claim is an outgrowth of the Los Angeles Water Board staff comment that the LAR UR2 Draft WMP failed to "describe how the model was calibrated in accordance with the calibration criteria set forth [in] Table 3.0 of the [RAA] Guidelines . . . [and] no historical hydrology and water quality monitoring data were used for comparison with the model results for the baseline prediction." C.P. Lai and Thanhloan Nguyen, Comments on Section 4, Reasonable Assurance Analysis, of the Draft Watershed Management Program for the Los Angeles River Upper Reach 2 Watershed Management Area (Oct. 27, 2014), Part B.8, p. 3.

¹⁷⁹ LAR UR2 WMP, § 4.2.2, p. 85.

otherwise, occurred at watershed mass emission and tributary sites, to reflect the larger watershed, so that little reach-specific water quality data exists upon which to assess an LAR UR2 WMA specific RAA calibration. Furthermore, during both dry- and wet-weather conditions, the contribution from the [LAR UR2 Group] amount[s] to less than 5% of the receiving water flow at the Rio Hondo and Los Angeles River confluence points, so it is unclear how this miniscule contribution of runoff or pollutants could be isolated from that of the remainder of the watershed.”¹⁸⁰ While the LAR UR2 Group relied on WMMS’s regional calibration in establishing target load reductions, the Group calibrated SPBAT, which it used to determine structural BMP implementation, to bring its calculated runoff volumes within 10% of the WMMS-predicted volumes (the “very good” range of the RAA Guidelines).¹⁸¹ We agree with the Los Angeles Water Board. The LAR UR2 Group provided an adequate justification for the choice made here.

¹⁸⁰ Greene, Response to Petition for Review of Regional Board Approval of Watershed Management Program Plans (January 15, 2016) at p. 2; available at https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2386/comments011516/cwe_rspns.pdf [as of Apr. 10, 2019].

Paradigm Environmental consultant Steve Carter explained the LAR UR2 Group’s reliance on the default model calibration to the Los Angeles Water Board at its September 10, 2015, hearing on the WMPs:

“[T]he first thing that we did is we took all these various models that had been developed . . . and had evolved over time, each model seemed to get better as we . . . moved from [one] watershed to another . . . and under one roof we . . . lifted the hood and looked at the engine [S]ome of the major inputs to the model . . . are rainfall data, and the physical characteristics of the watershed

“We looked at all the rainfall records . . . , [w]e also looked at the imperviousness, the – the land use, the soils, the slopes There was a lot of additional spatial, aerial, satellite imagery that could be used to better configure the models for just the physical characteristics themselves.

“Once we reconfigured all these models in this massive effort, things like hydrology essentially began to calibrate itself . . . [I]t’s just physics Water goes downhill. If you have the rainfall right and you have the imperviousness right, and you have the soils right, it tends to move pretty efficiently to calibrate the hydrology. And then we looked at the water quality for every coastal watershed within Los Angeles County, and there was a marked improvement in those calibrations. And that’s what we mean by the regional calibration is that . . . these calibrations occurred through these various TMDLs over time

“[O]ne of the major uses of models it (*sic*) to predict conditions in watershed[s] or tributaries or locations in the watershed where you . . . don’t have data

“The WMMS model itself was published repeatedly and peer reviewed in journal articles

“So just to move . . . [to] the WMMS [RAA] procedures, once we had these regional calibrated models . . . , where we had data we revisited some of those calibrations

“We’re looking at newer data that might have a few storms collected since the last time it was calibrated. And validating to make sure it still performs well. And in most cases it did. Wherever it didn’t it was usually because there was – I know in Lower Los Angeles River there was a new detention basin that was built after the model was calibrated. And once we were aware of that and realized we weren’t validating, we put that detention basin [in] the model and suddenly we were calibrating.

“So that is essentially that . . . additional validation-calibration that was occurring during the [RAA]. But if there’s no data available when pointing to WMMS, [there is] documentation as to the regional calibration” (Steve Carter, Los Angeles Water Board Hearing on Original WMP Petition, pp. 282:4-285:16.)

¹⁸¹ Los Angeles Water Board Response to Petition and Addendum, p. 36; LAR UR 2 WMP, §§ 4.1.3.1-4.1.3.3, pp. 75-79, § 4.2.2, pp. 85-89.

It failed, however, to provide that justification in the WMP itself. The LAR UR2 Group should fully explain its decision in the WMP.

It is worth noting that this calibration is not final. As the LAR UR2 Group noted, “Implementation of the . . . LAR UR2 [CIMP] will provide the best, and only non-speculative, discharge water quality monitoring data upon which to validate the local RAA and guide ongoing WMP implementation using relevant reach derived data.”¹⁸² The Los Angeles Water Board Executive Officer agreed. In his conditional approval, he directed that, in performing the adaptive management required by the Order, the LAR UR2 Group must “[r]efine[] and recalibrat[e] . . . the [RAA] based on data specific to the LAR UR2 [WMA] that are collected through the LAR UR2 [Group’s CIMP] and other data as appropriate.”¹⁸³

This discussion echoes what has been said and will be said again at various points throughout this order: the WMPs and associated RAAs must clearly identify the information considered and how that information was used or why it was not used. This is necessary for the Los Angeles Water Board Executive Officer and the public to assess the adequacy of the analyses performed and understand where the WMP Groups will be focusing their monitoring and data collection efforts.

c. Limiting Pollutants

The idea of a limiting pollutant, discussed in the WMP summary above, appears to have originated in the Los Angeles Water Board’s RAA Guidelines on March 25, 2014: “In some cases, it may be possible to identify a ‘limiting pollutant’ that can be used as the focus of the analysis – i.e., to estimate necessary pollutant reductions and to analyze the BMP scenario to achieve the needed reduction – which will result in achievement of needed reductions in other pollutants. Where this approach is taken, adequate justification must be provided.”¹⁸⁴ No additional guidance is given. The closest the Order comes to discussing a limiting pollutant approach is in its discussion of pollutant classes in the context of deemed-compliance for 303(d) listed water body-pollutant combinations in the same class as a TMDL: “Pollutants are

¹⁸² Greene, Response to Petition for Review of Regional Board Approval of Watershed Management Program Plans (January 15, 2016) at p. 2.

¹⁸³ Samuel Unger, Approval, With Conditions, of the Los Angeles River Upper Reach 2 Watershed Management Group’s Watershed Management Program (WMP), Pursuant to the Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit (NPDES Permit No. CAS004001; Order No. R4-2012-0175) (Apr. 28, 2015) pp. 6-7; available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/los_angeles/upper_reach2/Los_Angeles_Upper_Reach2_Watershed.pdf [as of Apr. 10, 2019].

¹⁸⁴ RAA Guidelines, p. 2.

considered in a similar class if they have similar fate and transport mechanisms, can be addressed via the same types of control measures, and within the same timeline already contemplated as part of the [WMP] for the TMDL.”¹⁸⁵

The function of a limiting pollutant is to focus compliance schedule implementation on as few pollutants as possible to ease the RAA’s analytical burden, reduce conflicting implementation priorities, and streamline implementation. This is a reasonable goal, but this goal cannot supersede Order-required analyses and considerations.

For a WMP Group to be deemed in compliance with receiving water limitations and WQBELs and other TMDL-specific limitations, that Group must address the relevant water body-pollutant combinations in its WMP. To this end, the Order sets out four tracks for addressing pollutant discharges that must be followed for a Permittee to be deemed in compliance:

1. Permittees will be deemed in compliance with applicable TMDL interim WQBELs and other interim TMDL-specific limitations so long as they incorporate requirements and dates for their achievement into their WMP and fully comply with those requirements and dates.¹⁸⁶ Permittees must select either watershed control measures identified by the Order’s TMDL provisions or modifications of those control measures designed to more effectively address TMDL requirements.¹⁸⁷ Additional control measures identified by Permittees, designed to achieve TMDL WQBELs and other TMDL-specific limitations, should be included in the WMP compliance schedule, if needed.¹⁸⁸ The RAA must be used to demonstrate that these control measures will achieve TMDL WQBELs and other TMDL-specific limitations with deadlines during the Order term.¹⁸⁹ Once substantiated by the RAA and upon approval of the WMP by the Los Angeles Water Board Executive Officer, implementation of the control measure schedule becomes the enforceable metric for determining WMP compliance and the “interim milestones and dates for their achievement shall be used to measure progress towards addressing the highest water quality priorities and

¹⁸⁵ Los Angeles MS4 Order, Part VI.C.2.a.i, p. 50, fn. 21.

¹⁸⁶ Los Angeles MS4 Order, Part VI.C.3.a, p. 54.

¹⁸⁷ Los Angeles MS4 Order, Parts VI.C.5.b.iv.(3)-(4), p. 64.

¹⁸⁸ Los Angeles MS4 Order, Part VI.C.5.b.iii.(1).

¹⁸⁹ Los Angeles MS4 Order, Parts VI.C.5.b.iv.(5)(a)-(b), p. 65.

achieving applicable [WQBELs] and [other TMDL-specific limitations].”¹⁹⁰ Further, “[a] Permittee that does not implement the [WMP] in accordance with the milestones and compliance schedule shall [instead] demonstrate compliance with . . . interim [WQBELs] and/or [other TMDL-specific limitations].”¹⁹¹

2. For non-TMDL pollutants that are in the same class as a TMDL pollutant (similar fate and transport mechanisms, addressable via the same types of control measures, and addressable within the same timeline already contemplated as part of the WMP for the TMDL)¹⁹² and for which the water body is 303(d) listed, Permittees must demonstrate that the control measures identified to achieve the requirements of the Order’s TMDL provisions will adequately address contributions of the non-TMDL pollutants and identify milestones and dates for their achievement consistent with those in the corresponding TMDL.¹⁹³ At this point, just as with the TMDL pollutants, implementation of the control measure schedule becomes the enforceable metric for determining WMP compliance and the “interim milestones and dates for their achievement shall be used to measure progress.”¹⁹⁴
3. For pollutants not in the same class as those addressed in a TMDL but for which the water body is 303(d) listed, Permittees must conduct a source assessment, create a control measure schedule, and identify a series of enforceable requirements and water quality milestones and dates for their achievement designed to control MS4 discharges of the pollutants.¹⁹⁵ Where the final milestone for achievement is beyond the term of the Los Angeles MS4 Order, any extension of deemed-compliance for the water body-pollutant combination must be made consistent with the terms of a subsequently adopted-TMDL.¹⁹⁶
4. Lastly, for non-303(d) listed pollutants for which there are exceedances of receiving water limitations reported pursuant to data collected in an approved monitoring program, Permittees shall conduct a source assessment. If MS4 discharges are

¹⁹⁰ Los Angeles MS4 Order, Part VI.C.5.c, p. 66.

¹⁹¹ Los Angeles MS4 Order, Part VI.E.2.d.(c), p. 147.

¹⁹² Los Angeles MS4 Order, Part VI.C.2.a.i, p. 50, fn. 21.

¹⁹³ Los Angeles MS4 Order, Part VI.C.2.a.i, p. 50.

¹⁹⁴ Los Angeles MS4 Order, Part VI.C.5.c, p. 66.

¹⁹⁵ Los Angeles MS4 Order, Part VI.C.2.a.ii.(1)-(4), p. 51.

¹⁹⁶ Los Angeles MS4 Order, Part VI.C.2.a.ii.(5)(b), pp. 51-52. To elaborate, this means that final compliance deadlines beyond the term of the MS4 Order for these water body-pollutant combinations may not be altered in a WMP unless that alteration is made consistent with the terms of a TMDL adopted after WMP approval. Just as with TMDL pollutants, interim deadlines may be adjusted and modified.

identified as a source that is or is potentially causing or contributing to that exceedance, Permittees, in order to be deemed in compliance with the receiving water limitations, must modify their WMPs via the Order's adaptive management provisions. This modification must identify control measures that will address the MS4's contributions, modify the RAA to address that pollutant, and identify enforceable requirements and water quality milestones and dates for their achievement meant to address the receiving water limitations exceedances.¹⁹⁷

All three WMPs fall short in complying with this framework. The WMP Groups generally failed to justify the use of their chosen limiting pollutant, and presented poorly defined pollutant classes unsupported by analysis resulting in ambiguity as to which water body-pollutant combinations are meant to be addressed by the WMPs' compliance schedules. Further, and most importantly, these problems mean that for most of the water body-pollutant combinations addressed by the WMPs, the Groups have not established reasonable assurance that the plans would result in actual achievement of receiving water limitations and WQBELs and other TMDL-specific limitations.

Before we proceed to our discussion of the specific WMPs, however, one change is needed. As described in the second track, the Order explicitly allows 303(d) listed pollutants in the same class as a TMDL to be addressed via a schedule designed for that TMDL. We view this as an acceptable approach for controlling any non-TMDL pollutant or pollutants. The change below will explicitly allow Permittees to control pollutants described by the fourth track via a schedule designed for a TMDL pollutant or to similarly control pollutants described by the third and fourth tracks together.

We will amend the Order by adding Part VI.C.2.e:

e. Pollutants described in Parts VI.C.2.a.ii. and iii. may be addressed via a schedule designed for another pollutant if the pollutants are in the same class and if:

- (1) Permittees demonstrate that the chosen Watershed Control Measures will adequately address contributions of the pollutant(s) within the same class from MS4 discharges to receiving waters such that the MS4**

¹⁹⁷ Los Angeles MS4 Order, Part VI.C.2.a.iii.(2), pp. 52-53.

discharges of the pollutant(s) will not cause or contribute to exceedances of receiving water limitations in Part V.A.

(2) Permittees include the water body-pollutant combination(s) in the Reasonable Assurance Analysis in Part VI.C.5.b.iv.(5).

(3) Permittees identify milestones and dates for their achievement consistent with those in the schedule identified for the other pollutant.

i. RAA Approaches

The LLAR and LSGR Groups chose “the metal zinc [as] the[ir] primary or ‘limiting’ pollutant and [predicted] that by implementing the structural and non-structural measures . . . to reduce zinc, the remaining pollutant reduction targets will be achieved”¹⁹⁸ The justification for this approach was provided in the LLAR and LSGR Groups’ RAA.¹⁹⁹ The LLAR and LSGR Groups compared the needed reductions for most Category 1 pollutants.²⁰⁰ Trash was not included because compliance with a WMP/EWMP does not constitute compliance with interim trash WQBELs.²⁰¹ Nitrogen compounds, including ammonia and nutrients, were not included in the RAA because final TMDL WQBELs (applicable to the LLAR Group) are already effective.²⁰² Category 2 and 3 pollutants were not included. The LLAR and LSGR Groups chose their limiting pollutant by ordering the needed reductions for the analyzed Category 1 pollutants from greatest to least and choosing what they viewed as the most appropriate pollutant with the greatest needed reduction. Copper, projected to require a greater reduction than zinc, was not chosen to be limiting with the explanation that “SB 346 is expected to reduce [copper loading] without any implementation of structural control measures Overall findings of [studies] estimated that of the anthropogenic sources of copper, approximately 35 percent are attributed to brake pad releases Even if the reduction was only half of this amount, the adjustment to the needed copper reduction would still result in zinc being the limiting pollutant.”²⁰³ Similarly, the organic pollutants DDT and PCB generally needed

¹⁹⁸ LLAR WMP, § 4.1, p. 4-1; LSGR WMP, § 4.1, p. 4-1.

¹⁹⁹ LLAR/LSGR/LCC RAA, § 5.3.1, pp. 38-39.

²⁰⁰ LLAR WMP, Table 2-1, p. 2-5; LSGR WMP, Table 2-1, p. 2-4; LLAR/LSGR/LCC RAA, § 5.3.1, pp. 38-39. As discussed above, Category 1 applies to those water-body pollutant combinations for which WQBELs and other TMDL-specific limitations are established by the Order’s TMDL provisions.

²⁰¹ Los Angeles MS4 Order, Part VI.E.2.a.ii, p. 145.

²⁰² LLAR WMP, § 3.4.1.1, p. 3-22.

²⁰³ LLAR/LSGR/LCC RAA, § 5.3.1, pp. 38-39. Petitioners object to the LLAR and LSGR Groups’ estimates for copper reduction resulting from SB 346. The estimated reduction is derived from the studies referenced above and if that estimate proves to be incorrect, the LLAR and LSGR Groups will reevaluate their limiting pollutant approaches

greater reductions than zinc but were not chosen as limiting “because the maximum detection limits (MDLs)²⁰⁴ used for the analysis heavily affected the calculated needed reductions. Rather than use LSPC for reduction calculations, monitoring data were used directly and many reported concentrations for [organics] were below MDLs, so concentrations were assumed in the model to equal half the MDL. The MDL is above the target leading to non-detects requiring reductions. Of course, toxics will be addressed by control measures implemented for zinc.”²⁰⁵ Zinc, after being chosen as the limiting pollutant, was the only pollutant modeled by the LLAR and LSGR Groups.²⁰⁶ For reasons we will discuss, these explanations fail to justify zinc’s use as the sole limiting pollutant.²⁰⁷

The LAR UR2 RAA “identified bacteria and metal pollutants [as the] priority and BMP design limiting pollutants,”²⁰⁸ each for a different drainage area. While the LAR UR2 WMP’s lack of a dedicated section explaining the LAR UR2 Group’s approach makes it difficult to understand exactly how the Group arrived at its conclusion, it appears from its RAA and the Los Angeles Water Board’s response to the WMP petition addendum that the LAR UR2 Group first used “LSPC/MMMS . . . to establish . . . target load reductions,”²⁰⁹ and then modeled for baseline and allowable loading and target load reductions for most of its Category 1 pollutants,²¹⁰ including nitrogen, *Escherichia coli* (*E. coli*) bacteria, copper, lead, and zinc. Nitrogen was analyzed as a stand-in for the four nitrogen compounds included in Category 1.²¹¹ Cadmium was not analyzed, and an explanation was not given. No reduction was found to be

and compliance schedules. The same is true regarding Petitioners’ objection to the LAR UR2 Group’s estimate. (LAR UR2 WMP section 4.4.3.)

²⁰⁴ This should likely refer to “method detection limits.”

²⁰⁵ LLAR/LSGR/LCC RAA, § 5.3.1, p. 38. Baseline loading for the Semi Volatile Organic Compound (SVOC) category pollutant PAH was estimated in the same way for the same reason. This estimate resulted in a finding that no reduction in baseline loading is needed.

²⁰⁶ See LLAR/LSGR/LCC RAA, Table 4-8, p. 23, which identifies the “90th percentile concentrations assumed for non-modeled pollutants” – a list that includes DDT, PCBs, PAHs, cadmium, copper, lead, and *E. coli*.

²⁰⁷ The LLAR and LSGR WMPs somewhat muddle zinc’s status as their limiting pollutant by referring to total suspended solids (TSS) as the “governing pollutant for metals” and by saying that the WMP’s “chief approach is controlling [TSS] at the source.” LLAR WMP, § 3.4.2.1, pp. 3-31 to 3-32; LSGR WMP, § 3.4.1.2, pp. 3-22 to 3-23. We do not give these statements much effect, however, because the water quality milestones relate to zinc and it is with those milestones that the Groups must demonstrate compliance. We do, however, instruct the Group’s to clarify the role TSS played in the planning of the WMP and what role it will continue to play, if any, in the actual demonstrations of compliance.

²⁰⁸ LAR UR2 WMP, § 4, p. 73.

²⁰⁹ Los Angeles Water Board Response to Petition and Addendum, p. 36; LAR UR2 WMP, §§ 4.2.3-4.2.5, pp. 89-94.

²¹⁰ LAR UR2 WMP, § 2.2, p. 29 & Tables 4-5 to 4-7, pp. 91-94.

²¹¹ LAR UR2 WMP, § 4.2.3, p. 89.

needed for lead or nitrogen.²¹² For the remaining Category 1 pollutants, the Group used SBPAT²¹³ in an “iterative process of identify[ing] suites of [structural BMPs (regional, LID, and green streets)] capable of achieving the [target load reductions.] Bacteria was found to be the [limiting] pollutant for the Los Angeles River drainage area, and zinc . . . for the Rio Hondo drainage area.”²¹⁴ The resulting estimated load reductions for *E. coli*, copper, and zinc in both drainage areas were presented.²¹⁵

It is unclear exactly which pollutants are meant to be limited by the WMP Groups’ limiting pollutant approaches, as will be discussed. The result of the limited modeling and the lack of clarity surrounding the WMP Groups’ approaches ultimately leads us to the conclusion that the WMP Groups’ RAAs did not produce reasonable assurance that their compliance schedules will achieve final water quality goals for few pollutants beyond their limiting pollutants. We require that the WMP Groups update their WMPs to incorporate the requirements of the following section or be held to baseline receiving water limitations and WQBELs and other TMDL-specific limitations for pollutants not adequately addressed in their RAA.

ii. Required Approach

The first step in designing a compliance schedule should be grouping pollutants into classes wherever possible. As discussed in section II.B.2.c of this order, the Los Angeles MS4 Order allows pollutants to be classified together when “they have similar fate and transport mechanisms, can be addressed via the same types of control measures, and within the same timeline already contemplated as part of the [WMP.]”²¹⁶ The LLAR and LSGR Groups each have a “Pollutant Classification” section in which they group pollutants into seven categories,²¹⁷ purportedly based on the class definition above. These classifications, however, are not supported with any level of analysis. The LAR UR2 WMP lacks any explicit pollutant classification at all, addressing pollutant classes with just a conclusory statement that “Category 3 pollutants overlap significantly with Category 1 or 2 pollutants and in some cases . . . they are

²¹² LAR UR2 WMP, Table 4-7, p. 94.

²¹³ LAR UR2 WMP, §, p. 101. This is the first of two sections numbered 4.5 in the LAR UR2 WMP. The other is the “Modeling Output” section on page 113. This numbering discrepancy should be fixed in the next round of updates to the WMPs.

²¹⁴ LAR UR2 WMP, § 4.5, p. 113.

²¹⁵ LAR UR2 WMP, Tables 4-20 to 4-23, pp. 114-115.

²¹⁶ Los Angeles MS4 Order, Part VI.C.2.a.i, p. 50, fn. 21.

²¹⁷ The categories are: Metals, Nutrients, Pesticides, Bacteria, Semivolatile Organic Compounds (SVOC), Water Quality Indicators/General, and Trash. (LSGR WMP, § 2.1.4, p. 2-14; LLAR WMP, § 2.1.4, p. 2-13.)

essentially the same pollutant.”²¹⁸ As a result of this approach, the LLAR, LSGR, and LAR UR2 Groups have not shown that the implementation plans created for their chosen pollutants will be effective in treating all of the other pollutants intended to be addressed by their WMP.

When grouping pollutants by the Order’s class definition, each point of the definition must be addressed. This requires an explanation of the pollutants’ similarity of fate and transport, identification of the overlap in land uses and activities that contribute to generation of the pollutants, identification of the BMPs that can treat each pollutant in the class, and support for the contention that all the pollutants are treatable via the same schedule.²¹⁹ If that information is elsewhere in the WMP, the pollutant classification must refer to the section containing it. If information is unavailable, the missing information must be identified and a specific, enforceable commitment to obtaining it and incorporating it into the WMP by a certain date should be included. As stated before, the WMP process does not require perfect information – it requires that relevant, available information be used and, where information is not available, it requires an enforceable commitment to obtaining that information. The four tracks described above, however, are Order requirements and must be adhered to when designing a schedule.²²⁰ This means that the WMP Groups’ blanket approach of designating one pollutant as their jurisdictional limiting pollutant and conducting an analysis for just that one pollutant is insufficient.²²¹

²¹⁸ LAR UR2 WMP, § 2.4, p. 33.

²¹⁹ A class is not limited to one type of pollutant. Metals, for example, do not have to be grouped only with other metals. Different kinds of pollutants that meet the class definition may be grouped together and treated via the control measure schedule identified.

²²⁰ The only effect of the above change made by this order to the scheduling tracks is to explicitly authorize the class approach to address non-303(d) listed pollutants via TMDL control schedules and to address 303(d) listed pollutants and non-303(d) listed pollutants together even where a TMDL is not involved.

²²¹ This deficiency was recognized by Renee Purdy, the Los Angeles Water Board’s Regional Programs Section Chief, when, during an October 9, 2014 Board hearing regarding the Draft WMPs, she commented, “in some cases some of the . . . water quality priorities [the WMP Groups are] identifying have not been addressed through the [RAA]. [¶] And in some cases that is okay, because they have identified . . . a ‘limiting pollutant’ where they know if they control that pollutant, then they are going to address the other pollutants. But in other cases if it’s a pollutant that has different fate and transport characteristics, they really need to go through that modeling exercise for that pollutant as well.” (Renee Purdy, address to the Los Angeles Regional Water Quality Control Board (Oct. 9, 2014) Workshop on the draft Watershed Management Programs (WMPs) submitted pursuant to Part VI.C of the Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES Permit (Order. No. R4-2012-0175), at RB-AR2442:16-25.)

This comment was also made in the Draft WMP reviews by Los Angeles Water Board staff. In their comments on the Draft LSGR WMP, Los Angeles Water Board staff stated, “The RAA identifies zinc as the limiting pollutant and notes that this pollutant will drive reductions of other pollutants. [¶] If the Group believes that this approach demonstrates that activities and control measures will achieve applicable receiving water limitations, it should explicitly state and justify this for each category 1, 2, and 3 pollutant.” (Letter from Executive Officer Samuel Unger, Los Angeles Regional Water Quality Control Board, to Lower San Gabriel River Watershed Management Group (Oct. 30, 2014), Enclosure 1, at p. 5.) These comments were ultimately not addressed. Instead, Los Angeles Water Board staff concluded that while the “WMP does not state and justify this approach [(i.e. the assumption that controlling zinc will drive reductions of other pollutants)] for each category 1, 2, and 3 pollutant; [it] is not necessary given the Group’s limiting pollutant approach.” (Staff Response to Petition for Review of Executive Officer’s approval, with conditions, of

The first track is for TMDL pollutants. First, the WMP Groups must incorporate the requirements and date for their achievement of each relevant TMDL into their WMPs. Permittees must then use their RAA to demonstrate that their chosen control measures will achieve TMDL WQBELs and other TMDL-specific limitations with deadlines during the Order term for each TMDL pollutant.²²² We will clarify what this means in terms of designing WMP compliance schedules.

Where, as here, a WMP Group has proposed a control measure schedule designed to address the highest priority pollutant covered by a particular TMDL, it is sufficient, where the TMDL does not identify significantly different sources and implementation strategies, to assume that the proposed schedule will treat the other pollutants addressed by the TMDL. For example, the Los Angeles River Metals TMDL sets effluent limitations for copper, zinc, and lead, does not identify different sources for the different pollutants, and does not mandate different implementation strategies. Therefore, the LLAR Group's strategy of modeling for zinc and planning a control measure schedule accordingly also provides reasonable assurance for lead and copper, consistent with the assumptions and requirements of the TMDL.²²³ Because monitoring is required for all of these pollutants, the Group will be able to verify whether this approach is working and, if needed, make appropriate adjustments through adaptive management.

For pollutants addressed by a different TMDL, a separate implementation plan is generally required. The proper approach is to model the highest priority pollutant addressed by the TMDL, resulting in a unique implementation plan. Where possible, implementation opportunities that overlap with other TMDL implementation plans should be identified, but addressing multiple TMDLs via the same implementation plan would only be appropriate where the compliance schedule can be independently justified for each TMDL via modeling.²²⁴

nine WMPs (Sept. 2, 2015), Attachment 1 – Staff Response to Petitioner's Detailed Technical Comments in its Memorandum of Points and Authorities and Exhibit D, at p. 4.) This is circular, essentially concluding that justifying the limiting pollutant approach is unnecessary because of the limiting pollutant approach.

²²² Los Angeles MS4 Order, Part VI.C.5.b.iv.(5)(a)-(b), p. 65.

²²³ 40 C.F.R. § 122.44, subd. (d)(1)(vii)(B).

²²⁴ The LLAR and LSGR Groups attempt to justify deemed compliance for organic pollutants in their WMA through reference to the Harbor Toxics TMDL, which addresses zinc, copper, lead, PCBs, PAHs, and DDTs.

The Harbor Toxics TMDL "does not assign a [waste load allocation] or WQBELs for . . . the [LLAR entities] subject to this TMDL (Cities of Signal Hill, Long Beach, Caltrans, and the [Los Angeles County Flood Control District] [footnote omitted]) [that] discharge to the [Los Angeles River] above the Estuary For these [entities], [t]he TMDL requires: [¶] • Monitoring (which will be addressed . . . in the CIMP) and [¶] • A Report of Implementation, to be submitted . . . annually [on December 15] to describe how current activities support the downstream TMDL. The MS4 Annual Report with the inclusion of data gathered from the CIMP will constitute reporting of activities in support of the downstream monitoring TMDL." (LLAR WMP, § 3.4.1.6, p. 3-30.) The LLAR Group asserts that this provides

Once a control measure implementation plan has been identified for each TMDL pollutant, the analysis can shift to the second track: pollutants in the same class as a TMDL pollutant and for which the water body is 303(d) listed and, as explicitly authorized by the proposed change above, pollutants in the same class as a TMDL pollutant for which there are exceedances of receiving water limitations in Part V.A but for which the water body is not 303(d) listed. Where the WMP Groups can make the required demonstrations to show that the described pollutants are in the same class as a TMDL pollutant, they may treat those pollutants via a schedule created for that TMDL pollutant. As a result, they will not be required to separately model or plan for those pollutants.

The last two tracks are for any remaining pollutants that are 303(d) listed for any jurisdictional water body and that are not in the same class as a TMDL pollutant and for any non-303(d) listed pollutants for which there are exceedances of receiving water limitations and that are not in the same class as a TMDL pollutant.²²⁵ Permittees should propose a unique control measure schedule for each pollutant or class of pollutants that fall into these categories. As discussed in section II.B.2.c of this order, where a control measure schedule is proposed for any 303(d)-listed pollutant not in the same class as a TMDL with a final milestone beyond the term of this order, that milestone date may only be changed consistent with the terms of a subsequently adopted TMDL.²²⁶

“reasonable assurance that the [LLAR entities] are addressing the TMDL pollutants of concern in their discharges and conducting activities to support the achievement of WQBELs.” (*Id.*, § 3.4.1.6, p. 3-31.)

This is insufficient to justify deemed compliance for the organic pollutants identified by the TMDL in the LLAR WMA. The provisions of the Order that allow compliance with a TMDL to constitute compliance with receiving water limitations only apply insofar as the TMDL addresses the same water body-pollutant combinations as the receiving water limitations. The Harbor Toxics TMDL does not address the water body-pollutant combinations for the relevant pollutants in the LLAR WMA; instead, the obligations it imposes are specific to the potential impact of upstream discharges of these pollutants on Dominguez Channel and Greater Los Angeles and Long Beach Harbor waters. Further, the obligations are only informational while leaving open the possibility that the Los Angeles Water Board may later impose substantive obligations on upstream dischargers.

The LSGR Group, meanwhile, addresses the Harbor Toxics TMDL in its WMP only to note that it does not apply to the Group’s members due to a consent decree releasing them from obligations imposed by the TMDL. (LSGR WMP, § 3.4.1.1, p. 3-22; *United States of America v. Montrose Chemical Corporation* (1999) 1999 WL 672223.) Despite this, the LSGR Group relies on the exact same RAA as the LLAR Group, treating PAHs, DDTs, and PCBs as TMDL pollutants limited via implementation of the San Gabriel River Metals TMDL. This is equally insufficient to justify deemed compliance for these organic pollutants in the LSGR WMA.

As a result, both Groups, to be deemed in compliance with receiving water limitations addressing these pollutants within their respective WMAs, must address them via the appropriate non-TMDL track. If the LLAR and LSGR Groups wish to continue addressing these pollutants via a control measure implementation schedule designed for zinc, they must make the class justification required of any other non-TMDL pollutant.

²²⁵ Although this final track is written as reactionary to data collected via WMP-associated monitoring programs, the WMP Groups proactively included in their WMPs non-303(d) listed pollutants for which their existing data shows exceedances of receiving water limitations.

²²⁶ Los Angeles MS4 Order, Part VI.C.2.a.ii.(5)(b), pp. 51-52.

Once this process is complete, the conclusions must be clearly presented. This has not been done in the WMPs' current iterations. When one pollutant is being used as a planning surrogate for another, it must be clearly stated so Permittees can be deemed in compliance for all the pollutants in the class, and, conversely, *not* be deemed in compliance for pollutants for which the required analyses and planning have not been performed. The LAR UR2 RAA states that “[b]ased on the identified Critical Conditions in both the Los Angeles River Reach 2 and Rio Hondo Reach 1, the LAR UR3 (*sic*) WMA RAA indicates that for each pollutant of concern, the load reductions anticipated by the average cumulative BMP implementation strategy will exceed the final total load reductions, and the phased BMP load reductions also meet the interim compliance targets.”²²⁷ What these “pollutants of concern” are is unclear. The WMP states, “priority pollutants of concern [are] identified in Section 2[.]”²²⁸ however, whether this is meant to refer to the categorization of pollutants,²²⁹ the prioritization of pollutants,²³⁰ or something else entirely²³¹ is unclear. The only WMP-identified “pollutants of concern” are listed in Table 3-7: “Treatment Control BMP Removal Efficiency,” which grades the efficiency of particular BMPs in treating different pollutants and pollutant categories.²³² The LAR UR2 Group’s analysis, discussed above, focused on nitrogen (employed as a representative pollutant for all four Category 1 nitrogen compounds), *E. coli*, copper, lead, and zinc. The Group did not analyze cadmium, a Category 1 pollutant, and found that no reductions were needed for lead and nitrogen. The Group then settled on *E. coli* as the limiting pollutant for the Los Angeles River drainage area and zinc as the limiting pollutant for the Rio Hondo drainage area. We conclude, based on this analysis, that the Group intended its approaches to be limiting for *E. coli*, copper, and zinc in both drainage areas. It can also be assumed to be limiting for cadmium in the Los Angeles River drainage area, where it is included in the same TMDL as zinc and copper.²³³ Of the remaining Category 1 pollutants, of which four are nitrogen compounds and

²²⁷ LAR UR2 WMP, § 4.6, p. 113.

²²⁸ LAR UR2 WMP, § 4, p. 73.

²²⁹ LAR UR2 WMP, § 2.2, p. 29.

²³⁰ LAR UR2 WMP, § 2.4, p. 33.

²³¹ The Order refers to “pollutants of concern” in a few different areas. Finding A identifies “indicator bacteria, total aluminum, copper, lead, zinc, diazinon, and cyanide.” (Los Angeles MS4 Order, Finding A, p. 13.) “Trash and debris, including organic matter, total suspended solids (TSS), residual chlorine, pH, and any pollutant for which there is a [WQBEL] in Part VI.E” are identified as pollutants of concern in drinking water supplier distribution system releases. (Los Angeles MS4 Order, Part III.A.2.a.ii, p. 29, fn. 9.) Pollutants of concern are defined generally as including, “at a minimum, trash and debris, including organic matter, TSS and any pollutant for which there is a [WQBEL] in Part VI.E for the lake and/or receiving water.” (Los Angeles MS4 Order, Table 8, p. 34, fn. 18.)

²³² LAR UR2 WMP, Table 3-7, pp. 69-70.

²³³ The LAR UR2 Group’s Table 2-2 to 2-5, which show substantially fewer cadmium exceedances than copper and zinc, appear to explain why cadmium was not chosen as the pollutant to be analyzed from the Los Angeles River

one is lead, the Group determined no reductions were needed. The final Category 1 pollutant is trash, for which deemed-compliance is not available. The only Category 2 or 3 pollutants we can conclude the Group intended its approaches to be limiting for are coliform bacteria and fecal enterococcus, which it states are “essentially the same pollutant” as *E. coli*.²³⁴ No other Category 2 or 3 pollutants are grouped with pollutants analyzed in the RAA for which reductions were found to be needed; therefore, no deemed-compliance is available for the remaining Category 2 and 3 pollutants.

The LLAR and LSGR Groups, based on their analyses of selected organics, metals, and bacteria, combined with their pollutant classifications, appear to intend their approaches be limiting for their Metals, SVOC, and Bacteria classes, as well as, in the LLAR Group’s case, its Pesticides class. This understanding is based on comparing the pollutants analyzed in the LLAR and LSGR Groups’ RAA, which include DDT, PCB, PAH, Copper, Lead, Zinc, and *E. coli*, to the WMPs’ pollutant classifications.²³⁵ However, whether it was also meant to cover their Water Quality Indicators/General and Nutrients classes is unclear.

The lack of supported classifications reveals serious problems with the WMP Groups’ compliance schedules. The compliance schedules presented by the LLAR and LSGR WMPs are based on volumetric treatments within specified subwatersheds,²³⁶ with schedules derived from, respectively, the Los Angeles River Metals TMDL and the San Gabriel River Metals TMDL. Based on the foregoing discussion, we can be confident that treatment within those subwatersheds will control the pollutants addressed by those TMDLS; that is, zinc, lead, copper, and, in the case of the LLAR Group, cadmium. Without modeling for other pollutants or a proper pollutant classification, however, it is unclear how we can be particularly confident that treatment within those subwatersheds will meaningfully address any other pollutants. Similarly, the LAR UR2 WMP states that the LAR UR2 Group’s process identified BMPs capable of

Metals TMDL. (LAR UR2 WMP, Tables 2-2 to 2-5, pp. 25-28.) We expect, however, that the Group will include an explicit discussion of this in its revised pollutant classification when it makes updates to its WMP consistent with this order.

²³⁴ LAR UR2 WMP, § 2.4, p. 33. While this statement will not be enough to justify deemed compliance after 12 months from this order’s adoption, when we will expect more robust pollutant classifications consistent with this order, it is sufficient to justify the temporary extension of deemed compliance we offer for those water body-pollutant classifications addressed by flawed limiting pollutant approaches.

²³⁵ LLAR/LSGR/LCCR AA, § 5.3.1, pp. 38-39; LLAR WMP, § 2.1.4, p. 2-13; LSGR WMP, § 2.1.4, p. 2-14. Copper, lead, and zinc appear in both Groups’ Metals class; *E. coli* appears in both Groups’ Bacteria class; and PAH appears in both Groups’ SVOC class. DDT and PCB, which appear in the LLAR Group’s Pesticides class, are not in any of the LSGR Group’s classes. No pollutants in either Groups’ Water Quality Indicators/General or Nutrients classes are analyzed.

²³⁶ LLAR/LSGR/LCC RAA, Att. B.

achieving the target load reductions for copper, zinc, and *E. coli*,²³⁷ but there is no explanation of how that conclusion was reached. A model that suggests placement of BMPs to treat one pollutant will not necessarily suggest BMP placement and types that will treat significant amounts of other pollutants and pollutant classes because of variation in sources, treatability, and fate and transport.²³⁸

The lack of sufficient pollutant classifications is not the only issue with the WMP approaches here. There is no justification for granting deemed-compliance for water body-pollutant combinations for which the WMP Group cannot obtain monitoring results when monitoring is required and feasible to perform. Here, the LLAR and LSGR Groups project that PCBs and DDT will require reductions of up to 90%, but the RAA claims that baseline loading and target loading are below the sampling and analysis MDL.²³⁹ This explanation is acceptable only if it is not feasible for a WMP Group to obtain accurate monitoring results for these pollutants, either through the use of a properly accredited laboratory²⁴⁰ or *in-situ* measurements. In such a situation, the WMP Group should either explain why sampling is not feasible or use actual sampling results in their analysis. Monitoring, when feasible, is required to evaluate the effectiveness of the WMP, in general, and the limiting pollutant approach, in particular.

Following the approach taken by the WMP Groups, the only water body-pollutant combinations for which reasonable assurance has been established are the limiting pollutants and the pollutants covered by the same TMDL.

- For the LLAR Group, whose compliance schedule is based on the Los Angeles River Metals TMDL, reasonable assurance has been established for zinc, copper, cadmium, and lead. Assuming the LLAR Group complies with its WMP, demonstrates achievement of the 2017 milestones, and updates its WMP for conformance with this order by 12 months from the date of this order's adoption, the LLAR Group's deemed-compliance for these water body-pollutant combinations will not be interrupted. Because the LLAR

²³⁷ LAR UR2 WMP, § 4.5, p. 113.

²³⁸ For example, the LLAR WMP contains findings that a detention basin has 29% effectiveness in removing dissolved zinc, but a *negative* 233% effectiveness for dissolved cadmium. Similarly, a bioswale will treat dissolved zinc with 54% effectiveness, but has an effectiveness of negative five percent for *E. coli* and negative six percent for fecal coliform. (LLAR WMP, § 3.4.3.2, p. 3-56.)

²³⁹ The same is true for PAHs, although the LLAR and LSGR Groups do not project any needed reductions for that pollutant.

²⁴⁰ ELAP certified laboratories can be located via: <https://waterboards.maps.arcgis.com/apps/webappviewer/index.html?id=bd0bd8b42b1944058244337bd2a4ebfa> [as of Apr. 10, 2019].

Group appears to have intended its approach to be controlling for the pollutants in its metals, pesticides, SVOC, and bacteria classes, the LLAR Group will continue to be deemed in compliance with those water body-pollutant combinations for up to six months, by which point the Group must demonstrate to the Los Angeles Water Board's Executive Officer that it has achieved its 2017 milestones. Failure to demonstrate achievement of those milestones will result in a loss of deemed-compliance for all water body-pollutant combinations in the LLAR Group's WMA until the WMP can be updated to be consistent with this order. Achievement of those milestones will allow the LLAR Group to continue to be deemed in compliance with zinc, copper, cadmium, and lead. It will also allow the Group to continue to be deemed in compliance with the pollutants in its metals, pesticides, SVOC, and bacteria classes for which reasonable assurance has not been established consistent with this order until 12 months from the date of this order's adoption, at which point the LLAR Group must propose updates to its WMP to conform it to the requirements of this order. The LLAR Group is not deemed in compliance with any water body-pollutant combinations other than those just discussed.

- For the LSGR Group, whose compliance schedule is based on the San Gabriel River Metals TMDL, reasonable assurance has been established for copper, lead, and zinc. Assuming that the LSGR Group complies with its WMP, demonstrates achievement of the 2017 milestones, and updates its WMP for conformance with this order by 12 months from the date of this order's adoption, the LSGR Group's deemed-compliance for these water body-pollutant combinations will not be interrupted. Because the LSGR Group appears to have intended its approach to be controlling for the pollutants in its metals, SVOC, and bacteria classes, the LSGR Group will continue to be deemed in compliance with those water body-pollutant combinations for up to six months, by which point the Group must demonstrate to the Los Angeles Water Board's Executive Officer that it has achieved its 2017 milestones. Failure to demonstrate achievement of those milestones will result in a loss of deemed-compliance for all water body-pollutant combinations in the LSGR Group's WMA until the WMP can be updated to be consistent with this order. Achievement of those milestones

will allow the LSGR Group to continue to be deemed in compliance with copper, lead, and zinc. It will also allow the Group to continue to be deemed in compliance with the pollutants in its metals, SVOC, and bacteria classes for which reasonable assurance has not been established consistent with this order until 12 months from the date of this order's adoption, at which point the LSGR Group must propose updates to its WMP to conform it to the requirements of this order. The LSGR Group is not deemed in compliance with any water body-pollutant combinations other than those just discussed.

- For the LAR UR2 Group's Rio Hondo and Los Angeles River drainage areas, reasonable assurance has been established for copper, zinc, and *E. coli*. The same is true for cadmium in the Group's Los Angeles River drainage area. Assuming that the LAR UR2 Group complies with its WMP, demonstrates achievement of the 2017 milestones, and updates its WMP for conformance with this order by 12 months from the date of this order's adoption, the LAR UR2 Group's deemed-compliance for these water body-pollutant combinations will not be interrupted. Because the LAR UR2 Group appears to have intended its approaches to also be controlling for coliform bacteria and fecal enterococcus in both drainage areas, the LAR UR2 Group will continue to be deemed in compliance with those water body-pollutant combinations for up to six months, by which point the Group must demonstrate to the Los Angeles Water Board's Executive Officer that it has achieved its 2017 milestones. Failure to demonstrate achievement of the milestones applicable to a drainage area will result in a loss of deemed-compliance for all water body-pollutant combinations in that drainage area until the WMP can be updated to be consistent with this order. Achievement of those milestones will allow the LAR UR2 Group to continue to be deemed in compliance with *E. coli*, copper, and zinc in both drainage areas and cadmium in its Los Angeles River drainage area. It will also allow the Group to continue to be deemed in compliance with coliform bacteria and fecal enterococcus in both drainage areas, although reasonable assurance has not been established for either consistent with this order, until 12 months from the date of this order's adoption, at which point the LAR UR2 Group must propose updates to its WMP to conform it to the requirements of this order.

The LAR UR2 Group is not deemed in compliance with any water body-pollutant combinations other than those just discussed.

In the end, every pollutant meant to be addressed via a WMP compliance schedule must be addressed through an RAA, either directly or via an appropriately justified class. Permittees cannot be deemed in compliance for water body-pollutant combinations not addressed in an RAA.²⁴¹ The basis for deemed-compliance is the assumption that WMP implementation reflects a rigorous analytical process that gives assurance final receiving water limitations and WQBELs and other TMDL-specific limitations will be met. While we expect these early iterations of the WMPs and RAAs to be imperfect, that does not excuse the WMP Groups' obligations to conduct their analyses as thoroughly as possible and to comply with the Los Angeles MS4 Order's requirements. The RAA should provide modeling results for all pollutants, either directly or through analyses of class-representative pollutants.

d. Conclusion

To assist Permittees in complying with our direction above, we will specify some of what we expect to see in the updated WMPs. This is not an exhaustive compilation of all changes we expect to see, nor does simply including these elements guarantee that the WMP Groups have complied with this order. That said, the next iteration of the WMPs should include:

1. An explanation for how information in the source assessment was used.
2. Identification of unavailable, needed information and the assumption(s) being made to substitute for that information with enforceable commitments to acquiring the information and deadlines for incorporating it into the WMP. This applies not just to the source assessments but to the WMPs generally.
3. A section or sections clearly detailing the bases for each pollutant class. To be in the same class, pollutants must have similar fate and transport mechanisms, be addressable via the same types of control measures, and be addressable within the same timeline already contemplated as part of the WMP.
4. A table that identifies each pollutant class and the water body or bodies addressed.
5. All other information required by this section, including:

²⁴¹ "Permittees shall conduct a Reasonable Assurance Analysis for each water body-pollutant combination addressed by the [WMP]." (Los Angeles MS4 Order, Part. VI.C.5.b.iv.(5).)

- a. For the LAR UR2 Group: reinserting a commitment found in the LAR UR2 Revised WMP to demonstrate dry-weather compliance through the Los Angeles River Bacteria TMDL Load Reduction study, CIMP Annual Reports, and continued assessment through CIMP implementation along with a schedule for validating assumptions about dry-weather loading; an expanded explanation of the LAR UR2 Group's choices regarding water-quality prioritization; a discussion regarding the choice to use default hydrology calibration for their modeling including the information discussed above; and a fix to the WMP's section numbering so that there are not two sections numbered 4.5.
- b. For the LLAR and LSGR Groups, a modified approach to the pollutants covered by the Harbor Toxics TMDL. The organic pollutants discussed in the TMDL are not assigned WQBELs or other TMDL-specific limitations for the water bodies in the LLAR and LSGR WMA; as such, they should not be treated as TMDL pollutants. Once appropriately categorized and classified, the LLAR and LSGR Groups must determine whether obtaining sampling results for the pollutants is feasible and if the LLAR and LSGR Groups conclude it is infeasible, they must provide an explanation in their WMPs. The Groups must also clarify the role TSS played in the planning of their WMPs and the role it will play, if any, in demonstrating compliance with its water quality milestones.

3. Schedule

The RAA is used to develop a WMP compliance schedule. Schedules must be "adequate for measuring progress on a watershed scale once every two years" and "developed for both the strategies, control measures and BMPs implemented by each Permittee within [the WMP's] jurisdiction and for those that will be implemented by multiple Permittees on a watershed scale."²⁴²

At a minimum, schedules must include:

- compliance deadlines occurring within the Order term for all applicable interim and/or final WQBELs and other TMDL-specific limitations contained in the Order's TMDL provisions;

²⁴² Los Angeles MS4 Order, Parts VI.C.5.c.i-ii, p. 66.

- interim milestones and dates for their achievement within the Order term for any applicable final WQBELs and other TMDL-specific limitations in the Order where deadlines within the permit term are not otherwise specified;
- and, for watershed priorities related to addressing exceedances of receiving water limitations not otherwise addressed by the Order's TMDL provisions
 - milestones based on measurable criteria or indicators, to be achieved in the receiving water and/or MS4 discharges,
 - a schedule with dates for achieving the milestones, and
 - a final date for achieving the receiving water limitations as soon as possible.²⁴³

Petitioners make an array of objections to the sufficiency of the schedules established in the three WMPs discussed herein. Due to our discussion of the limiting pollutant approach, we expect significant revisions to all WMP Groups' compliance schedules. As a result, we will discuss the sufficiency of the compliance schedules in general, rather than delving too deeply into any particular schedule.

a. Clarity and Enforceability

WMP compliance schedules are composed of a combination of structural and non-structural controls. We reviewed the compliance schedules of the WMPs at issue, looking to ensure that they are clear and enforceable. As a result of our review, we order changes to the Los Angeles MS4 Order to clarify the role of milestones proposed to be met entirely by implementation of non-structural and/or non-modeled structural controls, making explicit in the Los Angeles MS4 Order that Permittees must demonstrate actual attainment of such milestones, rather than just implementation of the underlying actions. In the case of such milestones, failure to demonstrate both actual achievement of the milestone and implementation of the underlying actions results in a loss of deemed-compliance for the water body-pollutant combinations addressed by the milestone. We additionally order a change that requires there be interim milestones no more than five years apart. Regarding the specific schedules in the WMPs, we make clear that we give no effect to any language in the WMPs that could be read to render the obligations contained within contingent on funding and we generally approve of the

²⁴³ Los Angeles MS4 Order, Parts VI.C.5.c.i-ii, p. 66.

various presentations of the compliance schedules while specifying how compliance should be determined.

i. Enforceability of Non-Structural and Non-Modeled Controls and Milestones

Each WMP incorporates a variety of non-structural controls. Some of these are Los Angeles MS4 Order requirements or modifications thereof.²⁴⁴ Others go beyond the baseline MCMs and Non-Storm Water Discharge measures required in the Order, intended to target the WMP Group's water quality priorities.²⁴⁵ While the plans vary, all Groups assume some level of pollutant reduction from their implementation of non-structural and non-modeled controls.²⁴⁶

The LLAR and LSGR Groups each estimated a 10% load reduction would result from implementation of non-structural controls by December 2017.²⁴⁷ The LAR UR2 Group estimated that by December 2017, non-structural controls would result in, approximately, a 4% *E. coli* load reduction, a 15% copper load reduction, and an 8% zinc reduction in the Los Angeles River drainage area and a 4% *E. coli* load reduction, an 8% copper load reduction, and a 6% zinc load reduction in the Rio Hondo drainage area.²⁴⁸ While Petitioners object to these estimates, we will not disturb them. However, Permittees may not be deemed in compliance through a milestone based entirely on implementation of non-structural or non-modeled controls, as is proposed in the LSGR and LAR UR2 WMPs, without additionally demonstrating actual achievement of the water quality improvement milestone.²⁴⁹

²⁴⁴ Los Angeles MS4 Order, Parts VI.C.5.b.iv, pp. 63-64 & VI.D, pp. 70-144. These include the Order-required MCMs, non-storm water discharge measures, and control measures required by TMDLs. The Order allows Permittees to modify MCMs to better address watershed priorities. (Los Angeles MS4 Order, Part VI.C.5.b.iv.(1)(a), p. 63; LLAR WMP, § 3.2.2, pp. 3-4 to 3-19; LSGR WMP, § 3.2.2, pp. 3-4 to 3-19.)

²⁴⁵ LLAR WMP, § 3.4, p. 3-22; LSGR WMP, § 3.4, p. 3-22.

²⁴⁶ For details on non-structural control measures, see LLAR WMP, § 5.1, pp. 5-1 to 5-4, LSGR WMP, § 5.1, pp. 5-1 to 5-3, & LAR UR2 WMP, §§ 3.1, pp. 35-42 & 5.1, pp. 116-120 & Table 3-8, pp. 69-70.

²⁴⁷ LLAR WMP, § 4.3, p. 4-4; LSGR WMP, § 4.3, p. 4-4.

²⁴⁸ LAR UR2 WMP, Figures 5-1 to 5-6, pp. 118-119. These numbers are approximate because the Figures cited here are bar graphs that fail to provide the actual numbers associated with the expected load reductions. This is a defect that must be addressed immediately. As written, the expected reductions are unacceptably vague. The LAR UR2 Group should provide information for each milestone in the same way that it did for the 2028 and 2037 milestones in Tables 4-20 to 4-23.

²⁴⁹ Both the LSGR and LAR UR2 Groups committed to some structural control measures by 2017 (LSGR WMP, § 5.2, pp. 5-4 to 5-5; LAR UR2 WMP, § 3.3.3, p. 72), but those commitments do not change our characterization of this milestone because those structural control measures are not incorporated into their RAA. The LSGR and LAR UR2 Groups do not take these control measures into account for their first or future milestones. (LAR UR2 WMP, Figures 5-1 to 5-6, pp. 118-120 & LSGR WMP, § 5.4, pp. 5-10 to 5-21.) These projects may have assisted the LSGR and LAR UR2 Groups in achieving their load reductions for their 2017 milestones and can be incorporated into their planning for future milestones, but their exclusion from the RAA means that we do not consider them for deemed

The deemed-compliance provisions generally operate to shield Permittees from having to demonstrate actual compliance with numeric pollutant reduction milestones when implementing their WMP. “A Permittee’s full compliance with all requirements and dates for their achievement in an approved [WMP] or EWMP shall constitute a Permittee’s compliance with provisions pertaining to applicable interim [WQBELs and other TMDL-specific limitations] in Part VI.E and Attachments L-R for the pollutant(s) addressed by the approved [WMP] or EWMP.”²⁵⁰ In general, therefore, if an interim load reduction target is proposed to be met by a series of actions, compliance is determined by implementation of the actions themselves, rather than achievement of the numeric target. If a Permittee implements the actions but fails to meet the interim target, it must reevaluate its assumptions and propose a new target, if needed, and/or additional BMPs to get back on a path to meeting final receiving water limitations and WQBELs and other TMDL-specific limitations.

The purpose of the deemed compliance provisions is to encourage significant investment in collaborative regional- and watershed-based BMP implementation, leading eventually to all receiving waters meeting final receiving water limitations, while reserving enforcement to circumstances in which Permittees fail to implement approved plans, rather than any ongoing violations of water quality requirements during implementation.²⁵¹ As discussed in section II.B.2 of this order, the RAA is the tool that allows Permittees to prove to the public that they should be deemed in compliance – that, based on their analysis of available data and reliance on advanced modeling approaches, the WMP compliance schedule puts them on a reliable path to meeting final receiving limitations and WQBELs and other TMDL-specific limitations.

This justification is not present for compliance milestones based on the implementation of non-modeled non-structural controls. These projected reductions are educated guesses, not the results of an RAA. In fact, rather than being the results of RAAs, they were RAA inputs. The RAA was conducted after incorporating the load reductions

compliance purposes as we do, for example, the LLAR Group’s model-supported volumetric capture/treatment BMPs for 2017. For the same reason, failure to implement these measures will not result in WMP noncompliance.

²⁵⁰ Los Angeles MS4 Order, Part VI.C.3.a, p. 54. For receiving water limitations not addressed by a TMDL, see Los Angeles MS4 Order, Part VI.C.2.b, p. 53.

²⁵¹ We reasoned in State Water Board Order WQ 2015-0075: “The WMP/EWMP provisions constitute an effort to set ambitious, yet achievable, targets for Permittees; receiving water limitations, on the other hand, while the ultimate goal of MS4 permitting, may not in all cases be achievable within the five-year permit cycle. Generally, permits are best structured so that enforcement actions are employed when a discharger shows some shortcoming in achieving a realistic, even if ambitious, permit condition and not under circumstances where even the most diligent and good faith effort will fail to achieve the required condition.” (State Water Board Order WQ 2015-0075, p. 31.)

assumed to result from the implementation of non-structural control measures.²⁵² Because these water quality milestones are inputs into the WMP Groups' models rather than outputs, the WMP Groups will be expected to demonstrate actual achievement of these water quality milestones. Additionally, many of the non-structural control measures are difficult to enforce, further diminishing our inclination to rely on them for deemed-compliance purposes.²⁵³

To reiterate, to avoid being held to baseline receiving water limitations, Permittees must not only meet the dates and requirements for implementation of non-structural control measures and non-modeled structural controls (to the extent that Permittees rely on them to form milestones), they must also demonstrate that they have actually achieved the assumed load reduction by the milestone date when that milestone is based entirely off non-structural controls. We view this requirement as consistent with the Order's existing requirements and, as such, it applies to the now-passed 2017 milestones. To avoid prejudicing the Permittees participating in WMPs who may have relied on a different understanding of the Order's requirements, we will allow six months from the date of this order's adoption for the Permittees and Los Angeles Water Board to determine whether the 2017 milestones were met in accordance with this order and, if not, to request time schedule orders and/or propose modifications to their WMPs.

To make this expectation clear for future milestones, we will update the Order with Parts VI.C.2.b.i and VI.C.3.a.i to read:

VI.C.2.b.i.

- i. When the requirements for achievement of a Part VI.C.5.b.iv.(5)(c) interim compliance deadline consist entirely of non-structural controls and/or non-modeled structural controls, Permittees must not only demonstrate implementation of the controls, but also actual achievement of any applicable water-quality based milestones.**

²⁵² "For the purposes of the RAA, a 10% reduction was assumed to represent the cumulative impact of these practices during both wet and dry conditions." (LLAR/LSGR/LCC RAA, § 1.6, p. 21.) "There are many substantial changes between the 2001 [and] 2012 Permits which can reasonably be assumed to result in substantially reduced pollutant generation, increased source control, and significant watershed control measure induced load reductions . . . [¶] Following discussions with the Regional Board staff, load reductions derived from not otherwise modeled, non-structural BMPs were estimated to result in a modest 5 percent of baseline loads for all pollutants." (LAR UR2 WMP, § 4.4.4, p. 100.)

²⁵³ For example, it is not clear how the Los Angeles Water Board would enforce the requirement that the LAR UR2 Group "[i]dentify modification opportunities and consider implementation" of those opportunities in its Catch Basin and Storm Drain Cleaning Program. (LAR UR2 WMP, Table 3-8, p. 69.)

VI.C.3.a.i.

- i. When the requirements for achievement of a Part VI.C.5.b.iv.(5)(a) or (b) interim compliance deadline consist entirely of non-structural controls and/or non-modeled structural controls, Permittees must not only demonstrate implementation of the controls, but also actual achievement of any applicable water-quality based milestones.**

ii. Enforceability of Structural Controls and Milestones

The vast majority of pollutant reduction is proposed to be achieved via structural control implementation. The LLAR and LSGR WMPs are organized around volumetric capture/treatment objectives. The LAR UR2 WMP proposes specific projects expected to reach identified reductions in specific pollutants.

As discussed in the prior subsection, the compliance point for milestones meant to be achieved via structural controls is the timely implementation of those structural controls consistent with the WMP and RAA. This is because the Order's deemed-compliance provisions operate to excuse actual compliance with interim and final water quality deadlines, except for those final compliance deadlines established in a TMDL, so long as Permittees implement the RAA-derived WMP control measures in accordance with the schedule laid out by the WMP. This takes different forms depending on the organization of the WMP. Generally, however, if a Permittee implements its schedule in compliance with a WMP and RAA, the Permittee will be protected by the Order's deemed-compliance provisions even if it does not achieve receiving water limitations and interim WQBELs and other TMDL-specific limitations by the compliance deadlines. Should a Permittee comply with the implementation requirements of its WMP but fail to meet the underlying water quality milestones, that Permittee must update its schedule with new control measures and deadlines.

Petitioners contend these schedules are contingent and unenforceable. Regarding the LLAR and LSGR Groups' volumetric reduction model, Petitioners state "the volumetric reductions . . . are . . . expressly conditioned on obtaining funding; and, for pollutants not addressed by a TMDL, any deadlines are tentative at best. [Footnote omitted.] If Permittees . . . demonstrate a failure to obtain funding . . . , the volumetric reduction requirements will be effectively rendered unenforceable."²⁵⁴ We disagree, and, in fact, we view the volumetric reduction requirements as requiring substantial action on the part of Permittees

²⁵⁴ WMP Petition Addendum, pp. 19-20 & pp. 25-26.

while simultaneously allowing them an appropriate level of flexibility in determining what structural controls to implement. Petitioners make the same funding-related objection to the LLAR UR2 Group's commitment to specific control measures rather than volumetric milestones.²⁵⁵ As explained below, none of the measures are contingent on funding and we give no effect to any statements in the WMPs that could be read to create such a contingency.

Section 5.4 of the LLAR and LSGR WMPs identifies the acre-feet of storm water the RAA requires each Permittee to treat and/or capture by each currently identified milestone. The City of Downey, for example, "need[s] to [have] capture[d] and/or treat[ed] 20 acre-feet of stormwater by September 30, 2017, to meet the 31% interim compliance milestone, 13.2 acre-feet by January 11, 2024, to meet the 50% interim compliance milestone, and 79.6 acre-feet by January 11, 2028, to meet the final compliance milestone."²⁵⁶ The LLAR and LSGR Groups identified potential BMP sites that will allow them to achieve all or part of the compliance milestones. The LLAR and LSGR Groups' RAA Attachment B identifies the specific subwatersheds in which these controls must be implemented. For example, Downey's 20 acre-feet of storm water must be captured and/or treated in subwatershed 6102 to comply with the RAA.²⁵⁷ These requirements are clear and enforceable. Failure to implement structural controls that achieve the needed level of treatment and/or capture in the specific subwatershed will result in WMP noncompliance. Permittees have flexibility in deciding what kind of structural controls to implement and where within the specified subwatersheds to implement them, but the Los Angeles Water Board can easily determine compliance based on whether the needed volume of treatment and/or capture has been achieved in the identified subwatershed.

Petitioners object to the lack of specificity of these measures, citing the Order's requirement that WMP Groups commit to "the number, type, and location(s), as well as the nature, scope, timing and frequency of implementation" of each BMP in their WMP.²⁵⁸ In our view, where Permittees have identified a strategy that commits to categories of BMPs in specific subwatersheds and have identified potential BMP sites adequate to handle those commitments, this requirement is satisfied, as long as the WMPs commit to a corresponding volumetric benchmark for treatment and/or capture that is subject to enforcement.²⁵⁹ The LLAR and LSGR

²⁵⁵ WMP Petition Addendum, p. 11.

²⁵⁶ LLAR WMP, § 5.4.1, p. 5-10.

²⁵⁷ LLAR/LSGR/LCC RAA, Att. B, Table B2.1, p. 9.

²⁵⁸ WMP Petition Addendum, pp. 16 & 24.

²⁵⁹ We do expect more specific commitments to the control measure types that may be implemented following the WMP Groups' reevaluations of pollutant classes as required by this order.

Groups have identified the subwatershed in which BMPs must be implemented and the acre-feet of storm water those BMPs must be able to treat. They have identified potential BMP sites in their compliance schedule. If those locations become unsuitable, they have each compiled long lists of other potential BMP sites.²⁶⁰ The Los Angeles Water Board staff asked that the WMPs at least “commit to the construction of the necessary number of projects to ensure compliance with [Order] requirements per applicable compliance schedules.”²⁶¹ This commitment was included.²⁶² The WMPs will necessarily have to increase in specificity as the compliance deadlines approach. If sufficient projects to meet the volumetric benchmarks are not completed by the compliance milestones, Permittees will be out of compliance. If Permittees cannot present good cause to the Executive Officer for extensions and changes of deadlines, requests for such changes to their compliance schedules will be denied.

The LAR UR2 Group organized its WMP differently. Less flexible than the LLAR and LSGR compliance schedules, the LAR UR2 compliance schedule identifies specific control measures to implement and dates for their achievement.²⁶³ The LAR UR2 WMP commits Permittees to a variety of specific structural controls. Table 5-1 identifies final implementation dates for regional and distributed BMPs.²⁶⁴ Tables 4-13 to 4-18 list the regional BMPs, the water quality design volume needed, the infiltration rate needed, and a variety of other measurements that the BMPs will comply with. In this case, failure to implement these specific BMPs by the identified date will result in WMP noncompliance, unless the LAR UR2 Group requests and receives approvals for amendments to the WMP. Similarly, Table 5-1’s list of

²⁶⁰ Permittees also object to the LLAR and LSGR Groups’ exclusion of potential site locations for privacy. (See LLAR WMP, Table 3-13, pp. 3-72 to 3-83; also see LSGR WMP, Tables 3-7 & 3-8, pp. 3-59 to 3-68.) If sufficient site locations are identified (i.e. not excluded for privacy) to satisfy the structural BMP requirements of the next milestone or the Group has committed to a deadline for identifying sufficient site locations from the excluded sites before the next milestone, this is not a problem. Of course, if a Permittee decides to implement a BMP in a site whose location is excluded for privacy, the Permittee will have to reveal the location of that BMP. These BMP lists should, however, be updated to reflect the subwatersheds in which the sites are located, at least for the non-excluded sites.

²⁶¹ Letter from Executive Officer Samuel Unger, Los Angeles Regional Water Quality Control Board, to Lower Los Angeles River Watershed Management Group (Oct. 28, 2014), Enclosure 1, at p. 4.

²⁶² LLAR WMP, § 5.3.2, p. 5-8; LSGR WMP, § 5.3.2, p. 5-7: “Even though not all projects can be specified and scheduled at this time, the Participating Agencies are committed to constructing the necessary regional and right-of-way BMPs to meet the determined load reductions per applicable compliance schedules.”

²⁶³ The LAR UR2 WMP refers to a storm water volumetric capture approach (see LAR UR2 WMP, §4.2.5, p. 94); however, the volume required to be captured and/or treated to achieve interim and final milestones is not provided. Rather, the WMP provides concentration-based targets the LAR UR2 Group believes will be achieved via WMP implementation. If the Group would rather be held to a volumetric reduction standard, it needs to provide, at a minimum, the same information the LLAR and LSGR provided: subwatershed-specific volumetric milestones, baseline loading, and the amount of acre-feet of storm water the Group ultimately plans to capture or treat.

²⁶⁴ It is unclear why the word “Final” in reference to the final implementation date of the control measure is in quotations marks; however, these are the dates by which compliance will be measured absent an extension or WMP update.

distributed BMPs must be completed by the listed completion date or the Permittees will be out of compliance with their WMP. As the dates for these measures grow closer, the Los Angeles Water Board should be proactive in requiring measurable water quality milestones to be incorporated into the WMP so that progress can be tracked.

None of these measures are contingent on funding and we give no effect to any statements made in the WMPs that could be read to create such a contingency.²⁶⁵ For clarity, such contingent statements should be removed or altered to make it clear that no contingency exists. These commitments are set, and failure to comply with the schedules will result in WMP noncompliance. This is not to say, however, that there is no potential for changes to the schedules, including extensions. Compliance milestones must be met unless the Los Angeles Water Board's Executive Officer grants an extension per Part VI.C.6.a.i of the Los Angeles MS4 Order. As the Los Angeles Water Board stated in its response to the WMP petition addendum, "The[se] . . . statements [regarding funding] are a statement of the reality that the Permittees of the WMP face with respect to funding stormwater-related projects This reality, however, is not a contingency."²⁶⁶ While funding may be considered when a Permittee requests a deadline extension, it is ultimately up to the Los Angeles Water Board to determine whether to grant that extension in a process subject to public review and comment. As such, it is in Permittees' interest to comply with these deadlines in the first instance, rather than resorting to the uncertain possibility of a deadline extension. Requests for extensions based in whole or in part on a lack of funding should be accompanied by a clear showing of a good-faith effort to obtain the funding needed. As stated above, the WMP and EWMP provisions of the Order are not a right but an accommodation to Permittees based on the complexity inherent in addressing the Los Angeles region's water quality issues. While the Order provides for the possibility of extensions, it rightly does not provide a guarantee. Permittees are generally expected to comply with the schedules they designed for themselves without resorting to requesting extensions.

²⁶⁵ Section 5 of the LAR UR2 WMP states that, "The dates identified in this WMP Plan are subject to the procurement of grants or other financing support commensurate with the existing and future fiduciary responsibilities of the Permittees." To the extent that this sentence could be read to create a "contingency," both we and the Los Angeles Water Board Executive Officer disapprove. The dates are commitments; any adjustment to the dates must occur through Order-identified processes. As the Executive Officer stated in his conditional approval of the LAR UR2 WMP: "Permittees must fully and timely implement all actions per associated schedules set forth in the approved WMP regardless of any contingencies indicated in the approved WMP (e.g., funding and purported reservation of rights) unless a modification to the approved WMP, including any extension of deadlines where allowed, is approved by the Los Angeles Water Board pursuant to Part VI.C.6.a or Part VI.C.8.ii-iii." (Letter from Executive Officer Samuel Unger, Los Angeles Regional Water Quality Control Board, to Permittees of the Los Angeles River Upper Reach 2 Watershed Management Group (Apr. 28, 2015), at p. 5; available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/los_angeles/upper_reach2/LAR_UR2_WMP_Conditional_Approval.pdf [as of Apr. 10, 2019].)

²⁶⁶ Los Angeles Water Board Response to Petition and Addendum, p. 32.

iii. Timing of Schedule

Having addressed the enforceability of the compliance schedules as written, we turn to questions about their sufficiency. Petitioners raise two general issues regarding the WMP compliance schedules.

First, Petitioners argue there is a lack of specificity regarding actions needed to meet interim milestones. We have already summarized the actions each Permittee planned to take to meet their first compliance milestones in 2017 and have affirmed the Los Angeles Water Board's approval of those plans, with some conditions. For milestones proposed to be achieved entirely via the implementation of non-structural controls and non-modeled structural controls, Permittees will have to demonstrate not only that they have implemented the controls but that they have achieved their actual pollutant reduction targets. The LLAR Group's compliance is determined by its timely implementation of non-structural controls and of structural controls in the RAA-identified subwatersheds to achieve its volumetric reduction target. As for future interim milestones, the Los Angeles MS4 Order does not require that every action be specified years ahead of time. The Order requires that schedules be "adequate for measuring progress on a watershed scale once every two years."²⁶⁷ As Los Angeles Water Board staff stated at the September 10, 2015, Los Angeles Water Board Meeting, "Since the[] milestones are quantitative, [they are] a sufficient metric for us to use as Board staff to evaluate progress, and also to assess compliance by these Permittees in this [WMP]."²⁶⁸ It is up to the Los Angeles Water Board, the Executive Officer, and the public to police these WMPs and ensure that, as time passes, the WMP Groups submit updates sufficient to ensure that the promised actions will keep Permittees on track to achieve final goals.

We understand, however, that these complex permits are often not renewed every five years, as would be ideal. If, as may happen, the permit is not renewed for several years, Permittees may go for extended periods of time without any interim compliance deadlines.²⁶⁹ As a result, we will amend the Order to add a provision that in no case shall the WMPs contain a compliance schedule that has more than a five-year gap between compliance deadlines. This will lessen the need to commit to specific control measures for future interim deadlines, as will the requirement that a new full iteration of the RAA be performed by 2021

²⁶⁷ Los Angeles MS4 Order, Part VI.C.5.c.i, p. 66.

²⁶⁸ Renee Purdy, Los Angeles Water Board Hearing on Original WMP Petition, pp. 261:14-17.

²⁶⁹ As discussed above, the Order only requires that there be one interim deadline per permit term where none is provided by a TMDL. (Los Angeles MS4 Order, Part VI.C.5.b.iv.(5)(b), p. 65.)

which, when combined with the WMPs' monitoring requirements, will likely result in adjusted compliance schedules for all Permittees.

Second, Petitioners argue the compliance schedules are not written to achieve compliance in the timeframe required by the Order; that is, they are not designed to achieve targets for pollutants not addressed by a state-established TMDL "as soon as possible"²⁷⁰ or in a timeframe that is "as short as possible."²⁷¹ These phrases are defined in the same way²⁷² as "timeframe(s) that . . . tak[e] into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary."²⁷³ We decline to review these arguments in depth for two reasons. First, we will generally not second-guess the Los Angeles Water Board's determination that the proposed compliance schedules appropriately balance the different factors that influence the implementation of these projects. There is no bright-line rule that separates a schedule that is "as short as possible" from one that is not. Every one of the LLAR, LSGR, and LAR UR2 Groups, despite whatever other issues exist with their WMPs, have proposed a schedule that requires ambitious implementation of structural and non-structural controls to remain in compliance. That said, the second reason we will not review this argument in depth is that we expect these compliance schedules to be significantly altered considering our discussion regarding Permittees' pollutant classifications. Once compliance schedules are approved, the Los Angeles Water Board and its Executive Officer should be active in encouraging Permittees to identify ways to address unique sources of pollutants and additional feasible control measures that will speed achievement of final water quality goals, and in requiring Permittees to update their WMPs when monitoring data shows that pollutants are not being adequately addressed via the limiting pollutant approach.

To mitigate the possibility that WMP compliance schedules will lack appropriately frequent interim compliance milestones if the Order is not renewed on the ideal five-year cycle,

²⁷⁰ For water body-pollutant combinations not addressed by TMDLs, see Los Angeles MS4 Order, Part VI.C.5.b.iv.(5)(c), p. 65. For watershed priorities related to exceedances of the Order's receiving water limitations provisions, see Los Angeles MS4 Order, Part VI.C.5.c.iii.(3)(c), p. 66.

²⁷¹ For pollutants not in the same class as those addressed by a TMDL for the watershed, but for which the water body is 303(d) listed, see Los Angeles MS4 Order, Part VI.C.2.a.ii.(4), p. 51. For pollutants for which there are exceedances of the Order's receiving water limitations provisions, but for which the water body is not 303(d) listed, see Los Angeles MS4 Order, Part VI.C.2.a.iii.(2)(c), p. 52. For USEPA-established TMDLs, see Los Angeles MS4 Order, Part VI.E.3, p. 148 & Part VI.E.3.c.iv, p. 149.

²⁷² Los Angeles MS4 Order, Part VI.C.5.c.iii.(3)(b), p. 66.

²⁷³ Los Angeles MS4 Order, Parts VI.C.2.a.ii.(4), p. 51 & VI.C.2.a.iii.(2)(c), p. 52.

we will amend the Order's Parts VI.C.5.b.iv.(5)(b) and VI.C.5.c.iii.(2) and add a Part VI.C.5.c.iii.(3)(e) to read:

VI.C.5.b.iv.(5)(b)

- (b) Where the TMDL Provisions in Part VI.E and Attachments L through R do not include interim or final water quality-based effluent limitations and/or receiving water limitations with compliance deadlines during the permit term, Permittees shall identify interim milestones and dates for their achievement to ensure adequate progress toward achieving interim and final water quality-based effluent limitations and/or receiving water limitations with deadlines beyond the permit term. **In no case shall there be a period of more than five years without an interim compliance deadline.**

VI.C.5.c.iii.(2)

- (2) Interim milestones and dates for their achievement within the permit term for any applicable final water quality-based effluent limitation and/or receiving water limitation in Part VI.E. and Attachments L through R, where deadlines within the permit term are not otherwise specified. **In no case shall there be a period of more than five years without an interim compliance deadline.**

VI.C.5.c.iii.(3)(e)

- (e) The milestones and implementation schedule in (a)-(c) shall in no case result in a period of more than five years without an interim compliance deadline.**

b. Changes Required

The following changes are required of the WMP Groups:

1. Propose compliance schedules for each individual water body-pollutant combination or class of water body-pollutant combinations as appropriate following reevaluation of the WMP Groups' limiting pollutant approaches.

2. Provide expected load reductions at regular milestones and the method(s) by which these reductions will be measured and demonstrated for each water body-pollutant combination addressed.
3. Remove all statements intended to make implementation of actions contingent on funding or information-gathering. While such issues may be cited in a request for a scheduling change to the Los Angeles Water Board Executive Officer, they cannot be used to create a contingency. To the extent any contingent statements remain in the WMPs, we give them no effect.
4. All other information required by this section, including:
 - a. For the LAR UR2 Group: for pollutant load reduction milestones already presented, provide the actual numbers associated with those milestones rather than bar graphs that force the reader to estimate the projected reductions.²⁷⁴ Additionally, as part of the Group's updated pollutant classification, an explicit justification for why cadmium rather than zinc was not chosen as the representative pollutant for the Los Angeles River Metals TMDL.
 - b. For the LLAR and LSGR Groups: ensure that the identified potential BMP sites with disclosed locations are sufficient to satisfy the subwatershed and volume requirements of the upcoming milestone or propose a site selection schedule that will allow enough currently excluded site locations to be revealed prior to the upcoming milestone. Additionally, update the lists of potential BMP sites to provide the specific subwatersheds in which the sites are located, at least for the non-excluded sites.

4. Summary of Obligations Due For 2017 Milestones

To address any ambiguity, we identify exactly what we view as having been necessary for the three WMP Groups here to maintain their deemed-compliance through their 2017 milestones and until 12 months from the date of this order's adoption. This deemed-compliance applies only to those water body-pollutant combinations that we understand the WMP Groups to have intended to address via their compliance schedules, even if based on a

²⁷⁴ LAR UR2 WMP, Figures 5-1 to 5-6, pp. 118-119.

flawed limiting pollutant approach. It does not apply to those water body-pollutant combinations for which no action or compliance schedule has been proposed.²⁷⁵

For the LLAR Group, this means that its deemed-compliance includes those pollutants listed in its “Metals,” “Pesticides,” “Bacteria,” and “SVOC” classes and does not include those pollutants listed in its “Water Quality Indicators/General” and “Nutrients” classes.²⁷⁶ The LSGR Group’s deemed-compliance includes those pollutants listed in its “Metals,” “Bacteria,” and “SVOCs” classes and does not include those pollutants listed in its “Water Quality Indicators/General,” “Nutrients,” and “Pesticides” classes.²⁷⁷ The LAR UR2 Group’s deemed-compliance includes *E. coli*, copper, zinc, coliform bacteria, and fecal enterococcus in both its Rio Hondo and Los Angeles River drainage areas as well as cadmium in its Los Angeles River drainage area.

a. LLAR

- LLAR WMP, § 3.2, pp. 3-3 to 3-19: Order-required MCMs (as modified, where applicable).
- LLAR WMP, § 3.3, pp. 3-20 to 3-21 & § 5.1.2, p. 5-2: Nonstormwater Discharge Measures.
- LLAR WMP, § 3.4.1, pp. 3-22 to 3-31: TMDL Implementation Plans. Some TMDLs require specific actions and submittals on the part of Permittees in the watershed. For example, the Los Angeles River Estuary Bacteria TMDL required the submission of Load Reduction Strategies and corresponding implementation by April 28, 2017.²⁷⁸ Permittees must comply with TMDL-required actions insofar as they have been incorporated into the WMP and/or modified.
- LLAR WMP, § 3.4.2, pp. 3-31 to 3-43 & § 5.1, pp. 5-2 to 5-4: Non-structural Targeted Control Measures. Every Non-structural TCM should have been underway by the 2017 milestone, and TCM-MRP-1, -PLD-1, -PLD-2, -RET-1, -SWM-1, -TSS-1, -TSS-3, and -TSS-4 should be complete or have achieved an

²⁷⁵ For more information on why deemed compliance is not available in these circumstances, see our discussions of the Santa Monica Bay Jurisdictional Group 7 WMP, the City of El Monte WMP, and the North Santa Monica Bay EWMP, below.

²⁷⁶ LLAR WMP, § 2.1.4, p. 2-13.

²⁷⁷ LSGR WMP, § 2.1.4, p. 2-14.

²⁷⁸ Incorporated into LLAR compliance schedule in LLAR WMP, § 5.4.10, p. 5-18.

easily enforceable milestone. The WMP Groups should describe, to the best of their ability, their efforts to implement ongoing and less easily enforceable TCMs.

- LLAR WMP, § 5.3.1, p. 5-6: Structural Minimum Control Measure Schedule.
- LLAR WMP, § 5.3.2, pp. 5-6 to 5-8: Structural Targeted Control Measures. The LLAR Group committed to completion of preliminary site assessments and feasibility studies by March 2016, with field analysis at the selected sites by December 2016.
- LLAR WMP, § 5.4, pp. 5-9 to 5-18; LLAR/LSGR/LCC RAA, Att. B, § B2, pp. 9-13: Pollutant Reduction Plan. Discussed in detail above, the LLAR Group's Pollutant Reduction Plan is driven primarily by the installation of structural infiltration BMPs in specified subwatersheds by the identified milestones. By the 2017 milestone, these LLAR Permittees must have demonstrated installation of structural infiltration BMPs capable of treating the required volume of storm water in RAA-identified subwatersheds:
 - Downey – 20 acre-feet in subwatershed 6102;
 - Lakewood – 1.1 acre-feet in subwatershed 6014;
 - Long Beach – 1 acre-foot in subwatershed 6005;
 - Lynwood – 1.7 acre-feet in subwatershed 6028, 19.4 acre-feet in subwatershed 6031, and 13.2 acre-feet in subwatershed 6080;
 - Paramount – 20.9 acre-feet in subwatershed 6075;
 - Pico Rivera – 6.5 acre-feet in subwatershed 6106, 0.2 acre-feet in subwatershed 6112, and 32.7 acre-feet in subwatershed 6113;
 - Signal Hill – 1.1 acre-feet in subwatershed 6011 and 0.2 acre-feet in subwatershed 6012;
 - South Gate – 22.9 acre-feet in subwatershed 6031, 8.3 acre-feet in subwatershed 6080, 0.1 acre-feet in subwatershed 6096, 0.1 acre-feet in subwatershed 6098, 3.3 acre-feet in subwatershed 6101, and 0.8 acre-feet in subwatershed 6102.

b. LSGR

- LSGR WMP, § 3.2, pp. 3-3 to 3-19: Order-required MCMs (as modified, where applicable).
- LSGR WMP, §3.3, pp. 3-20 to 3-21 & § 5.1.2, p. 5-2: Nonstormwater Discharge Measures.

- LSGR WMP, § 3.4.1.2-3.4.1.3, pp. 3-22 to 3-34 & § 5.1.3, pp. 5-2 to 5-3: Non-structural Targeted Control Measures. Every Non-structural TCM should be have been underway by the 2017 milestone, and TCM-MRP-1, -PLD-1, -PLD-2, -RET-1, -SWM-1, -TSS-1, -TSS-3, and -TSS-4 should be complete or have achieved an easily enforceable milestone. The WMP Groups should describe, to the best of their ability, their efforts to implement ongoing and less easily enforceable TCMs.
- LSGR WMP, § 5.3.1, p. 5-6: Structural Minimum Control Measure Schedule.
- LSGR WMP, § 5.3.2, pp. 5-6 to 5-8: Structural Targeted Control Measures. The LSGR Group committed to completion of preliminary site assessments and feasibility studies by March 2016, with field analysis at the selected sites by December 2016.

While the LSGR WMP's compliance schedule is largely driven by the implementation of structural infiltration BMPs, its Pollutant Reduction Plan does not commit to any of this kind of BMP for its 2017 milestone; instead, the LSGR Group planned on meeting a 10% load reduction milestone through the implementation of non-structural controls. As discussed in section II.B.3.a.i of this order, to remain in deemed-compliance, the LSGR Group must have demonstrated implementation of the above-listed actions and must demonstrate actual achievement of its 10% load reduction milestone for all pollutants intended to be covered by the WMP.

c. LAR UR2

- LAR UR2 WMP, Table 1-6, p. 18: Schedule of TMDL Compliance Milestones Applicable to the LAR UR2 WMA. The notable deadlines occurring after WMP approval and before the 2017 milestone included: (1) dry weather load reduction strategy for the Los Angeles River Segment B by 2014, (2) the beginning of outlier studies by September 23, 2015 for the Los Angeles River Segment B, and (3) a dry weather load reduction strategy for the Rio Hondo Segment B by March 23, 2014.
- LAR UR2 WMP, Table 3-1, p. 42: LAR Metals TMDL Jurisdictional Group 2 Non-Structural BMPs Phased Implementation Plan. All Phase 1 requirements, due by 2011, should be complete. Phase 2 requirements have a due date of 2019; however, the Los Angeles Water Board may monitor progress.
- LAR UR2 WMP, § 3.3.1, pp. 67-70: Order-required MCMs (as modified, where applicable). The LAR UR2 Group's Table 3-8: Non-Structural BMP Enhanced

Implementation Efforts contain dozens of tasks that should be have been completed by the 2017 milestone.

- LAR UR2 WMP, Table 5-1. p. 117: Control Measure Implementation Schedule. By the 2017 milestone, the LAR UR2 Group must have completed the City of Commerce Pavement Management System.

Like the LSGR WMP's compliance schedule, the LAR UR2 schedule is largely driven by the implementation of structural infiltration BMPs but its Pollutant Reduction Plan does not commit to any of this kind of BMP for its 2017 milestone; instead, the LAR UR2 Group planned on achieving reductions of approximately 4% for *E. coli*, 15% for copper, and 8% for zinc in the Los Angeles River drainage area and approximately 4% for *E. coli*, 8% for copper, and 6% for zinc in the Rio Hondo drainage area through the implementation of non-structural controls. Just as with the LSGR Group, therefore, to remain in deemed-compliance, the LAR UR2 Group must demonstrate implementation of the above-listed actions and must demonstrate actual achievement of its projected load reductions for all pollutants intended to be covered by the WMP.

C. The Other Six WMPs Approved by the Los Angeles Water Board's Executive Officer

We turn now to consideration of the other six WMPs conditionally approved by the Los Angeles Water Board Executive Officer. Petitioners made no specific substantive challenges to these WMPs, instead contending they are generally flawed in the same ways as the LLAR, LSGR, and LAR UR2 WMPs. To focus our review, we discuss what we view as the most important issues raised by the WMP petition with an eye particularly to source assessments, compliance schedules, and limiting pollutant approaches, although our own motion authority allows us to expand our review where appropriate.

As a preliminary matter, all the WMP Groups addressed below must update their WMPs to incorporate the changes we ordered for the LLAR, LSGR, and LAR UR2 WMPs unless otherwise specified, including:

1. An explanation for how information considered in the source assessment was used.
2. Identification of unavailable, needed information and the assumption(s) being made to substitute for that information along with enforceable commitments to acquiring the information and deadlines for incorporating it into the WMP.

3. A section or sections clearly detailing the bases for each pollutant class. To be in the same class, pollutants must have similar fate and transport mechanisms, be addressable via the same types of control measures, and be addressable within the same timeline already contemplated as part of the WMP.
4. A table that identifies each pollutant class and the water body or bodies addressed.
5. Compliance schedules for each individual water body-pollutant combination or class of water body-pollutant combinations as appropriate following reevaluation of the WMP Groups' limiting pollutant approaches.
6. Expected load reductions at regular milestones and the method(s) by which these reductions will be measured and demonstrated for each water body-pollutant combination addressed.
7. Removal of all statements that might be read to make implementation obligations contingent on funding or information-gathering. While such issues may be cited in a request for a scheduling change to the Los Angeles Water Board Executive Officer, they cannot be used to create a contingency. To the extent any contingent statements remain in the WMPs, we give them no effect.

Where needed, we will identify needed changes specific to particular WMPs in the section discussing that WMP. In all cases, we explicitly identify the scope of the deemed-compliance currently granted to the Groups and the actions they will need to take by the two deadlines identified in this order. As discussed above, the first of these deadlines is six months from the date of this order, by which point the Groups must demonstrate to the Los Angeles Water Board Executive Officer achievement of their 2017 milestones. Achievement of these deadlines will allow the WMP Groups to remain deemed in compliance with those receiving water limitations and WQBELs and other TMDL-specific limitations addressed by the milestones, even if the applicability of the milestones is based on a flawed limiting pollutant approach. The second of these deadlines is 12 months from the date of this order's adoption. The Groups must at this point submit to the Los Angeles Water Board Executive Officer updates to their WMPs to bring them into compliance with this order. Following the updates, the Groups will not be deemed in compliance with any water body-pollutant combinations not addressed in conformance with this order.

1. Santa Monica Bay Jurisdictional Group 7

While the Santa Monica Bay Jurisdictional Group 7 (SMB JG7) WMA includes multiple cities, the SMB JG7 WMP addresses only a 1,056-acre area owned by the City of Los Angeles. As a result, the WMP's only members are the City of Los Angeles and the Los Angeles County Flood Control District.²⁷⁹ Excluding areas over which these permittees do not have jurisdiction, the WMP addresses 1,009 acres.²⁸⁰

The SMB JG7 WMP is unique among the nine WMPs challenged here. While our review of these six WMPs generally focuses on source assessments, limiting pollutant approaches, and compliance schedules, this WMP identifies no water quality issues in its jurisdictional area and, as a result, has no limiting pollutant approach and proposes no compliance schedule. This WMP identifies four Category 1 water body-pollutant combinations (bacteria, debris, DDTs, and PCBs) drawn from three TMDLs²⁸¹ and no Category 2 or Category 3 water body-pollutant combinations.²⁸² Of the Category 1 pollutants, debris (i.e., trash) is specifically excluded by the Los Angeles MS4 Order for eligibility for deemed-compliance via the Order's deemed-compliance provisions.²⁸³ Regarding bacteria at the Santa Monica Bay Beaches within the WMA, the SMB JG7 WMP refers to the Los Angeles Water Board's Implementation Plan, which "concluded that *'as JG7 already meets the baseline goals and only needs to implement provisions to prevent "backsliding"; the non-integrated approach will be selected. No milestones are proposed, as existing conditions are the equivalent of compliance with the TMDL.'*"²⁸⁴ Lastly, regarding DDTs and PCBs in Santa Monica Bay, the WMP states that the "TMDL mass-based waste load allocations . . . are equivalent to the estimated existing stormwater loads (i.e. based on data used in the TMDL, zero MS4 load reduction is required). As a result, it is anticipated that for the WMP RAA, no reductions in DDT and PCB loading from the JG7 MS4s are required to meet the TMDL WQBELs."²⁸⁵ Essentially, the SMB JG7 Group has concluded that it is already in compliance with the final WQBELs and other TMDL-specific limitations for every water body-pollutant combination in its WMA.

²⁷⁹ The MWH Team, Watershed Management Program for Santa Monica Bay Jurisdictional Group 7 within the City of Los Angeles (May 28, 2015) (SMB JG7 WMP), p. ES-2.

²⁸⁰ SMB JG7 WMP, § 1.2, p. 1.

²⁸¹ SMB JG7 WMP, § 2.2.1, pp. 15-16.

²⁸² SMB JG7 WMP, § 2.2.1, p. 16. The only Category 2 pollutant considered was sediment toxicity and it was excluded from the WMP "to be consistent with USEPA determinations . . . based on lack of toxicity in regional surveys . . . which report findings of low toxicity in the Santa Monica Bay." (*Ibid.*)

²⁸³ Los Angeles MS4 Order, Part VI.E.2.a.ii, p. 145.

²⁸⁴ SMB JG7 WMP, § 2.2.1, pp. 15-16.

²⁸⁵ SMB JG7 WMP, § 2.2.1, p. 16.

Because the SMB JG7 Group believes itself in compliance, there is no compliance schedule proposed beyond unmodified Order-required MCMs.²⁸⁶ No RAA was performed.²⁸⁷ Essentially, the Group has committed to nothing that would not be required had no WMP been developed at all. Because there is no compliance schedule or limiting pollutant approach to review, the question we are left with is whether the SMB JG7 Group should have sought approval of a WMP in the first place.²⁸⁸

The SMB JG7 WMP's situation is not one that is clearly addressed by the Order's WMP provisions. The Order's requirements are crafted to address existing water quality issues. There is no justification for extending deemed-compliance to water body-pollutant combinations for which no action is proposed. The purpose of the Order's WMP provisions is to address existing water quality issues through a watershed approach, implementing BMPs above and beyond the Order's minimum requirements. Where a WMP Group does not need to implement expanded control measures addressing a water body-pollutant combination because the WMP Group is achieving compliance with the applicable water quality requirements through already implemented controls, there is no deemed-compliance for that combination and the SMB JG7 Group will be expected to continue to comply with baseline receiving water limitations and WQBELs and other TMDL-specific limitations.

However, disapproving the SMB JG7 WMP entirely would have the unintended consequence of precluding the SMB JG7 Group from addressing unanticipated water quality issues through a WMP in the future. The desire to develop a WMP is reasonable even where additional control measures to address water quality issues are not immediately necessary because the Order does not provide for development of a WMP at any time; instead, the deadlines for WMP development are tied to the Order's effective date.²⁸⁹

Having a WMP in place allows, at minimum, for incorporation of Category 3 pollutants if exceedances are detected after WMP approval, as the Los Angeles MS4 Order

²⁸⁶ SMB JG7 WMP, § 3, pp. 20-28.

²⁸⁷ The SMB JG7 Group explained that "a quantitative RAA is not being presented due to zero load reduction requirements and alternative compliance measures." (SMB JG7 WMP, p. ES-4.) Instead, the SMB JG7 Group presents a "qualitative RAA discussion." (SMB JG7 WMP, § 1.3, p. 5; see SMB JG7 WMP, § 4, pp. 29-30.) Of course, this is not an RAA at all. An RAA is, by definition, "quantitative and performed using a peer-reviewed model in the public domain." (Los Angeles MS4 Order, Part VI.C.5.b.iv.(5), p. 65.) Pursuant to the discussion following this footnote, the Group should be prepared to conduct an RAA if monitoring and sampling data should reveal the need to create a compliance schedule to address a particular water body-pollutant combination.

²⁸⁸ The WMP's source assessment was clearly written, identified the sources of the information and data considered, and explained the impact that the data and information had on the Group's decision-making and WMP development. (SMB JG7 WMP, § 2.3, pp. 17-19.)

²⁸⁹ Los Angeles MS4 Order, Table 9, p. 55.

allows.²⁹⁰ We also do not intend to preclude WMP Groups from addressing water body-pollutant combinations in a WMP should new information come to light or new water quality issues develop. We have expressly determined that a time schedule order is the appropriate vehicle for addressing water body-pollutant combinations for which final TMDL compliance deadlines have passed and are not being met. Similarly, where a Permittee anticipates that final receiving water limitation compliance deadlines set within a WMP/EWMP will not be met and the Permittee has not been granted an extension by the Executive Officer, that Permittee “may, no less than 90 days prior to the final compliance deadline, request a time schedule order”²⁹¹ We view as distinct, however, situations in which a WMP Group or permittee concludes it is in actual compliance with a receiving water limitation at the time of WMP adoption or has successfully achieved actual compliance with receiving water limitations on a schedule set in a WMP and, subsequently, the situation changes. For example, after WMP adoption or after achieving actual compliance, a new TMDL may be adopted, a more stringent receiving water limitation may be developed, or a significant new source may be introduced to the WMA, bringing Permittees or WMP Groups out of compliance. Upon a showing of such cause, we anticipate that the Los Angeles Water Board would allow the impacted Permittee or WMP Group to develop a plan to address the water quality issue and, after updating its WMP with that plan, to be deemed in compliance with the applicable receiving water limitation or WQBEL or other TMDL-specific limitation. This should not be interpreted as a pathway to never-ending deemed-compliance. The schedules proposed in the WMP are meant to be finite. Taking a second attempt at addressing a water body-pollutant combination within a WMP should only be allowed where significant justification exists.

We will not disapprove the SMB JG7 WMP and we are not requiring any changes now. However, the SMB JG7 Group will be held to compliance with baseline receiving water limitations and WQBELs and other TMDL-specific limitations for the water body-pollutant. The Group may continue to participate in the WMP process and if new water quality concerns emerge in the WMP area in the future, the Group may modify its WMP to address these concerns consistent with this order.

2. East San Gabriel Valley

²⁹⁰ Los Angeles MS4 Order, Part VI.C.2.a.iii, pp. 52-53.

²⁹¹ Los Angeles MS4 Order, Part VI.C.6.b, p. 67.

Like the SMB JG7 WMP, the East San Gabriel Valley (ESGV) WMP raises questions unique from the rest of the WMPs considered. The ESGV WMP covers the northeastern portion of the San Gabriel River watershed, totaling 38,639 acres.²⁹² The members are the cities of Claremont, La Verne, Pomona, and San Dimas.²⁹³

The ESGV WMP is unique among the WMPs examined here because of its proposed compliance mechanism. The ESGV Group's approach is explained as follows: "The [Los Angeles MS4 Order] provides two pathways of numeric goals for addressing water quality priorities: [¶] • Volume-based: Retain the standard runoff volume from the 85th percentile, 24-hour storm [¶] • Load-based: Achieve the necessary pollutant load reductions to attain RWLs and/or WQBELs [¶] Both types of numeric goals were evaluated as part of this RAA to assess potential management implications associated with each pathway. It was decided by the Group that in the case that the level of BMP implementation effort for the numeric goals based on the 85th percentile storm is similar to the pollutant-based numeric goal, (*sic*) the volume-based goal would be selected because it offers increased compliance coverage (applies to all final TMDL limits)."²⁹⁴ Ultimately, the WMP Group chose the volume-based approach. "Because the design approach is more comprehensive and reliable for achieving compliance, addressing 100% of the loading from all pollutants during the 85th percentile storm (rather than targeting a single pollutant), it was selected for WMP development."²⁹⁵

The problem with this approach is that the approach for obtaining deemed-compliance via implementation of control measures adequate to infiltrate or retain the 85th percentile, 24-hour storm event is the compliance mechanism for EWMPs, not WMPs, and the ESGV Group sought approval as a WMP. When the ESGV Group refers to "two pathways of numeric goals for addressing water quality priorities," it is referring to the WMP and EWMP provisions of the Los Angeles MS4 Order.

A significant difference between the WMP and EWMP approaches is the WMP approach requires a full RAA to ensure the proposed control measures will achieve applicable receiving water limitations and WQBELs and other TMDL-specific limitations in accordance with a compliance schedule. The EWMP provisions, by contrast, allow an initial assumption, without an RAA, that drainage areas addressed by the storm water retention approach will achieve

²⁹² East San Gabriel Valley Watershed Management Group, Final Watershed Management Program (WMP) Plan (June 2015) (ESGV WMP) § 1.2, p. 1.

²⁹³ ESGV WMP, § 1.1, p. 1.

²⁹⁴ ESGV WMP, § 5.1.3, p. 45.

²⁹⁵ ESGV WMP, App. A, p. A-24.

relevant water quality requirements and require an RAA only for those drainage areas where the storm water retention approach is not feasible. Once implementation is complete, Permittees must verify through monitoring that drainage areas implementing the storm water retention approach have in fact achieved receiving water limitations and WQBELs and other TMDL-specific limitations.²⁹⁶ The approach is meant to incentivize public projects requiring investments of significant magnitude and achieving benefits beyond water quality, including water supply.²⁹⁷

The ESGV program is neither fully a WMP nor an EWMP. It does not employ the proper compliance mechanism for a WMP, having not presented the RAA necessary to demonstrate that its plan will achieve receiving water limitations and WQBELs and other TMDL-specific limitations, nor does the ESGV WMP satisfactorily present its plan for the storm water retention approach. We will discuss what the ESGV Group should do to bring its program in compliance with either the WMP or EWMP provisions of the Order. In the meantime, the ESGV Group should continue implementing its program as written. Continued implementation, as well as a demonstration that the Group has achieved its 2017 milestone, will allow the Group to continue to be deemed in compliance with the receiving water limitations and WQBELs and TMDL-specific limitations identified in its WMP, as discussed in detail below.

a. Requirements for Continued Approval as a WMP

The ESGV Group, if it wishes to receive continued approval of its program as a WMP, will need to make extensive revisions consistent with the Los Angeles MS4 Order and this order.

First, the ESGV Group will have to conduct a source assessment. The only mention of a source assessment in the ESGV WMP is in the WMP's "Adaptive Management Process" section, in which the ESGV Group promises to "re-evaluate[]" the "assessment of possible sources of water quality constituents . . . based on new information from the CIMP implementation efforts. The identification of non-MS4 and MS4 pollutant sources is an essential component of the WMP because it determines whether the source can be controlled by watershed control measures. As further monitoring is conducted and potential sources are

²⁹⁶ State Water Board Order WQ 2015-0075, p. 43. Permittees implementing an EWMP must continue to adaptively manage these drainage areas to verify final WQBELs and other TMDL-specific limitations are met. Implementation of additional control measures as needed may be governed by a time schedule order. In some circumstances, reconsideration of the underlying TMDLs and the final deadlines within those TMDLs may be warranted. (State Water Board Order WQ 2015-0075, p. 45.)

²⁹⁷ State Water Board Order WQ 2015-0075, p. 44.

better understood, the assessment becomes more accurate and informed.”²⁹⁸ We agree that the source assessment is an “essential component of the WMP,” which makes its absence from this program especially confusing, particularly in light of the ESGV Group’s commitment to updating it. The Group, when performing its source assessment, should refer to the discussion in section II.B.2.a of this order, which sets out broad guidelines for what we expect of a source assessment.

Second, following the source assessment, the ESGV Group should organize pollutants into classes based on the Order criteria of similarity of fate and transport, and addressability via the same control measures and schedules. The ESGV WMP does not include this analysis, because “[f]or the design storm approach, achievement of the non-stormwater and stormwater retention goals represents compliance with all TMDL classes and pollutants. As such, attainment of the design storm volumes to address the San Gabriel River Metals TMDL will also address the other TMDLs in the watershed . . . , the 303(d) listings in the WMP area . . . and Category 3 WQ Priorities in the WMP area.”²⁹⁹ While we agree that there is no need for this classification where the storm water retention approach is taken, it is required for a WMP.

The ESGV Group must also perform an RAA, consistent with this order, to support the development of compliance schedules for the resulting classes of water body-pollutant combinations. Once schedules are developed, the Group must present water quality benchmarks for the covered pollutants so that the schedules’ effectiveness can be evaluated. The Group may have already done some of this work. The Group used WMMS and SUSTAIN³⁰⁰ to evaluate both the retention approach and the WMP load reduction approach.³⁰¹ As discussed above, the Group decided to use the retention approach because of the similar level of implementation effort and expanded deemed-compliance.³⁰² The ESGV Group may already be able to show that it has already demonstrated reasonable assurance for the water body-pollutant combinations covered by the San Gabriel River Metals TMDL, which was used

²⁹⁸ ESGV WMP, § 6.2.2, p. 81.

²⁹⁹ ESGV WMP, § 5.3, p. 70.

³⁰⁰ SUSTAIN (the System for Urban Stormwater Treatment and Analysis INtegration) is a USEPA developed small-scale BMP model intended to support the development of municipal storm water management plans. More information available at <https://www.epa.gov/water-research/system-urban-stormwater-treatment-and-analysis-integration-sustain> [as of Apr. 10, 2019].

³⁰¹ ESGV WMP, §§ 5.1.1-5.1.3, pp. 35-45.

³⁰² ESGV WMP, § 5.1.3, p. 45.

as the basis for its modeling.³⁰³ The Group states that to schedule BMP implementation, “the percent milestones of the San Gabriel River Metals TMDL were applied directly to the design storm volumes,” apparently concluding that implementation of its program would achieve the TMDL’s WQBELs.³⁰⁴ Because the ESGV Group did not separately model other pollutants in its jurisdiction or organize them into classes, this compliance schedule is insufficient under the WMP framework to justify deemed-compliance for anything other than the water body-pollutant combinations addressed by the San Gabriel River Metals TMDL.

b. Requirements for Reclassification as an EWMP

To be reclassified as an EWMP, the ESGV Group must make a variety of changes, including incorporating a source assessment³⁰⁵ and placing greater emphasis on consideration of large-scale regional BMPs.

More important, however, is the requirement that the ESGV Group identifies the specific drainage areas in which the storm water retention approach is being implemented. Deemed-compliance based on the retention approach is only available for those specific drainage areas. For an example of an appropriate approach, the Group might look to the Upper Santa Clara River EWMP. The Upper Santa Clara River Group identified and committed to eight regional projects.³⁰⁶ Of those, the Group identified four of them capable of retaining the 85th percentile, 24-hour storm event for defined drainage areas.³⁰⁷ For areas not addressed by an 85th percentile, 24-hour storm event retention BMP, the Upper Santa Clara River WMP includes an RAA that demonstrates that the Upper Santa Clara River Group’s implementation plan is projected to result in actual compliance with receiving water limitations and WQBELs and other TMDL-specific limitations.³⁰⁸ The ESGV Group’s strategy of planning for 85th percentile, 24-hour storm water retention throughout the WMA is inconsistent with the requirements of the Order, which requires the standard be met in each drainage area addressed by the storm water

³⁰³ ESGV WMP, § 5.3, p. 70.

³⁰⁴ ESGV WMP, § 5.3, p. 70.

³⁰⁵ As discussed in the prior subsection, the Group did not conduct a source assessment. This requirement applies to both WMPs and EWMPs. (Los Angeles MS4 Order, Part VI.C.1.g.i, p. 49.)

³⁰⁶ Upper Santa Clara River Watershed Management Group, Enhanced Watershed Management Program (Feb. 2016) (USCR EWMP) § 4.5, pp. 4-10 to 4-11.

³⁰⁷ USCR EWMP, Table 4-1, p. 4-11. See USCR EWMP, § 4.5.1, p. 4-15 for an example of how the USCR Group defined its drainage areas.

³⁰⁸ See USCR EWMP, Appendix 7.A for a “Detailed Recipe for Final EWMP Compliance” based on 90th percentile storm conditions (USCR EWMP), p. ES-6). This reference to the USCR EWMP does not constitute a conclusion that it complied with the Los Angeles MS4 Order and the principles of this order beyond noting that the general outline of the USCR Group’s approach appears to align with the requirements for EWMP development.

retention approach. For any drainage areas not addressed by the storm water retention approach, the ESGV Group must perform an RAA.

If the ESGV Group chooses this path, it will also have to evaluate its WMP for compliance with the additional requirements placed on EWMPs, including greater emphasis on and inclusion of “multi-benefit regional projects,”³⁰⁹ inclusion of an alternatives analysis,³¹⁰ and inclusion of a financial strategy.³¹¹ If the ESGV Group chooses to make these changes and its plan is approved by the Los Angeles Water Board, the ESGV WMP may be reclassified as an EWMP.

c. The ESGV Group’s Deemed-Compliance Status

To avoid prejudicing the ESGV Group, which relied in good-faith on the Los Angeles Water Board Executive Officer’s approval, the Group may continue to receive deemed-compliance for up to six months for all Category 1, 2, and 3 water body-pollutant combinations addressed by its plan while it demonstrates, consistent with section II.B.3.a.i of this order, achievement of a 10% reduction in pollutant loading for each of those combinations³¹² as well as implementation of the non-structural controls the Group projected would achieve that reduction.³¹³ The ESGV Group will not be deemed in compliance for any water body-pollutant combination for which it cannot make this demonstration. This deemed-compliance may continue until 12 months from the date of this order’s adoption, at which point the program should be updated to fully comply with either the WMP or EWMP provisions of the Los Angeles MS4 Order.

3. Walnut

³⁰⁹ Los Angeles MS4 Order, Part VI.C.1.g.iv, p. 49. Incentivization of large-scale regional, multi-benefit BMPs that require permittees to “comprehensively evaluate[] opportunities, within the participating Permittees’ collective jurisdictional area” is one of the primary goals of the EWMP approach. What constitutes a sufficient focus on inclusion of multi-benefit regional projects is a determination for the Los Angeles Water Board.

³¹⁰ Los Angeles MS4 Order, Part VI.C.1.g.vi, p. 50.

³¹¹ Los Angeles MS4 Order, Part VI.C.1.g.ix, p. 50.

³¹² ESGV WMP, Table 5-15, p. 72; ESGV WMP, § 5.3.1, p. 73.

³¹³ ESGV WMP, Table 5-15, p. 72. These non-structural controls are the ESGV Group’s Rooftop Runoff Reduction Program, (*Id.*, Table 5-17, p. 75) the increase in low impact development due to the Group’s LID ordinance, (*Id.*, Table 5-16, p. 74) increased construction site inspections, (*Id.*, Table 5-16, p. 74) and increased catch basin cleaning (*Id.*, Table 5-16, p. 74).

The City of Walnut, covering a jurisdictional area of 8.9 square miles in the San Gabriel Valley,³¹⁴ developed an individual WMP.³¹⁵ Walnut “drains to two receiving water bodies, San Jose Creek to the south and Walnut Creek Wash to the north, and . . . the [San Gabriel River Metals TMDL] applies to both. Both of these receiving waters are tributary to San Gabriel River Reach 3, which is itself tributary to San Gabriel River Reach 2.”³¹⁶ Because the San Gabriel River Metals TMDL is the only TMDL with which Walnut must comply, lead and selenium are the only Category 1 pollutants in the WMA.³¹⁷ The Category 2 pollutants are ammonia, benthic macroinvertebrates, coliform bacteria, cyanide, pH, total dissolved solids, and toxicity.³¹⁸ No Category 3 pollutants are identified.³¹⁹

Here, we discuss the deficiencies in Walnut’s source assessment, limiting pollutant approach, and compliance schedule and we specify the actions required for Walnut to retain its deemed-compliance for those pollutants addressed by its WMP – bacteria, pH, toxicity, and total dissolved solids.

a. Source Assessment

Walnut’s source assessment shares the problem common to many of the other source assessments - it is not clear in all cases how the information discussed was used, if at all, though this is not uniformly the case. Walnut used its source assessment to conclude that it is likely not a source of ammonia, discharges with toxic properties detrimental to populations of benthic macroinvertebrates, cyanide, and selenium.³²⁰ For the remainder of the water body-pollutant combinations addressed in the WMP, the influence of the source assessment is less clear. The presence of multiple municipal sources of lead³²¹ was presumably the impetus for Walnut’s decision to model lead in its WMA,³²² although this is not stated directly. The same is

³¹⁴ The City of Walnut, Watershed Management Plan: City of Walnut, California (June 12, 2015) (Walnut WMP) § 1.1, p. 1.

³¹⁵ Walnut WMP, § 1.0, p. 1.

³¹⁶ Walnut WMP, § 4.2, p. 40.

³¹⁷ Walnut WMP, Table 2-2, p. 8.

³¹⁸ Walnut WMP, Table 2-2, p. 8.

³¹⁹ Walnut WMP, Table 2-2, p. 8.

³²⁰ Walnut WMP, § 2.2, pp. 10-12. Of course, as a result, Walnut will be expected to comply with baseline receiving water limitations for these pollutants.

³²¹ Walnut WMP, § 2.2, p. 11. Walnut identified “automobile brake pads, vehicle wear, building materials, pesticides, erosion of paint, and atmospheric deposition from fuel ignition and industrial facilities.” (*Ibid.*)

³²² Walnut WMP, § 4.2, p. 40.

true for bacteria.³²³ The source assessment concluded that “MS4 discharges may contribute to changes in pH in receiving waters[,]” “[u]rban runoff has been identified as a potential source of toxicity in MS4 discharges” and “residential development” is a “known potential source of [total dissolved solids] in storm water and non-storm water runoff.”³²⁴ Walnut should review our discussion of source assessments in section II.B.2.a of this order and revise its WMP to include some discussion of how its source assessment impacted the development of its WMP.

b. Limiting Pollutant

Walnut does not seem to have used a limiting pollutant approach – at least, not explicitly. The only modeled pollutants were lead and bacteria³²⁵ and, of those, only bacteria was found to require a reduction.³²⁶ No pollutant classification was done. Selenium, consistent with the discussion in section II.B.2.c.ii of this order, did not need to be modeled because it is covered by the same TMDL as lead (although a discussion of why lead was modeled rather than selenium should be included). When addressing why no Category 2 pollutants other than bacteria were modeled, Walnut explains that they “are either not able to be modeled given currently available datasets or are not typically associated with MS4 wet weather discharges.”³²⁷ For these non-modeled Category 2 pollutants, Walnut should specify which cannot to be modeled and which Walnut has simply chosen not to model because they “are not typically associated with MS4 wet weather discharges.”³²⁸ Presumably, most, if not all, of the pollutants that fall into the latter category are those for which Walnut states that no actions other than monitoring are planned – ammonia, benthic macroinvertebrates, and cyanide.³²⁹

For those remaining Category 2 pollutants that Walnut intends to control via the measures proposed in the WMP, Walnut should first examine whether the pollutants can be placed in a class with bacteria. If that is not possible, Walnut should create other classes, if possible, and develop compliance schedules unique to those water body-pollutant combinations consistent with section II.B.2.c.ii of this order.

³²³ Walnut WMP, §§ 2.2, p. 11 & 4.2, p. 40.

³²⁴ Walnut WMP, § 2.2, pp. 11-12.

³²⁵ Walnut WMP, § 4.2, p. 40.

³²⁶ Walnut WMP, § 4.5.1, p. 50.

³²⁷ Walnut WMP, § 4.2, p. 40.

³²⁸ Walnut WMP, § 4.2, p. 40.

³²⁹ See Walnut WMP, § 2.2, pp. 10-12.

c. Compliance Schedule

Because bacteria is the only modeled pollutant with projected needed reductions, Walnut's compliance schedule is based on controlling bacteria discharges. There are four components to the compliance schedule: the LID ordinance, non-modeled non-structural BMPs, four regional BMPs, and the City's green streets program.³³⁰ Expected water quality improvements are presented in terms of the percentage of land area to be in compliance with the receiving water limitations by certain years.³³¹

Of the four components to the compliance schedule, only the non-modeled non-structural BMPs (consisting of MCMs and MCM enhancements) and the LID ordinance were scheduled to be implemented by the end of 2017.³³² The MCM enhancements include expanded community education, random commercial site inspections of critical potential sources, installation of pet waste stations, and potential grant-funded stream restoration projects "to reduce erosion and improve local vegetation adjacent to the stream."³³³ The effect of the LID ordinance, meanwhile, is not directly enforceable on Walnut. Walnut, however, made assumptions about the effects the LID ordinance would have in its jurisdiction: "Implementation of [LID] as a result of redevelopment was modeled uniformly throughout the WMA Average residential lots within the Walnut WMA were assumed to be 0.15 acres. The redevelopment of a single lot would therefore account for 0.0053% of the WMA's single family residential land use area. The City's LID ordinance was assumed to become effective in 2014 and the area redeveloped each year was sampled without replacement Extrapolating the annual redevelopment rate without replacement for 10 years, or until the 2024 final compliance date, suggests that 1.6 acres or 0.058% of the City's residential land use area would be required to implement onsite retention LID BMPs."³³⁴ Walnut should, to the extent possible, continually work to verify these assumptions to validate its RAA. Somewhat confusingly, Walnut presents expected reductions not just for bacteria, pH, total dissolved solids, and toxicity but also cyanide and benthic macroinvertebrates. The schedule generally uses the same years set for bacteria milestones to set milestones for these pollutants.³³⁵ Of these, the source

³³⁰ Walnut WMP, Table 4-11, p. 65.

³³¹ Walnut WMP, Table 6-1, p. 74.

³³² Walnut WMP, §§ 4.8 pp. 57-58 & 5.1, pp. 68-69.

³³³ Walnut WMP, Table 5-1a, p. 68. Regarding the stream restoration project, the 2017 milestone is not actual restoration but simply documentation of efforts to apply for grant funds and of "all conceptual engineering and related permitting coordination." (Walnut WMP, Table 5-1b, p. 69.)

³³⁴ Walnut WMP, § 4.8, p. 57.

³³⁵ The bacteria compliance schedule's first two milestones commit to having eight percent of Walnut's land area in compliance by 2017 and 10% by 2020, followed by new milestones every two years thereafter until 2036, each

assessment, discussed above, associates MS4 discharges with pH, total dissolved solids, and toxicity, and it seems from Walnut's plan that it intends for these to be limited by the plan to control bacteria. The latter two are presumably *not* associated with MS4 discharges and, as discussed in the prior section, Walnut does not plan to address them with anything beyond monitoring. Why milestones associated with these pollutants were presented in the WMP's compliance schedule is not clear.

Because no need for reductions of cyanide or discharges detrimental to benthic macroinvertebrates was identified, Walnut must actually comply with the receiving water limitations for these pollutants. Similarly, Walnut must actually comply with the WQBELs and TMDL-specific limitations of the San Gabriel River Metals TMDL, applicable to lead and selenium, with which it has concluded that it is already in compliance. To continue to be deemed in compliance with receiving water limitations for bacteria, pH, total dissolved solids, and toxicity, however, Walnut must, consistent with section II.B.3.a.i of this order, demonstrate not only that it has performed the actions identified in its schedule, but also that it has achieved the actual projected water quality improvements expected by 2017 because these milestones were proposed to be met via implementation of non-modeled and non-structural controls.

As with the rest of the WMPs evaluated in this order, we expect that the changes ordered to this WMP in terms of designating representative pollutants where possible and creating compliance schedules unique to the classes created will force changes to Walnut's compliance schedule beyond 2017. For that reason, we will not delve too deeply into the actions scheduled beyond 2017, other than to emphasize that we expect more firm commitments and greater specificity as deadlines grow nearer.

The need for greater specificity is apparent when reviewing the City's identified regional BMPs and green streets program. The language used by Walnut in relation to the regional BMPs is extremely tentative and noncommittal, emphasizing lack of information and uncertainty of funding.³³⁶ We expect more firm commitments in WMPs. Uncertain funding is always a concern and, as discussed near the end of section II.B.3.ii of this order, does not create a WMP contingency. Similarly, a reference to missing information does not create a

associated with a 10% increase in compliant land area. The compliance schedules for the six Category 2 pollutants commit to having one percent of Walnut's land area in compliance by 2016, three percent by 2018, and 10% by 2020, at which point the milestones exactly track those for bacteria. (Walnut WMP, Table 6-1, p. 74.)

³³⁶ "The regional type BMPs described in this section are included in the RAA on the basis of a number of assumptions that include construction feasibility and project funding. For the purpose of this document, only a desktop level investigation was conducted for establishing potential sites and footprints. No field samples of existing soil conditions or underground utility research have been completed." (Walnut WMP, § 4.10, p. 58.)

contingent obligation, particularly when the obligation is self-imposed, as in this WMP. Walnut should be actively gathering the data needed to determine that these regional BMP sites can support the BMPs that Walnut modeled in its RAA. If it has not yet done this, Walnut should provide a schedule for site investigations and development for the identified regional BMPs. The same is true of Walnut's green streets program, which has its first milestone on December 31, 2019, with the completion of the enigmatic "Project No. 1."³³⁷ Neither the location nor capacity of this project, or of any of the other projects to be completed annually thereafter, are provided.³³⁸ These actions, which underlie Walnut's post-2017 milestones, are insufficiently specific to justify deemed-compliance for future milestones and must be updated by 12 months from the date of this order's adoption.

Although we leave it to the Los Angeles Water Board Executive Officer to oversee Walnut's adaptive management process, we expect to see significantly more information regarding upcoming projects as deadlines grow nearer. In the meantime, Walnut will be expected to review its implementation of the projects to which it has committed and demonstrate that the projected water quality improvements have been achieved. Walnut, if it can demonstrate actual achievement of its 2017 milestone as well as implementation of all control measures required by its schedule, will remain deemed in compliance with the receiving water limitations for bacteria, pH, total dissolved solids, and toxicity in its WMA until 12 months from the date of this order's adoption, at which point Walnut must propose an update that brings its WMP into compliance with this order, including adding more specificity to the actions underlying future milestones.

4. Alamitos Bay/Los Cerritos Channel

The Alamitos Bay/Los Cerritos Channel (AB/LCC) WMA "is located in southern Los Angeles County and has a drainage area of approximately 37.5 square miles" that spans through the Los Cerritos Channel freshwater watershed, the Los Cerritos Channel estuary watershed, and the Alamitos Bay watershed.³³⁹ The WMP, whose only members are the County of Los Angeles and Los Angeles County Flood Control District, "only includes [a] 95 acre

³³⁷ Walnut WMP, Table 5-3, p. 71.

³³⁸ Walnut WMP, § 5.3, pp. 70-71. Presumably, this is due to Walnut's plan to "review at least two years of monitoring data from the [IMP] to prioritize the potential Green Streets project locations. Following development of the prioritized projects schedule the City will begin implementation of an annual CIP program that will include the construction of Green Street type BMPs." (*Id.*, § 5.3, p. 70.) "CIP" is not defined in the WMP.

³³⁹ County of Los Angeles and Los Angeles County Flood Control District, Alamitos Bay/Los Cerritos Channel Final Watershed Management Program (May 28, 2015) (AB/LCC WMP) § 1.2, p. 2.

County Island, the [Los Angeles County Flood Control District] infrastructure within that island, and the [Los Angeles County Flood Control District] infrastructure within the Los Cerritos Channel estuary watershed, and the Alamitos Bay watershed.”³⁴⁰ The AB/LCC Group notes that it has limited jurisdiction in the overall WMA, because “the Alamitos Bay and Los Cerritos Channel Estuary watersheds . . . are under the jurisdiction of the City of Long Beach and will be addressed under Long Beach’s WMP[,]” though it commits to reviewing Long Beach’s WMP and considering on a case-by-case basis opportunities for collaboration on future projects.”³⁴¹

The only TMDL applicable to the AB/LCC Group is the Los Cerritos Channel Metals TMDL.³⁴² Pursuant to a resolution adopted by the Los Angeles Water Board that included implementation requirements for the Los Cerritos Channel Metals TMDL, implementation of the AB/LCC WMP is intended to satisfy the requirements of the TMDL.³⁴³ All of the water body-pollutant combinations addressed by this WMP are in the freshwater portion of the Los Cerritos Channel.³⁴⁴

In this discussion, we order changes to the AB/LCC Group’s source assessment and limiting pollutant approach and specify what is required for the AB/LCC Group to continue to be deemed in compliance with the pollutants addressed by its WMP – metals, DEHP, toxics, bacteria, and enterococcus.

a. Source Assessment

The source assessment prepared by the AB/LCC Group³⁴⁵ suffers from the same issues as those discussed in section II.B.2.a of this order. The discussion is cursory and no explanation is given for how the information impacted the development of the WMP. The Group should review its source assessment, make changes to the extent needed to incorporate any

³⁴⁰ AB/LCC WMP, § 1.2, p. 2. Our understanding is that the WMP area does not include the entire Alamitos Bay watershed, but just the Los Angeles County Flood Control District infrastructure within it. If that is correct, the final comma in the quoted sentence should be removed.

³⁴¹ AB/LCC WMP, § 1.2, p. 2.

³⁴² AB/LCC WMP, § 2, pp. 5-6. As the cited section notes, the permittees are named as responsible parties in the Harbor Toxics TMDL. This will be addressed in the discussion of the AB/LCC Group’s limiting pollutant approach.

³⁴³ AB/LCC WMP, § 2.1, p. 5. The resolution states, “An Enhanced Watershed Management Program or Watershed Management Program, including the Reasonable Assurance Analysis, submitted in fulfillment of requirements in Order No. R4-2012-0175 may be used by permittees subject to that Order to satisfy the TMDL implementation requirements.” (Attachment A to Resolution No. R13-004, available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/docs/R13-004_RB_BPA.pdf [as of Dec. 4, 2018].)

³⁴⁴ AB/LCC WMP, Table 4, p. 13.

³⁴⁵ AB/LCC WMP, § 4, pp. 14-15.

additional relevant, available information, and explain how the information influenced the development of the WMP.

b. Limiting Pollutant

The AB/LCC WMP addresses a variety of pollutants in the Los Cerritos Channel. Category 1 pollutants, derived from the Los Cerritos Channel Metals TMDL, are copper, lead, and zinc.³⁴⁶ Toxics named in the Harbor Toxics TMDL are also listed as Category 1,³⁴⁷ for these, however, the AB/LCC Group should refer to our discussion in section II.B.2.c.ii of this order regarding the Harbor Toxics TMDL in relation to the LLAR and LSGR Groups.³⁴⁸ Category 2 pollutants are Bis(2-ethylhexyl) phthalate (DEHP), trash, bacteria, ammonia, and pH.³⁴⁹ Category 3 pollutants are enterococcus and methylene blue active substances (MBAS).³⁵⁰

The AB/LCC Group generally complied with the framework of this order in grouping pollutants. More information, however, is needed to fully justify its classifications and approaches. For example, the AB/LCC Group plans to treat all metals and toxics via a schedule created for zinc, with the justification that “toxics and metals move through and are transformed physically, chemically and biologically the same in the environment. The [Harbor] Toxics TMDL’s final compliance date is over 5 years after the LCC Metal TMDL’s. By using the limiting pollutant approach in this RAA, treatment of the Critical LCC Metals Condition will address the [Harbor] Toxics TMDL.”³⁵¹ Because the toxic pollutants should not be considered Category 1 in the AB/LCC WMP (thus not implicating the Order’s requirement that unique schedules be designed for each TMDL), treating them via a schedule for zinc may be appropriate, but only if that approach is properly justified. The AB/LCC Group, however, needs to provide more information and sources for its conclusion. A short statement that they are the same is not enough.

Next, the AB/LCC Group proposes to treat DEHP and trash together. “DEHP is a plasticizer which is used in plastic and is typically associated with trash. As discussed . . . , this

³⁴⁶ AB/LCC WMP, § 4.2, p. 14.

³⁴⁷ AB/LCC WMP, § 4.2, p. 14.

³⁴⁸ In short: the AB/LCC Group has been released of responsibility to implement this TMDL and, in any event, the TMDL does not impose substantive obligations on the AB/LCC Group; as such, these pollutants should not be treated as Category 1 pollutants.

³⁴⁹ AB/LCC WMP, § 4.3, pp. 14-15.

³⁵⁰ AB/LCC WMP, § 4.4, p. 15.

³⁵¹ AB/LCC WMP, § 6.3.4, pp. 23-24.

WMP Group will install full capture devices on the catch basins in their jurisdiction to significantly reduce trash. Therefore, trash and DEHP do not need to be modeled.”³⁵² This is an appropriate justification for the treatment of DEHP via the control of trash, for which the relevant compliance schedule has already been imposed on the AB/LCC Group via the imposition of requirements in our Water Quality Control Plans.³⁵³

To analyze bacteria, the AB/LCC Group used WMMS to model fecal coliform.³⁵⁴ The Group used a bacteria TMDL for another water body as a reference to address bacteria in its jurisdiction: “This WMP Group utilized the methodology outlined by the Ballona Creek, Ballona Estuary and Sepulveda Channel Bacteria TMDL. This TMDL allows for 17 wet weather exceedance days. Storms during the 2004-2005 season were arranged based on magnitude and the 18th largest storm was selected as the Critical Condition Bacteria storm event. This storm produces a 1.09 acre-feet volume. The Critical Condition Bacteria storm volume is far below the 90th Percentile Critical Storm Volume (3.7 acre-feet) chosen for the LCC Metals TMDL. Therefore, treatment of the LCC Metals TMDL will also meet applicable Bacteria limits.”³⁵⁵ Because enterococcus “is a bacteria similar to Fecal Coliform . . . , [it] will be addressed through the . . . Bacteria analysis.”³⁵⁶ As a result, the Group is treating enterococcus via a schedule designed for bacteria, which is being treated via a schedule designed for metals. Again, we do not rule out using a schedule designed for a metal pollutant to treat a non-metal pollutant, but the approach must be justified. The Group does not correlate treatment of metals to treatment of bacteria – the Group should identify BMPs capable of treating both and explain how placement of those BMPs will capture sources of both bacteria and metals. Without this, the Group has not adequately justified use of a zinc schedule to treat bacteria.

Regarding MBAS, the AB/LCC Group proposes no compliance schedule, instead committing to using “actual monitoring results from implementation of the Group’s CIMP” to determine “[t]he County Island’s contribution.”³⁵⁷

³⁵² AB/LCC WMP, § 6.3.4, p. 24.

³⁵³ The Amendment to the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) to Control Trash and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE Plan) are available at https://www.waterboards.ca.gov/water_issues/programs/trash_control/documentation.html [as of Apr. 10, 2019].

³⁵⁴ AB/LCC WMP, § 6.3.4, p. 24.

³⁵⁵ AB/LCC WMP, § 6.3.4, p. 24.

³⁵⁶ AB/LCC WMP, § 6.3.4, p. 24.

³⁵⁷ AB/LCC WMP, § 6.3.4, p. 24.

Consistent with section II.B.2.c.ii of this order, we expect to see an expanded, dedicated discussion to pollutant classes. The outline of the AB/LCC Group's approach generally comports with this order, but it must be supplemented by the additional analysis we have identified.

c. Compliance Schedules

The AB/LCC Group's compliance schedule is based on achieving storm water volume mitigation targets. By its first milestone on September 30, 2017, the Group planned on mitigating .16 acre-feet of storm water through the implementation of non-structural controls, discussed below.³⁵⁸ By the final milestone on September 30, 2026, the Group plans on mitigating 1.62 acre-feet of storm water for "100% compliance with wet weather WLAs."³⁵⁹ This target was derived from the Group's modeling of zinc, which concluded that a 72% reduction of zinc was needed to meet targets³⁶⁰ and correlated that load reduction to a 43.9% reduction in flow.³⁶¹

To meet its compliance milestone on September 30, 2017, the AB/LCC Group planned to rely on implementation of LID ordinances (to which the Group attributes a .2% zinc load reduction), enhanced street sweeping (a 5% load reduction), full capture devices (a 2% load reduction), and increased catch basin cleanout (a 2% load reduction).³⁶² Consistent with section II.B.3.a.i of this order, the Group must demonstrate actual achievement of the projected load reductions as well as actual implementation of the non-structural control measures because of the lack of model-supported structural control measures associated with this milestone.

Regarding MBAS, no compliance schedule is provided nor is this pollutant classified with any other pollutant. MBAS is a Category 3 pollutant, included in the WMP because of an exceedance of a receiving water limitation. When an exceedance is detected, the Order requires that permittees use data collected pursuant to an approved monitoring program to assess contributions of the pollutant from MS4 discharges to the receiving water and sources of the pollutant within the discharge area of the MS4.³⁶³ the AB/LCC Group should use

³⁵⁸ AB/LCC WMP, Table 9, p. 34.

³⁵⁹ AB/LCC WMP, Table 9, p. 34.

³⁶⁰ AB/LCC WMP, Table 8, p. 25.

³⁶¹ AB/LCC WMP, Figure 17, p. 34.

³⁶² AB/LCC WMP, § 6.3.6, p. 35.

³⁶³ Los Angeles MS4 Order, Part VI.C.2.a.iii.(1), p. 52.

the data collected to update its WMP either with data demonstrating that MS4 discharges are not a source of the pollutant or with a control measure implementation schedule meant to address MBAS. Until the AB/LCC Group proposes a control measure schedule to address MBAS that satisfies the requirements of the Los Angeles MS4 Order, there is no justification for extending the benefits of deemed-compliance to MBAS in the AB/LCC WMA.

The AB/LCC Group has appropriately addressed deemed-compliance requirements for metals and DEHP. Its WMP addresses toxics, bacteria, and enterococcus through its limiting pollutant approach, but its approach is flawed. To avoid losing deemed-compliance for all of these pollutants, the Group must demonstrate actual achievement of the projected load reductions as well as implementation of the non-structural controls to which the Group committed in its compliance schedule. Because no schedule was provided to address MBAS, the Group is not deemed in compliance with corresponding receiving water limitations.

5. The City of El Monte

The City of El Monte developed an individual WMP for its jurisdictional area, located in both the Los Angeles River and San Gabriel River watersheds.³⁶⁴ El Monte is subject to the Los Angeles River Metals TMDL, the Los Angeles River Nitrogen Compounds and Related Effects TMDL (Los Angeles River Nitrogen TMDL), the Los Angeles River Watershed Bacteria TMDL, the Legg Lake Nutrients TMDL, the San Gabriel River Metals TMDL, and the San Gabriel River, Estuary and Tributaries Indicator Bacteria TMDL (San Gabriel River Bacteria TMDL).³⁶⁵

El Monte's WMP presents substantial deficiencies – the source assessment is all but nonexistent and its limiting pollutant and compliance schedule approaches are confusing, contradictory, and unacceptable. We will detail the actions El Monte must take to fix its WMP by requiring extensive changes. In the interim, El Monte will be held to actual compliance with receiving water limitations and WQBELs and other TMDL-specific limitations in all cases for the reasons detailed below.

a. Source Assessment

³⁶⁴ CASC Engineering and Consulting, Watershed Management Program: City of El Monte, California (June 2015) (El Monte WMP) Figures 1-1 to 1-2, pp. 1-2 to 1-3.

³⁶⁵ El Monte WMP, § 1.9.2, pp. 1-37 to 1-56. Approval of the San Gabriel River Bacteria TMDL was pending at the time of WMP approval. The Basin Plan Amendment incorporating the TMDL was adopted on June 10, 2015, and the TMDL was effective on June 14, 2016. The TMDL and related documents are available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/bpa_details.php?id=111 [as of Apr. 10, 2019].

The source assessment for El Monte's WMP is all but nonexistent. Approximately a page in length, the source assessment simply lists the data reviewed and contains two sentences addressing the quality of a few of the data sources.³⁶⁶ The City of El Monte must review and significantly revise its source assessment to include substantive discussions of the information considered and that information's impact on its WMP.

b. Limiting Pollutant

El Monte does not identify a limiting or representative pollutant or pollutants, though there are scattered references to what amounts to the same concept.³⁶⁷ To start, El Monte used WMMS to model sediment (TSS), copper, lead, zinc, total nitrogen, total phosphorous, and fecal coliform.³⁶⁸ Through its modeling, El Monte found:

- For copper in the Los Angeles River, a 68% pollutant reduction is needed;
- For zinc in the Los Angeles River, a 70% pollutant reduction is needed;
- For lead in the Los Angeles River, no pollutant reduction is needed;
- For nitrogen compounds in the Los Angeles River, no pollutant reduction is needed;
- For bacteria in the Los Angeles River Watershed, pollutant reductions "between 7% and 97%" are needed;
- For total nitrogen in Legg Lake, a 13% pollutant reduction is needed;
- For total phosphorous in Legg Lake, a 62% pollutant reduction is needed;
- For lead in the San Gabriel River, no pollutant reduction is needed; and
- For fecal coliform in the San Gabriel River, a pollutant reduction "between 41% and 94%" is needed.³⁶⁹

The results presented for copper and zinc contrast with earlier statements in the El Monte WMP that the "modeled results indicate that the City is in compliance with metals and nitrogen compounds TMDLs but will need to implement BMPs to achieve reductions for nutrients and trash."³⁷⁰

³⁶⁶ El Monte WMP, § 1.6, pp. 1-22 to 1-23.

³⁶⁷ For example, El Monte asserts without support that "[a]lthough Cadmium is not directly modeled by WMMS, the BMPs implemented to remove other heavy metals will remove Cadmium." (El Monte WMP, § 1.9.1, p. 1-37.)

³⁶⁸ El Monte WMP, § 1.9.1, p. 1-37.

³⁶⁹ El Monte WMP, §§ 1.9.2.1-1.9.2.6, pp. 1-42 to 1-56.

³⁷⁰ El Monte WMP, p. ES-1.

Following this modeling, no attempt was made to organize pollutants into classes. In a “Supplemental Information” appendix,³⁷¹ apparently submitted after final approval of the WMP,³⁷² El Monte provides what it calls clarification to its plan to address bacteria TMDLs in the Los Angeles River and San Gabriel River watersheds. For the purpose of the following discussion, we refer to the main WMP document as “the WMP” or “the El Monte WMP” and we refer to the Supplemental Information Appendix as “the supplement.” The supplement presents El Monte’s approach by stating, “As discussed previously, the controlling pollutant in the Los Angeles River Watershed is bacteria. Implementation of non-structural and structural infiltration BMPs to reduce bacteria loads will also archive (*sic*) the required pollutant reductions (flow reduction via infiltration) for Copper and Zinc Using the milestones established for bacteria, the City anticipates meeting the dry weather and wet weather WQBELs by 2024 and 2028 respectively.”³⁷³ The phrase “controlling pollutant” appears nowhere else in the WMP or in the supplemental information. Which previous discussion of controlling pollutants to which this refers is not apparent.

The supplement’s approach of implementing BMPs to reduce bacteria, thereby also achieving the needed pollutant reductions for copper and zinc, appears to conflict with the El Monte WMP. In its WMP’s discussion of achieving compliance with the Los Angeles River Metals TMDL, El Monte identifies categories of BMPs that it believes will treat metals and commits to focusing “BMP implementation first on those subwatersheds with the highest density of Industrial /Commercial (*sic*) areas in order to reduce the largest amount of potential metals pollutants.”³⁷⁴ This makes sense if, as its WMP asserts, El Monte plans on controlling metals through a compliance schedule designed for those constituents. It is not consistent with the approach presented by the supplement of controlling metals through a compliance schedule designed to treat bacteria, in which BMP implementation would likely not focus on high density industrial and commercial areas. The approach is made even more confusing by the lack of consistency between the discussion of bacteria TMDLs in the WMP and in the supplement.

³⁷¹ El Monte WMP, App. C. The first seven pages of this Appendix are unnumbered. The eighth page is numbered “1” and this numbering continues to the end of the document.

³⁷² In the introduction to this supplemental information, the City notes that its conditional approval was received in April 2015, that it responded to the Regional Board’s review comments in June 2015, and “[s]ubsequently, the City corresponded with the Regional Board staff on the WMP and additional clarification was needed. The City is providing this document to supplement the WMP and to better demonstrate to the Regional Board staff the City’s strategy in making progress towards meeting pollutant load reduction requirements for the Bacteria TMDL in the Los Angeles River and the pending Bacterial TMDL in the San Gabriel River.” (El Monte WMP, App. C, p. 1.)

³⁷³ El Monte WMP, App. C, p. 12.

³⁷⁴ El Monte WMP, § 1.9.2.1, p. 1-42.

Just pages after its discussion of metals, the El Monte WMP's approach to controlling bacteria is limited to a statement that, "[t]o reduce bacteria concentrations, the City proposes to create curb cuts to existing and planned landscaped areas and retrofit street side parking areas with permeable pavement and other infiltration features."³⁷⁵ The supplement, on the other hand, discusses scheduling of non-structural BMPs, private property redevelopment projects, green street BMPs, and potential regional projects.³⁷⁶ Furthermore, it is unclear why this discussion, which includes the closest thing to a compliance schedule that the El Monte WMP has, is being presented in an appendix at all rather than in the WMP itself.

In any case, it appears that El Monte intends for the supplement's bacteria schedule to serve as the benchmark for WMP compliance in the Los Angeles River and San Gabriel River watersheds. Below, we discuss the problems with these compliance schedules, as well as the schedule El Monte designed for discharges to Legg Lake. Here, however, we point out that this approach is not appropriate as to the water body-pollutant combinations addressed by the Los Angeles River Metals TMDL. As stated above in section II.B.2.c.ii of this order, TMDL pollutants may not be "controlled" via a schedule created for a different TMDL unless that schedule can be independently justified for the controlled pollutants – that is, El Monte must use modeling to demonstrate that the schedule created for bacteria will adequately address metals and supply unique water quality benchmarks for metals.

El Monte must address these deficiencies by following the requirements we laid out in section II.B.2.c.ii of this order. El Monte may already be on the right track due to its decision to model pollutants drawn from every applicable TMDL. By using the results of this or new modeling, El Monte must create compliance schedules for every set of TMDL water body-pollutant combinations. The next step, wherever possible, is classifying Category 2 and 3 pollutants into classes with TMDL pollutants. If any Category 2 or 3 pollutants remain, they must be analyzed either independently or as part of a non-TMDL class.

Of course, the final step in obtaining deemed-compliance is an enforceable compliance schedule for each class of pollutants. In the next section, we discuss why El Monte's compliance schedules are insufficient to justify any grant of deemed-compliance for any water body-pollutant combinations in its jurisdiction.

c. Compliance Schedules

³⁷⁵ El Monte WMP, § 1.9.2.3, pp. 1-48 to 1-49.

³⁷⁶ El Monte WMP, App. C, pp. 2-6.

El Monte categorizes its compliance schedules by watershed. As such, we will evaluate them in the same way.

i. Los Angeles River Watershed

El Monte committed generally to installing BMPs to achieve the final needed percent load reductions in metals discharges to the Los Angeles River, although the City did not identify a schedule by which the BMPs would be implemented.³⁷⁷ The City does present locations on a map for planned tree well filters and modular wetland systems, but it is impossible to know whether these are planned for implementation now or at some point in the future.³⁷⁸ As described in the discussion of El Monte's limiting pollutant approach, El Monte must address copper (68% needed reduction), zinc (70% needed reduction), and bacteria (between 7% and 97% needed reduction) in the Los Angeles River watershed. El Monte is also subject to a TMDL addressing nitrogen compounds in the Los Angeles River watershed but has proposed no actions for any pollutants described in the TMDL on the apparent grounds that no reductions are needed³⁷⁹ and must therefore comply with currently applicable WQBELs and other TMDL-specific limitations for those nitrogen compounds.

As discussed in the preceding section, El Monte's plan to address copper, zinc, and bacteria in the Los Angeles River Watershed is remarkably unclear. El Monte first proposes to implement BMPs to treat metals focused on subwatersheds with the highest density of industrial or commercial areas.³⁸⁰ El Monte associates projected load reductions with each category of BMP: 3% for enhanced street sweeping, 2% for retrofit of catch basins with full capture devices, 1% for implementation of a LID ordinance and green streets policy, and the remainder handled by porous pavement installed over 23% of the City's impervious area and permeable landscaping over 9% of the City's impervious area.³⁸¹ This, according to El Monte, will achieve needed zinc and copper load reductions.³⁸² El Monte's plan to address bacteria in the WMP is wholly addressed through a commitment to "create curb cuts to existing and planned landscaped areas and retrofit street side parking areas with permeable pavement and

³⁷⁷ El Monte WMP, Table 1-20, p. 1-58.

³⁷⁸ El Monte WMP, Figure 1-10, p. 1-34.

³⁷⁹ El Monte WMP, § 1.9.2.2, p. 1-46.

³⁸⁰ El Monte WMP, § 1.9.2.1, p. 1-42.

³⁸¹ El Monte WMP, § 1.9.2.1, p. 1-42.

³⁸² El Monte WMP, § 1.9.2.1, p. 1-42.

other infiltration features.”³⁸³ No actual control measure implementation schedule is presented in the El Monte WMP for either metals or bacteria.³⁸⁴

The undated Appendix C, containing the supplement discussed above, begins with a category addressing the Los Angeles River Metals TMDL pollutants that, with some minor modifications, essentially restates the approach taken in the body of the WMP.³⁸⁵ The most noticeable changes are the inclusion of “Dry Wells” in the list of structural BMP categories and the removal from that list of the projected pollutant reductions associated with the specific categories of structural BMPs.³⁸⁶ No schedule for implementation is included, although the supplement retains the same commitment to focusing on structural BMP implementation “in those subwatersheds with the highest density” of industrial and commercial areas.³⁸⁷

The supplement goes on to present “additional clarification” of El Monte’s approach to controlling bacteria discharges in the Los Angeles River and San Gabriel River watersheds. This “clarification” expands El Monte’s plan to address bacteria in the Los Angeles River watershed from three sentences to seven pages.

The plan to reduce bacteria in the Los Angeles River watershed begins with a commitment to implement non-structural BMPs from which the City assumes a 5% pollutant load reduction will result and an estimate of a 2% load reduction resulting from private property redevelopment projects.³⁸⁸ El Monte then commits to five “Green Street Projects”: a sewer main rehab, resurfacing of a parking lot, street repair, bulb outs and sidewalk replacement, and roadway improvements.³⁸⁹ Details on the location, size, and capacity of these projects are not provided. El Monte then cites a project that it has not yet fully formulated – the Ramona Resurfacing project – which is being designed to “retain[] 7.6% of the 0.75 inch design storm;”

³⁸³ El Monte WMP, § 1.9.2.3, pp. 1-48 to 1-49.

³⁸⁴ The WMP’s “Pollutant Reduction Plan” merely restates TMDL milestones without identifying any actions to achieve them. (El Monte WMP, Tables 1-23 to 1-25, pp. 1-60 to 1-61.) Even this, however, has issues – Table 1-24 (“TMDL Milestones for Los Angeles River”) identifies January 11, 2012, as the date by which 25% of the MS4 area must meet the Los Angeles River Metals TMDL’s wet weather WQBELs while Table 1-25 identifies the same milestone as occurring in January 11, 2020. (El Monte WMP, Tables 1-24 to 1-25, pp. 1-60 to 1-61.) The TMDL itself reflects the 2012 date. (TMDL and related documents available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/bpa_details.php?id=113 [as of Apr. 10, 2019].)

³⁸⁵ El Monte WMP, App. C. As discussed above, this approach consisted of implementation of the non-structural BMPs discussed above and of constructing porous pavement and permeable landscaping in the subwatersheds with the highest density of industrial and commercial areas.

³⁸⁶ El Monte WMP, App. C.

³⁸⁷ El Monte WMP, App. C.

³⁸⁸ El Monte WMP, App. C, pp. 2-4.

³⁸⁹ El Monte WMP, App. C, Table 4, p. 5. El Monte also lists a catch basin retrofit project, but no pollutant load reduction is attributed to it.

the project is intended to be “a case study in establishing performance measures for the City’s future Green Street BMPs,” forming the basis for the listed green street projects to include “water quality features to accept 7% of the runoff generated from a 0.75” design storm for each project.”³⁹⁰ El Monte concludes, without explanation, that “[b]ecause all Green Street BMPs going forward are expected to have the same performance measure – accept 7% of the runoff generated from a 0.75” design storm– regardless of its size, in averaging all of the distributed projects it is assumed that each Green Street BMPs (*sic*) will have an average target pollutant load reduction of 1%.”³⁹¹ Why the 0.75 inch design storm is targeted and why El Monte concludes that retaining that volume of runoff equates to a 1% pollutant load reduction is not explained.

With a pollutant load reduction target of 97% in 2037, El Monte presented a schedule with milestones in 2016, 2017, 2019, 2021, and 2027.³⁹² By the end of 2016, El Monte committed to achieving the full 5% load reduction from its non-structural BMPs, the 2% load reduction from private property redevelopment, and the 5% load reduction attributed to the green street BMPs to be implemented in 2016, followed by a further 4% reduction from unidentified green street BMPs in 2017.³⁹³ These commitments resulted in an overall commitment to a 12% pollutant load reduction in 2016 and a cumulative 16% pollutant load reduction by 2017.³⁹⁴ Presumably, this schedule is also meant to apply to metal pollutants in the Los Angeles River watershed, based on the supplement’s statement that “the controlling pollutant in the Los Angeles River Watershed is bacteria. Implementation of non-structural and structural infiltration BMPs to reduce bacteria loads will also archive (*sic*) the required pollutant load reductions (flow reduction via infiltration) for Copper and Zinc (45% and 46% flow reduction respectively). Using the milestone established for bacteria, the City anticipates meeting the dry weather and wet weather WQBELs by 2024 and 2028 respectively.”³⁹⁵

Beyond the lack of detail on the green street BMPs planned for 2016, the most glaring issue with this schedule is that no control measures were proposed for 2017. The

³⁹⁰ El Monte WMP, App. C, pp. 5-6. El Monte describes the Ramona Resurfacing project as 65% designed” and anticipated completing design by the end of the 2015-2016 fiscal year. El Monte’s 2017 adaptive management proposal, available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/el_monte/El_Monte_AMP_2017.pdf, does not provide an updates on the Ramona Resurfacing project.

³⁹¹ El Monte WMP, App. C, p. 6.

³⁹² El Monte WMP, App. C, Table 5, p. 7.

³⁹³ El Monte WMP, App. C, Table 5, p. 7.

³⁹⁴ El Monte WMP, App. C, Table 5, p. 7.

³⁹⁵ El Monte WMP, App. C, p. 12.

discussed green street BMPs, for which the City assumed a 1% apiece load reduction, are fully accounted for with the projected 5% load reduction in 2016.³⁹⁶ The City has not committed to any additional green street projects to explain the additional 4% reduction anticipated in 2017. Further, no additional BMPs or proxies for BMP implementation (such as a commitment to volumetric reductions in specified subwatersheds) are presented for implementation in 2017, giving absolutely no reason to trust the City's estimate of a 4% pollutant load reduction in 2017.

As a result of this missing information, combined with the other deficiencies of its plan, El Monte provided no basis for receiving deemed-compliance for bacteria or for any other pollutant in the Los Angeles River watershed. El Monte will therefore be expected to actually comply with receiving water limitations and WQBELs and other TMDL-specific limitations for all pollutants in the Los Angeles River Watershed until it updates its WMP to be consistent with this order.

El Monte must update its plan with an independently justified schedule for metals that includes regular milestones, commitments to actual control measures that it can demonstrate are expected to result in the projected load reductions, and enough detail on those milestones and control measures that the Los Angeles Water Board, its Executive Officer, and the public can gauge whether El Monte is actually complying with its plans..

ii. San Gabriel River Watershed

El Monte is subject to TMDLs for lead and bacteria in the San Gabriel River watershed. Because El Monte concluded that it is in compliance with its lead waste load allocation and proposes no control measures,³⁹⁷ this section of its plan addresses only bacteria. In short, El Monte's proposed compliance schedule for bacteria in the San Gabriel River watershed suffers from the exact same defects as the schedule proposed for bacteria in the Los Angeles River watershed. While the supplement proposes control measures (including two structural green street measures), none of which are found in the El Monte WMP, and associated load reductions through 2016, there is no decipherable basis for the City's assumption that it would achieve a 4% load reduction in 2017.³⁹⁸ As a result, the extension of deemed-compliance to El Monte for bacteria in the San Gabriel River watershed in 2017 has not

³⁹⁶ El Monte WMP, App. C, p. 6.

³⁹⁷ El Monte WMP, § 1.9.2.5, p. 1-55.

³⁹⁸ El Monte WMP, App. C, Table 8, p. 11. Just as with its discussion of the Los Angeles River watershed, what the supplement describes as "additional clarification" of its plan expands El Monte's plan to control bacteria in the San Gabriel River Watershed from two sentences to four pages.

been justified and El Monte is expected to actually comply with receiving water limitations and WQBELs and other TMDL-specific limitations until it updates its WMP to comply with this order.

As with its schedule for the Los Angeles River Watershed, El Monte must commit to actual control measures that it can demonstrate are expected to result in the projected load reductions along with enough detail for its compliance to be determined.

iii. Legg Lake

There is no compliance schedule to evaluate for El Monte's achievement of total nitrogen and total phosphorous waste load allocations in Legg Lake and, as a result, El Monte is expected to actually comply with receiving water limitations and WQBELs and other TMDL-specific limitations until substantial revisions to its WMP are made and approved. El Monte presents the needed load reductions for total phosphorous and total nitrogen in Legg Lake and, just as it did with metals in the Los Angeles River watershed, identified categories of BMPs that El Monte contends will control discharges of these nutrients.³⁹⁹ Just as with metals, El Monte commits to no schedule for implementing these control measures.⁴⁰⁰ Legg Lake nutrient pollutants are addressed in the supplement, which essentially restates the original WMP entry for the pollutants with some minor modifications, such as adding dry wells to the list of structural BMPs and removing any commitment to implement certain classes of structural BMPs over a defined amount of impervious area.⁴⁰¹ As discussed in section II.C.1 of this order, deemed-compliance is not available where no commitment to implement control measures on a schedule, complete with measurable milestones, is made.

d. Conclusion

El Monte has failed to justify deemed-compliance for any water body-pollutant combination in 2017 and beyond. The lack of a control measure implementation schedule and contradictory discussions of El Monte's approach to metals and bacteria in the body of the WMP and in the undated supplement make actual enforcement of the WMP impossible. El Monte will receive deemed-compliance for appropriately addressed water body-pollutant combinations

³⁹⁹ El Monte WMP, § 1.9.2.4, pp. 1-50 to 1-51.

⁴⁰⁰ El Monte WMP, § 1.9.2.4, pp. 1-50 to 1-51.

⁴⁰¹ El Monte WMP, App. C.

when it resolves those contradictions, incorporates a source assessment into its WMP, addresses each TMDL with an independently justified control measure implementation schedule, and otherwise brings its WMP into compliance with this order and with the Los Angeles MS4 Order. Pending these revisions, El Monte must actually comply with receiving water limitations and WQBELs and other TMDL-specific limitations of the Los Angeles MS4 Order.

6. Los Cerritos Channel

The Los Cerritos Channel (LCC) Watershed Group is comprised of the Cities of Bellflower, Cerritos, Downey, Lakewood, Long Beach, Paramount, and Signal Hill and the Los Angeles County Flood Control District.⁴⁰² The Group's WMA is 17,711 acres.⁴⁰³ The LCC WMP shares an important similarity with the LLAR and LSGR WMPs, discussed in section II.B of this order – the LCC RAA was prepared by the same consultant and is included in the same document as the LLAR and LSGR RAAs.

In this section, we order specific changes to the LCC Group's limiting pollutant approach and compliance schedules. Of the pollutants addressed by the plan, we conclude that the Group has done enough to justify continued deemed-compliance for copper, zinc, and DEHP, subject to the requirement to demonstrate achievement of its 2017 milestones to the Los Angeles Water Board Executive Officer, while it has not justified deemed-compliance with bacteria, enterococcus, MBAS, or any other pollutants.

a. Source Assessment

The LCC Group's source assessment⁴⁰⁴ presents no significant issues outside of our general desire to see more integration of the source assessment into the WMP. The LCC Group should expand its source assessment by identifying the ways that it impacted the development of the Group's WMP.

b. Limiting Pollutant

The LCC Group identified zinc as its WMP's wet-weather limiting pollutant. In the LCC WMA, zinc is a Category 1 pollutant along with copper and lead, due to the inclusion of all

⁴⁰² Richard Watson & Associates, Inc., Los Cerritos Channel Watershed Management Program (June 8, 2015) (LCC WMP), p. ES-1.

⁴⁰³ LCC WMP, p. ES-1.

⁴⁰⁴ LCC WMP, § 2.3, pp. 2-35 to 2-38.

three pollutants in the Los Cerritos Channel Metals TMDL.⁴⁰⁵ The selection of zinc “was intended to identify the most challenging pollutants so that the Permittees could develop control measures to address these pollutants that would also address other pollutants [¶] The LID, green streets, and water capture facilities constructed to address zinc . . . will also address other pollutants. LID and green street facilities will reduce the transport mechanism and capture trash and MBAS, as well as bacteria. The regional and sub-regional water capture facilities will involve pre-treatment that will capture trash and other suspended materials. The facilities will also capture dissolved material that will be filtered as the water infiltrates or be removed if the water is treated for surface irrigation.”⁴⁰⁶ Here, as with the LLAR and LSGR Groups, the LCC Group concluded that copper actually requires greater reductions, but anticipates that factors outside of its control, such as the implementation of SB 346, will reduce copper loading to the point that zinc is the more appropriate limiting pollutant. Lead, on the other hand, is stated by the LCC Group to be in compliance with TMDL limits.⁴⁰⁷

While, as with the LLAR and LSGR Groups, we do not disapprove of the LCC Group’s use of zinc as the limiting pollutant as it applies to the other pollutants addressed by the same TMDL, the Group’s limiting pollutant approach more broadly must be readdressed. As we have required of all the WMP Groups, the LCC Group must first group pollutants in its WMA into classes wherever possible by referencing the Order’s criteria. After the LCC Group conducts a pollutant classification, it must present its conclusions and design a compliance schedule for each class. Currently, the LCC WMP lacks any explicit pollutant classification.

The LCC Group identified five Category 2 pollutants – ammonia, DEHP, coliform bacteria, trash, and pH.⁴⁰⁸ Of these, only bacteria requires significant further attention. DEHP and trash will be addressed together.⁴⁰⁹ The LCC Group does not plan on addressing ammonia and pH through the WMP because it believes “there is sufficient documentation to delist them,”⁴¹⁰ which means that the LCC Group will be expected to comply with applicable receiving water limitations. That leaves bacteria, which the Group contends will be addressed through a compliance schedule designed for metals. This approach is acceptable if justified. The LCC Group has not provided that justification, as its own discussion on bacteria makes clear: “The

⁴⁰⁵ LCC WMP, § 2.2.1, p. 2-32.

⁴⁰⁶ LCC WMP, § 5.4, pp. 5-6 to 5-7.

⁴⁰⁷ LCC WMP, p. ES-1.

⁴⁰⁸ LCC WMP, § 5.2.2, p. 5-3.

⁴⁰⁹ LCC WMP, § 5.2.2, p. 5-3.

⁴¹⁰ LCC WMP, § 5.2.2, p. 5-4.

Watershed Group proposes to address bacteria more directly during the second and third adaptive management reviews after members have had a chance to review the effectiveness of runoff reduction and ongoing implementation of minimum control measures on *E. coli* counts in the receiving waters The only way the Permittees currently know to reduce wet-weather bacteria exceedances is to obtain a high-flow suspension and to capture stormwater. Twenty to twenty-five years will be needed to design, fund, and build enough capacity to significantly reduce wet-weather bacteria exceedances. Therefore, the Watershed Group believes that 2040 is as soon as wet-weather bacteria standards can be realistically met.”⁴¹¹ It is apparent that the Group does not believe that bacteria can be controlled on the same schedule as zinc, a requirement of the class definition.⁴¹² The Group should reevaluate its approach and either work to place bacteria in a class with zinc or create a control measure implementation schedule designed to treat bacteria.

The LCC Group identifies two Category 3 pollutants: MBAS and enterococcus.⁴¹³ Enterococcus is proposed to be treated with bacteria,⁴¹⁴ but, again, because the Group has not addressed the requirements of the Order’s class definition, there is not currently a compliance schedule in the LCC WMP that addresses bacteria. MBAS is proposed to be treated by 2020 through “us[ing] the inspection process to educate maintenance organizations and individuals about not letting detergents and other cleaning products enter the storm drain.”⁴¹⁵

After this evaluation, copper is the only pollutant that can be reasonably expected to be controlled by the LCC Group’s plan to address zinc. DEHP is proposed to be controlled through the Group’s plan to address trash, an approach we have approved, and MBAS is proposed to be treated independently. Bacteria and enterococcus are not properly classified together or with zinc and the LCC Group acknowledges that the zinc control measure schedule will not be sufficient to control bacteria and the WMP does not address ammonia or pH. As such, the LCC Group can only be deemed in compliance with zinc, copper, DEHP, and MBAS in its WMA, provided its compliance schedules for each are sufficient.

c. Compliance Schedule

⁴¹¹ LCC WMP, § 5.2.2, p. 5-4.

⁴¹² Los Angeles MS4 Order, Part VI.C.2.a.i, p. 50, fn. 21.

⁴¹³ LCC WMP, § 5.2.3, p. 5-4.

⁴¹⁴ LCC WMP, § 5.2.3, p. 5-4.

⁴¹⁵ LCC WMP, § 5.2.3, p. 5-4.

The LCC WMP includes compliance schedules for the control of zinc, copper (through the schedule for zinc), MBAS, and DEHP. We will not evaluate the DEHP compliance schedule further because, by using the compliance schedule for control of trash, the LCC Group is using a schedule that we have already approved. Of the remaining pollutants, we find that the LCC Group has addressed zinc and therefore copper with enough specificity to justify continued deemed-compliance while the requirements of this order are implemented.

i. Zinc

The LCC Group plans on achieving compliance with Los Cerritos Channel Metals TMDL zinc and copper WLAs by the final TMDL compliance date on September 30, 2026.⁴¹⁶ The Group's first WMP-included TMDL milestone was on September 30, 2017, by which 30% compliance with dry-weather WLAs and 10% compliance with wet-weather WLAs was expected.⁴¹⁷

The LCC Group planned on meeting the 2017 metals milestone entirely via implementation of non-structural controls. "The RAA . . . indicates that the Watershed will meet the 2017 interim milestone through implementation of non-structural control measures, including the [TSS] reduction program. The Watershed Group will demonstrate this reduction either by a 10% reduction in loadings as measured at the Stearns Street monitoring site or by monitoring results demonstrating that a sub-basin containing 10% or more of the drainage area served by the storm drain system meets the wet weather WLAs . . ." ⁴¹⁸ Because the LCC Group planned on meeting this milestone via implementation of non-structural controls, it must, consistent with section II.B.3.a.i of this order, demonstrate actual achievement of the 10% milestone as well as implementation of the non-structural controls to which it committed, including minimum control measures, true source control and operational source control, TSS reduction efforts, and encouragement of storm water capture.⁴¹⁹ If the Group can demonstrate to the Los Angeles Water Board Executive Officer that it has implemented these control measures and achieved the 10% milestone, it will have retained its deemed-compliance for zinc and copper.

⁴¹⁶ LCC WMP, Table 6-1, p. 6-2.

⁴¹⁷ LCC WMP, Table 6-2, p. 6-2.

⁴¹⁸ LCC WMP, § 5.1.1, p. 5-1.

⁴¹⁹ LCC WMP, Table 6-4, p. 6-6 & Table 6-5, p. 6-8. The Group additionally references constructing an "initial stormwater capture facility, as needed to achieve volume reduction milestones" by September 30, 2017, but the location and capacity of the facility is never identified, rendering this commitment unenforceable. (LCC WMP, Table 6-5, p. 6-8.) The Group's RAA identifies no amount of storm water capture required by the 10% milestone in 2017. (LLAR/LSGR/LCC RAA, Att. B, Part B4, pp. 18-21.)

ii. MBAS

The LCC Group has proposed no compliance schedule for MBAS beyond a statement that it is “going to target eliminating MBAS exceedances by 2020” and will “use the inspection process to educate maintenance organizations and individuals about not letting detergents and other cleaning products enter the storm drain If the data do not demonstrate success by the time of the second adaptive management review, the Group will implement other measures. [The WMP] continues to show a final wet weather compliance date of 2025 in case education and inspection measures are not sufficient to achieve compliance with water quality standards.”⁴²⁰

This schedule does not meet the Order’s requirements that schedules for Category 3 pollutants include “enforceable requirements and milestones and dates for their achievement to control MS4 discharges” with dates no more than a year apart, milestones that relate to a specific water quality endpoint, and dates relating either to taking a specific action or meeting a milestone.⁴²¹ The schedule is also not “adequate for measuring progress on a watershed scale once every two years.”⁴²² Lastly, it does not include any interim milestone and corresponding date for achievement within the term of the Order, as is required where deadlines within the term of the order are not otherwise specified.⁴²³ No actions identified as targeted at MBAS are identified in the “Implementation Schedule” portion of the WMP leading to 2020.⁴²⁴ No actual compliance schedule for MBAS has been identified. Until one is included in the WMP, the LCC Group cannot receive deemed-compliance for MBAS and is subject to the baseline receiving water limitations.

III. EWMP PETITION ISSUES AND FINDINGS

Petitioners make three primary allegations in their challenge to the Los Angeles Water Board Executive Officer’s approval of the North Santa Monica Bay EWMP (NSMB EWMP).⁴²⁵ The first two contentions are procedural: first, Petitioners argue that an inappropriate standard of review was applied to the Board’s decision as to whether to review the

⁴²⁰ LCC WMP, § 5.2.3, p. 5-4.

⁴²¹ Los Angeles MS4 Order, Parts VI.C.2.a.ii.(2)(c), p. 52 & VI.C.5.c.iii.(3), p. 66.

⁴²² Los Angeles MS4 Order, Part VI.C.5.c.ii, p. 66.

⁴²³ Los Angeles MS4 Order, Part VI.C.5.c.iii.(2), p. 66.

⁴²⁴ LCC WMP, Tables 6-4 to 6-7.

⁴²⁵ NSMB EWMP and related documents available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/santa_monica/north_santamonica_bay/index.html [as of Apr. 10, 2019].

merits of the EWMP petition;⁴²⁶ and second, Petitioners argue that the Los Angeles Water Board should have “retain[ed] separate counsel to assure that legal advice to the [Los Angeles Water] Board would reflect the difference—and possible actual or apparent conflict—between advice regarding the . . . Board’s adjudicatory function in deciding whether to review the merits of the [EWMP] Petition and legal arguments made in support of the staff’s approval of the EWMP.”⁴²⁷ The final contention is substantive: Petitioners claim that the Permittees failed to incorporate relevant ASBS storm water and non-storm water standards and data into their EWMP and RAA.⁴²⁸

In this section, we find that the Los Angeles Water Board acted appropriately in determining whether to review the EWMP petition on its merits and in deciding not to retain separate counsel while making that determination. Regarding the NSMB Group’s EWMP and ASBS Compliance Plan, we find that while the Group properly incorporated ASBS standards into its plans, it misapplied those standards and failed to appropriately react to alterations of natural water quality and exceedances of Ocean Plan objectives at its outfalls. In response, we require that the NSMB Group update its ASBS Compliance Plan and EWMP to appropriately address these alterations and exceedances and we require that the Los Angeles Water Board ensures that all of its Permittees are appropriately addressing any confirmed alterations and exceedances related to their discharges to ASBS. We also find that the NSMB Group’s discussion of ASBS data in its EWMP is insufficient, leaving us unable to determine whether it was appropriately considered by the NSMB Group in designing its plan, and we require the Group to revisit that data and update its plan accordingly. Having addressed the issues raised in the EWMP Petition, we examined the NSMB EWMP more broadly for compliance with the requirements of the Los Angeles MS4 Order, finding generally that it failed to present a compliance schedule that justified any grant of deemed-compliance outside of the area addressed by the EWMP-compliant Legacy Park BMP.

Before proceeding to the merits of the EWMP petition, we will resolve a procedural issue. We received a request from the County of Los Angeles to take notice of two documents not in the administrative record of the EWMP petition.⁴²⁹ We reviewed the request with consideration of whether the documents were appropriate for notice based on the legal

⁴²⁶ EWMP Petition, p. 17.

⁴²⁷ EWMP Petition, p. 10.

⁴²⁸ EWMP Petition, pp. 19-25.

⁴²⁹ The Administrative Record was prepared by the Los Angeles Water Board and is available at https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/Consideration_of_petition/north_santa_monica.html [as of Apr. 10, 2019].

standards governing our proceedings.⁴³⁰ We grant the request with regard to both documents, which are noticeable as “facts . . . not reasonably subject to dispute and . . . capable of immediate and accurate determination by resort to sources of reasonably indisputable accuracy.”⁴³¹

1. North Santa Monica Bay Coastal Watersheds Annual Watershed Report, reporting year 2015-16;
2. Transmittal Letter, dated October 3, 2016, transmitting Area of Special Biological Significance 24 Report on Supplemental Monitoring, and 2015-16 ASBS Special Protections Monitoring Report.

Having resolved the procedural issues, we address the EWMP petition on its merits.

A. The Los Angeles Water Board Has Unreviewable Discretion to Determine Whether to Review a Petition on its Merits

Petitioners contend that in determining whether to review their petition, the Los Angeles Water Board was required to consider whether its Executive Officer’s approval of the North Santa Monica Bay EWMP “was reasonable, and that substantial evidence supported the Executive Officer’s decision, as required by Water Code [section] 13320.”⁴³²

We disagree. First, Water Code section 13320 only applies to the State Water Board’s review of regional board actions.⁴³³ Further, the only standard applicable to the review of a petition in Section 13320 is “inappropriate or improper,” a finding of which allows the State Water Board to direct a regional water board to act, refer the matter to another state agency with jurisdiction, take the appropriate action itself, or any combination of these.⁴³⁴

Our regulations supplement Water Code section 13320, specifying that the State Water Board may, “[a]t any time, refuse to review the action or failure to act of the regional board if the petition fails to raise substantial issues that are appropriate for review[.]”⁴³⁵ The State Water Board “retains unreviewable discretion to determine what issues are ‘substantial’

⁴³⁰ For official notice see Cal. Code Regs., tit. 23 § 648.2; Gov. Code, § 11515; Evid. Code, § 452.

⁴³¹ Evid. Code, § 452, subd. (h).

⁴³² EWMP Petition, pp. 17-18.

⁴³³ The one exception is Subdivision (a), which concerns the timing of the filing of a petition for review. (Wat. Code, § 13320, subd. (a).)

⁴³⁴ Wat. Code, § 13320, subd. (c).

⁴³⁵ Cal. Code Regs., tit. 23, § 2052, subd. (a)(1).

and whether they are ‘appropriate for review.’”⁴³⁶ The same is true of the regional water boards.

B. The Los Angeles Water Board Was Not Required to Retain Separate Counsel for the Meeting

Petitioners claim that having the same attorney who assisted staff in approving the NSMB EWMP also advise the Los Angeles Water on whether to review the EWMP petition’s merits would create a conflict requiring the Los Angeles Water Board to retain separate counsel for the meeting at which it considered addressing the petition’s merits. Specifically, Petitioners claim that the Los Angeles Water Board violated the Administrative Procedures Act (APA) requirement that “[t]he adjudicative function shall be separated from the investigative, prosecutorial, and advocacy functions within the agency.”⁴³⁷ We disagree. None of these functions were involved in the Los Angeles Water Board’s meeting.

Petitioners argue that the Los Angeles Water Board’s attorney, Jennifer Fordyce, acted as an advocate for the decision made by the Executive Officer while simultaneously advising the regional board on whether to review the merits of that decision.⁴³⁸ We note that other than referencing a line in an e-mail from Ms. Fordyce to Arthur Pugsley, L.A. Waterkeeper’s attorney, that “Regional Board staff’s role will be limited to explaining the basis for the Executive Officer’s action to approve the EWMP,”⁴³⁹ Petitioners offer no evidence from the record to demonstrate Ms. Fordyce acted improperly. Neither Ms. Fordyce nor Los Angeles Water Board staff acted as advocates. Here, as in virtually all the regional board’s non-prosecutorial proceedings, all of the regional board staff who participated in the proceeding merely advised and assisted the regional board. They explained the basis for the Executive Officer’s decision, but they did not recommend an outcome. Ms. Fordyce, in introducing the EWMP petition to the Los Angeles Water Board, explained. “In this matter, staff and legal counsel remain as your advisors. However, as it is staff’s action that you are reviewing, staff are not going to make a separate recommendation to you on this matter. The purpose of staff’s presentation and written responses is to explain the EWMP review and approval process and

⁴³⁶ *People v. Barry*, *supra*, 194 Cal.App.3d at p. 176. Since the decision in *People v. Barry*, our regulations have been updated to provide that petitions for review are dismissed by operation of law on the 91st day following our receipt of the petition if we do not within that time provide interested parties with notification to file responses to the petition. (Wat. Code, § 13320, subd. (e).)

⁴³⁷ Gov. Code, § 11400.10.

⁴³⁸ Petitioners do not claim that regional board staff or counsel acted as investigators or prosecutors.

⁴³⁹ E-mail from Jennifer Fordyce, Los Angeles Water Board, to Arthur Pugsley (July 29, 2016), at p. 2.

why the Executive Officer determined that approval of the North Santa Monica Bay EWMP, in light of the contentions raised in the Petitioners (*sic*), was appropriate.”⁴⁴⁰ Ms. Fordyce explained the options available to the Board but made no recommendation. Staff explained the Executive Officer’s decision and presented their response to the EWMP petition’s claims, but similarly made no recommendation. Staff and counsel acted in an advisory capacity, as was appropriate. Even if staff and counsel had been involved in the proceeding beyond their advisory role, however, they would not have acted inappropriately. The State Water Board’s hearing regulations specifically contemplate, for example, that regional board staff who are assisting the regional board or the hearing officer may cross-examine parties’ witnesses.⁴⁴¹ This is recognized in *Howitt v. Superior Court* (1992) 3 Cal.App.4th 1575, relied upon by Petitioners: “The mere fact that the decision maker or its staff is a more active participant in the factfinding process . . . will not render an administrative procedure unconstitutional.”⁴⁴²

Beyond the fact that regional board staff did not violate the APA’s general prohibition on commingling adjudicative functions with investigative, prosecutorial, and advocacy functions, however, California law explicitly grants water board staff the authority to communicate with the water boards in non-prosecutorial adjudicative proceedings, such as the proceeding at issue here, without regard to whether the staff previously served as an investigator, prosecutor, or advocate. Government Code section 11430.10, subdivision (a), generally prohibits communications regarding any issues in a pending proceeding “to the presiding officer from an employee or representative of an agency that is a party . . . without notice and opportunity for all parties to participate in the communication.” This prohibition on *ex parte* communications is inapplicable to communications when “[t]he communication is for the purpose of advising the president officer . . . in an adjudicative proceeding that is nonprosecutorial in character . . . [¶] . . . [and t]he advice involves an issue in a proceeding of the . . . [State] Water Resources Control Board, or a regional water quality control board.”⁴⁴³ This express statutory authority specifically allows regional board staff to provide advice to the regional board concerning any issues in a pending non-prosecutorial adjudicative proceeding. As the California Supreme Court has recognized, separation of functions (like that urged by

⁴⁴⁰ Jennifer Fordyce, address to Los Angeles Regional Water Quality Control Board (Sept. 7, 2015) Consideration of Petition for Review of the Executive Officer’s Action to Approve the Enhanced Watershed Management Program for the North Santa Monica Bay Pursuant to the Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit, Order No. R4-2012-0175, p. 30:3-11.

⁴⁴¹ Cal. Code Regs., tit. 23, § 648.5, subd. (a)(6).

⁴⁴² *Howitt v. Superior Court* (1992) 3 Cal.App.4th 1575, 1581.

⁴⁴³ Gov. Code, § 11430.30, subd. (c)(2).

Petitioners) is inextricably linked with the prohibition on ex parte communications.⁴⁴⁴ The Legislature has recognized that communications that would customarily be prohibited are appropriate for regional board staff during a non-prosecutorial adjudicative proceeding.⁴⁴⁵ By the same token, a separation of functions in such circumstances is not necessary. Petitioners' argument ignores the statutory grant of express authority to regional water boards by Government Code section 11430.30, subdivision (c)(2).

Given that there is no provision in statute or regulation that mandates a specific process for consideration of whether to address the merits of a petition for review, any such limitation must come from case law. Petitioners rely heavily on *Howitt v. Superior Court, supra*, 3 Cal.App.4th 1575 and *Nightlife Partners v. City of Beverly Hills* (2003) 3 Cal.App.4th 1575 (hereafter *Nightlife Partners*) to support their claim that the regional board violated their due process rights.

Howitt involved a county counsel's dual role in assigning attorneys to both prosecute a personnel action and advise the personnel board during that action. Unlike *Howitt*, there was no prosecution in this proceeding.

Nightlife Partners is likewise factually inapposite. *Nightlife Partners* involved a city attorney who served in conflicting functions in different phases of a proceeding about the plaintiff's application for a cabaret license. The attorney advocated to the decision maker (executive staff) that it should determine the application was incomplete, and the decision maker rejected the application on that basis.⁴⁴⁶ Thereafter, the same attorney also served as the advisor to the hearing officer during the plaintiff's subsequent administrative appeal of that ruling.⁴⁴⁷ Unlike the city attorney in *Nightlife Partners*, Ms. Fordyce was not tasked with an advocacy function in the proceeding at issue here. Ms. Fordyce was tasked with advising staff when staff exercised the authority delegated to them by the Los Angeles Water Board. She was then tasked with advising the Los Angeles Water Board when it reviewed that exercise of authority. These are equivalent roles – a decision of the regional board's staff made pursuant to delegated authority is the same as a decision of the Los Angeles Water Board. The result of this is the proceeding here was not an appeal as the proceeding in *Nightlife Partners* was. Here, the proceeding involved a request for the Los Angeles Water Board to reconsider its own decision, made pursuant to delegated authority. The Los Angeles Water Board held a meeting

⁴⁴⁴ *Department of Alcoholic Beverage Control v. Alcoholic Beverage Control Appeals Board* (2006) 40 Cal.4th, 1, 10.

⁴⁴⁵ Gov. Code, § 11430.30, subd. (c)(2).

⁴⁴⁶ *Nightlife Partners, supra*, 108 Cal.App.4th at pp. 84-85.

⁴⁴⁷ *Nightlife Partners, supra*, 108 Cal.App.4th at p. 85.

to consider this request. This meeting did not “utilize the adversary model[.]”⁴⁴⁸ The Los Angeles MS4 Order created a mechanism, used by the Petitioners, to request reconsideration by the Los Angeles Water Board of an action taken by the water board’s Executive Officer pursuant to delegated authority.⁴⁴⁹ The Executive Officer acted for the Board. To paint this as an adversarial proceeding would be equivalent to saying that the Los Angeles Water Board itself was both a party and the hearing officer. In this light, any claim that the regional board staff and counsel acted inappropriately by participating in the initial decision and then acting as advisors to the Board on reconsideration is clearly not meritorious. This was not an appeal. To appeal the Los Angeles Water Board Executive Officer’s decision, Petitioners must come to the State Water Board, as they now have. Lastly, because the regional board was reconsidering its own action, taken pursuant to delegated authority, requiring a separation of the Los Angeles Water Board from its staff and counsel would be equivalent to barring the members of the Board from conferring with each other. Access to staff and counsel in their normal, advisory capacity is necessary for the Los Angeles Water Board to meaningfully reconsider its Executive Officer’s action. “Adjudicative proceedings shall be conducted in a manner as the Board deems most suitable to the particular case with a view towards securing relevant information expeditiously without unnecessary delay and expense to the parties and to the Board.”⁴⁵⁰ The Los Angeles Water Board met this standard.

Perhaps most significant, however, is that, unlike the regional board staff and counsel, neither the county counsel in *Howitt* nor the city attorney in *Nightlife Partners* had the benefit of an express grant of statutory authority to advise the presiding officer off the record on any issues in a non-prosecutorial adjudicative proceeding. Because Government Code section 11430.30, subdivision (c)(2) allows for such communications and is expressly limited to the regional board (and a very small number of other agencies) neither *Howitt* or *Nightlife Partners* are applicable.

The Los Angeles Water Board and its staff and counsel did not act inappropriately in refusing to create a separation when considering whether to address the

⁴⁴⁸ *Nightlife Partners*, *supra*, 108 Cal.App.4th at p. 92.

⁴⁴⁹ “Any formal determination or approval made by the Regional Water Board Executive Officer pursuant to the provisions of this Order may be reviewed by the Regional Water Board. A Permittee(s) or a member of the public may request such review upon petition within 30 days of the effective date of the notification of such decision to the Permittee(s) and interested parties on file at the Regional Water Board.” (Los Angeles MS4 Order, Part VI.A.6, p. 39.)

⁴⁵⁰ Cal. Code Regs., tit. 23, subd. (a).

Petitioners' request on its merits. We now move on to the substantive claims in the EWMP petition.

C. The NSMB Group's ASBS Compliance Plan Properly Incorporated ASBS Standards, but Failed to Respond to Relevant Data

We now consider Petitioners' substantive contentions regarding the NSMB Group's ASBS Compliance Plan and its incorporation into the EWMP and RAA. Petitioners make a variety of claims, arguing that the EWMP and RAA failed to incorporate relevant ASBS standards and utilize relevant and available ASBS data. Before we address those claims, however, we first clarify that this discussion has no bearing on the deemed-compliance status of the NSMB Group because the NSMB Group is not deemed in compliance for its discharges to its ASBS. The NSMB Group, following its review of available data during the development of its EWMP, concluded that "the Compliance [P]lan considered all the data and found compliance with Ocean Plan Exceptions and Special Protections"⁴⁵¹ They further noted that "[t]he most recent ASBS monitoring reflects that the BMPs set forth in the Compliance Plan remain sufficient and no additional BMPs are required."⁴⁵² Because the NSMB Group has concluded that it is in compliance with all relevant water quality requirements for the ASBS and has therefore proposed no additional actions, the Group must actually comply with those water quality requirements.

Most of the requirements Petitioners allege the NSMB Group failed to meet are contained in the General Exception to the prohibition on discharges to ASBS. The General Exception allows discharges of storm water into ASBS only when they are authorized by an NPDES permit issued by the Water Boards, comply with the General Exception's "Special Protections," and are essential for flood control or slope stability, are designed to prevent soil erosion, occur during wet weather, or are composed of only storm water runoff.⁴⁵³ Discharges of storm water runoff may not alter natural ocean water quality in ASBS and discharges of non-storm water are generally prohibited.⁴⁵⁴ Dischargers must submit compliance plans that

⁴⁵¹ City of Malibu, Response to Petition for Review of NSMB EWMP Approval (Feb. 17, 2017) (Malibu Petition Response), p. 7.

⁴⁵² Malibu Petition Response, pp. 9-10.

⁴⁵³ General Exception, Part I.A.1.a, p. 1.

⁴⁵⁴ General Exception, Parts I.A.1.b & e, pp. 1-2. The following categories of non-storm water discharges are allowed so long as the discharges are essential for emergency response purposes, structural stability, slope stability, or are naturally occurring: discharges associated with emergency fire fighting operations, foundation and footing drains, water from crawl space or basement pumps, hillside dewatering, naturally occurring groundwater seepage via

specifically addresses the non-storm water discharge prohibition and the requirement to maintain natural ocean water quality.⁴⁵⁵

The two major substantive components of the General Exception relate to its treatment of outfalls and ocean receiving water. The General Exception first requires that no new outfalls be created.⁴⁵⁶ It then requires that discharges from all existing outfalls be addressed by BMPs to achieve either the Ocean Plan's Table B Instantaneous Maximum Water Quality Objectives or a 90% reduction in pollutant loading during storm events for the applicant's total discharges.⁴⁵⁷ Permittees must also monitor the ocean receiving water to determine whether storm water runoff is causing or contributing to an alteration of natural ocean water quality. An alteration of natural ocean water quality occurs when the results of two consecutive receiving water samples "indicate levels higher than the 85th percentile threshold of reference water quality data and the pre-storm receiving water levels" for any constituent.⁴⁵⁸ Following a confirmed alteration of natural water quality, the Permittee must submit a report subject to approval by the Water Boards that (1) identifies the constituents that alter natural ocean water quality and their sources and (2) describe BMPs currently being implemented, BMPs identified for future implementation, and any additional BMPs that may be implemented to address the alteration of natural water quality.⁴⁵⁹

1. The NSMB EWMP and RAA Appropriately Incorporated ASBS Storm Water and Non-Storm Water Standards

Petitioners contend that the NSMB EWMP and RAA failed to incorporate relevant ASBS standards. Specifically, "for discharges to the ASBS beaches, [Petitioners claim] the RAA considers and applies the Santa Monica Bay Beaches Bacterial TMDL standards *only*."⁴⁶⁰ For non-storm water, Petitioners argue that the EWMP's model, described below, to evaluate non-storm water discharges is "inconsistent with the [General] Exception's dry weather

a storm drain, and entirely non-anthropogenic flows from a naturally occurring stream via a culvert or storm drain. (*Id.*, Part I.A.1.e.(2), p. 2.)

⁴⁵⁵ General Exception, Part I.A.2, pp. 2-5.

⁴⁵⁶ General Exception, Part I.A.1.d, p. 2.

⁴⁵⁷ General Exception, Part I.A.2.d, pp. 3-4.

⁴⁵⁸ General Exception, Part I.A.3.e, p. 5.

⁴⁵⁹ General Exception, Part I.A.2.h, pp. 4-5.

⁴⁶⁰ EWMP Petition, p. 23.

discharge prohibition, and would permit non-stormwater discharges beyond the six limited categories set out in the [General] Exception.”⁴⁶¹

The storm water standards referenced by the Petitioners are the Ocean Plan’s narrative objective that there shall be no alteration of ocean water quality in an ASBS due to a storm water discharge and the instantaneous maximum numeric water quality objectives in Table 1 (formerly Table B) of the Ocean Plan. The Los Angeles MS4 Order’s receiving water limitations provisions include the numeric objectives in Table 1 of the Ocean Plan and the narrative objective – Attachment A of the Los Angeles MS4 Order defines “receiving water limitations” as “[a]ny applicable numeric or narrative water quality objective or criterion, or limitation to implement the applicable water quality objective or criterion, for the receiving water as contained in Chapter 3 or 7 of the Water Quality Control Plan for the Los Angeles Region (Basin Plan), water quality control plans or policies adopted by the State Water Board, or federal regulations[.]”⁴⁶² The NSMB EWMP cannot alter these standards; however, we discuss below the NSMB Group’s failure to properly apply these standards.

The General Exception prohibits the discharge of non-storm water to ASBS except in certain specified circumstances.⁴⁶³ This prohibition is reflected in the Los Angeles MS4 Order⁴⁶⁴ and cannot be altered by an EWMP. Petitioners’ objection stems from the NSMB EWMP’s use of a “four part test” for addressing non-storm water discharges, which Petitioners allege is improperly being used to replace the general prohibition on non-storm water discharges. Petitioners are incorrect. This test was used in performing the Group’s dry-weather RAA to determine whether dry-weather discharges were causing or contributing to receiving water limitations exceedances. Reasonable assurance would be demonstrated if at identified “compliance monitoring location[s:]” (1) a dry weather diversion, infiltration, or disinfection system was located at the downstream end of the analysis region; (2) if there were no MS4 outfalls owned by the NSMB Group agencies within the analysis region; (3) if, in the “compliance monitoring locations” for the Santa Monica Bay Beaches Bacteria TMDL, the allowed exceedance days have been achieved “for four out of the past five years and the last two years[;]” or (4) if non-storm water MS4 outfall discharges have been eliminated within the analysis region.⁴⁶⁵ In no place does the NSMB Group claim these demonstrations take the

⁴⁶¹ EWMP Petition, p. 24.

⁴⁶² Los Angeles MS4 Order, Part V.A p. 35; Los Angeles MS4 Order, Att. A, p. A-16.

⁴⁶³ General Exception, Part I.A.1.e, p. 2.

⁴⁶⁴ Los Angeles MS4 Order, Part III.A.3, p. 27.

⁴⁶⁵ North Santa Monica Bay EWMP, p. 64.

place of demonstrating actual compliance with the general prohibition on non-storm water discharges. Regardless of the results of this test, the NSMB Group is required to comply with the General Exception's non-storm water discharge prohibition.

2. The NSMB Group Failed to Appropriately React to Alterations of Natural Water Quality in its RAA

Petitioners claim that at the time the Draft ASBS Compliance Plan was submitted in 2014, the data showed alterations of natural water quality for “at least selenium, total PAH, and mercury.”⁴⁶⁶ The NSMB Group does not dispute these alterations of natural water quality occurred: “In post-storm samples collected in the receiving water . . . , selenium and total PAHs were above the 85th percentile reference threshold and had post-storm concentrations that exceeded those of the pre-storm samples collected during three consecutive monitored storm events Mercury results . . . were above 85th percentile reference threshold and pre-storm concentrations for two consecutive events Based on the guidance found in Attachment 1 of the General Exception, this indicates an exceedance of natural water [quality] of the ASBS for these constituents.”⁴⁶⁷ The NSMB Group and Petitioners disagree, however, about how to respond to these alterations.

The NSMB Group states that in response to the alterations, it performed an “assessment of outfalls . . . to determine what structural controls may be required to achieve the specified pollutant loading limitations on point source discharges into ASBS 24. The outfall assessment included comparing the mercury and selenium monitoring data results obtained to Ocean Plan Table 1 Instantaneous Maximum [Water Quality Objectives]. The Ocean Plan Table 1 does [not] list Instantaneous Maximum values for the protection of marine aquatic life for total PAHs. (The Ocean Plan Table 1 only lists a 30-day Average PAHs [Water Quality Objective] for the protection of human health.) As shown in Table ES-1 the results of the comparison indicated the discharges to the ASBS from [outfalls] are currently achieving, and significantly below, the target levels. Therefore . . . in accordance with the . . . General Exception, additional controls (e.g. BMPs) to achieve pollutant load reductions are not required in the tributary drainage areas to the Parties' outfalls.”⁴⁶⁸ Los Angeles Water Board staff echo

⁴⁶⁶ EWMP Petition, p. 22.

⁴⁶⁷ County of Los Angeles & City of Malibu, Area of Special Biological Significance 24 Draft Compliance Plan for the County of Los Angeles and City of Malibu (Sept. 20, 2014) (Draft ASBS Compliance Plan), pp. 68-69; available at https://www.waterboards.ca.gov/water_issues/programs/ocean/docs/asbs_general_exception/la_dcp_04302015.pdf [as of Apr. 10, 2019].

⁴⁶⁸ Draft ASBS Compliance Plan, p. ES-5.

these conclusions in their response to the EWMP petition: “Post-storm ocean receiving water samples from the ASBS indicated an alteration of natural ocean water quality due to selenium, mercury, and [PAHs]. Based on these results, the Petitioners conclude that the Permittees’ MS4 stormwater discharges are the cause of the alteration However, an evaluation of the paired outfall . . . data relative to the applicable Ocean Plan limits in Table 1 found that the Permittees’ MS4 discharges *were not* causing the altered ocean water quality for these pollutants.”⁴⁶⁹

The NSMB Group and the Los Angeles Water Board misread the General Exception. While the NSMB Group must ensure that outfalls achieve either Ocean Plan Table 1 water quality objectives or a 90% reduction in pollutant loading during storm events, the Group is separately required to not cause or contribute to alterations of natural ocean water quality in ASBS. The State Water Board’s response to comments on the General Exception explains: “The language in the [General Exception] regarding Table [1] or a 90% load reduction is clearly intended as a target for design of BMPs and not as an ultimate compliance endpoint. Ultimate compliance is required in the receiving water in order to meet natural water quality.”⁴⁷⁰ That there is no instantaneous maximum water quality objective for Total PAHs (as well as other constituents present in MS4 discharges) supports this application of these General Exception provisions. It was clearly not our intent in approving the General Exception that a discharger may find that an alteration in natural ocean water quality is occurring but conclude that it need not take any action in response simply because there is not an Ocean Plan Table 1 value assigned to the constituent responsible for the alteration.

Therefore, the NSMB Group’s response to all three of these confirmed alterations is insufficient. The General Exception’s iterative process requires that BMPs be added to address the alteration of natural water quality. Avoiding this requirement requires more than a finding that relevant outfalls meet Table 1 objectives or that no Table 1 objectives for the constituent exist. The General Exception requires that storm water discharges not alter natural ocean water quality. The Los Angeles Water Board must require the NSMB Group, as well as any other Permittees discharging to ASBS, to re-evaluate any confirmed alterations that have occurred and ensure that Permittees have addressed those alterations or require them to

⁴⁶⁹ Samuel Unger, Los Angeles Water Board Response to Petition and Revision of Administrative Record (Feb. 23, 2017), at p. 13.

⁴⁷⁰ Revised Response to Comments [with additions previously missed from original comment letters] (February 17, 2012), at p. 79; available at https://www.waterboards.ca.gov/water_issues/programs/ocean/asbs/docs/app11.pdf [as of Apr. 10, 2019].

update their ASBS Compliance Plans with either an updated BMP approach or explanations for why they are unable to address the alterations.

3. The NSMB Group Failed to Appropriately React to Exceedances of Ocean Plan Water Quality Objectives at its Outfalls

Petitioners and the Los Angeles Water Board agree that MS4 outfall samples demonstrate exceedances of Ocean Plan objectives for ammonia, cadmium, chromium, copper, lead, nickel, and zinc.⁴⁷¹ They disagree, however, on what action was required in response to those exceedances.

The Los Angeles Water Board determined that because monitoring results for the receiving water adjacent to the outfalls did not show alteration of natural ocean water quality for these pollutants, no further action to address the outfalls was required.⁴⁷² Petitioners disagree. We agree with Petitioners.

As discussed above, the requirement to not cause or contribute to alterations of natural ocean water quality is separate from the requirement to address MS4 outfalls with BMPs designed to achieve either the Ocean Plan's water quality objectives or a 90% reduction in pollutant loading. That the discharges were not shown to be altering natural ocean water quality in the receiving water for these pollutants does not excuse the requirement to comply with independent provisions of the General Exception. The NSMB Group must revise its EWMP and ASBS Compliance Plan to address outfalls showing exceedances of Ocean Plan water quality objectives by installing BMPs to either achieve Ocean Plan water quality objectives or a 90% reduction in pollutant loading.

4. The NSMB Group Failed to Appropriately Address Alterations of Natural Water Quality in its EWMP and RAA

Petitioners make several arguments related to the incorporation of General Exception requirements into the NSMB Group's EWMP and RAA. First, they argue that the EWMP and RAA should have addressed the pollutants altering natural ocean water quality in the ASBS. Second, they argue that even absent plans to address these pollutants, the EWMP and RAA failed to appropriately incorporate relevant ASBS storm water and non-storm water data. We agree that the EWMP and RAA should have addressed the pollutants altering natural

⁴⁷¹ EWMP Petition, p. 22; Los Angeles Water Board Response to EWMP Petition, p. 13.

⁴⁷² Los Angeles Water Board Response to EWMP Petition, p. 13.

ocean water quality. We find that while the NSMB Group may have acted appropriately with regard to the ASBS data, it failed to adequately explain its decisions. Regarding the NSMB EWMP more generally, we also find that the NSMB EWMP's compliance schedule fails to meet the standards of the Los Angeles MS4 Order and has therefore failed to provide the NSMB Group with deemed-compliance.

a. ASBS Monitoring Data in the NSMB EWMP

Petitioners claim that NSMB Group failed to use "readily available and highly relevant data in the County's Malibu's and State [Water] Board's files, and the 2013 and 2014 stormwater data attached to the . . . EWMP itself as an appendix," despite the Los Angeles MS4 Order's requirement that all available relevant subwatershed data collected within the 10 years prior to EWMP development be used in the RAA.⁴⁷³ This data includes "documented exceedances of Ocean Plan standards for chromium and copper . . . [and] repeated exceedances of Ocean Plan Instantaneous Maximum limits, including ammonia, cadmium, copper, lead, nickel, zinc, and high concentrations of PAH, pyrethroids, and TSS."⁴⁷⁴ Petitioners in particular point to a sentence in the NSMB EWMP that "[n]o MS4 discharge monitoring data were available at the time of this assessment,"⁴⁷⁵ arguing that this sentence directly contradicts the Los Angeles Water Board staff's comment response asserting that appropriate data were reviewed and considered.⁴⁷⁶ Additionally, Petitioners object to the NSMB Group's use of generalized land use data to conduct its RAA rather than using the available ASBS data.

Regarding the language pertaining to the availability of MS4 discharge monitoring data, the Los Angeles Water Board responds that "a plain reading of the sentence, and in the context of the section in which it is included, does not indicate that 'no stormwater or receiving water data for ASBS 24 were considered in the EWMP assessment.' This section only addresses MS4 outfall monitoring data, not receiving water data Neither is this section specific to ASBS 24 discharge data, but rather the EWMP area as a whole [¶] Second, the relevant, available data that the Petitioners assert were not considered are included and evaluated in detail in Appendix E[, the NSMB Group's revised ASBS Compliance Plan.]"⁴⁷⁷

⁴⁷³ EWMP Petition, p. 18.

⁴⁷⁴ EWMP Petition, p. 18.

⁴⁷⁵ NSMB EWMP, § 2.1.3, p. 43.

⁴⁷⁶ EWMP Petition, pp. 18-19.

⁴⁷⁷ Los Angeles Water Board Response to Petition, p. 14.

We disagree that a plain reading of the sentence or the context in which it is placed make it evident that it does not refer at least in part to data relevant to the ASBS. As we have stated several times throughout this order, one of the most important components of these alternative compliance plans is clarity. As we have also said in this order, we are not generally inclined to second-guess the regional board's determination of whether data were suitable for use in an RAA. We therefore reviewed the EWMP with an eye towards the clarity of the NSMB Group's explanation for its decision not to use ASBS data in its RAA. The NSMB Group must specifically address whether the data is suitable for use in its EWMP and RAA. Neither the NSMB Group nor the Los Angeles Water Board point to any place in the EWMP or RAA that addressed this information in this context, and we found no such discussion in our own review. We therefore direct the NSMB Group to revise its EWMP and RAA to include an explicit consideration of whether such data is suitable for use and, if no adequate justification for excluding the data can be made, to revise its EWMP and RAA to incorporate the data.

b. Exceedances of Natural Ocean Water Quality in the EWMP and RAA

The Los Angeles Water Board points out, correctly, that the EWMP and RAA are only obligated to address three categories of pollutants: Category 1 is for those water body-pollutant combinations addressed in a TMDL; Category 2 is for those water body-pollutant combinations listed on the Clean Water Act section 303(d) list; and Category 3 is for those pollutants which exceed applicable receiving water limitations and for which MS4 discharges may be causing or contributing to the exceedance. Mercury, selenium, and PAHs in the ocean are not addressed by a TMDL or a Section 303(d) listing. Therefore, they would be addressed, if at all, as Category 3 pollutants.

We concluded above that because the NSMB Group had not adequately demonstrated it was not responsible for the documented alterations of natural ocean water quality for mercury, selenium, and PAHs, it is required to re-evaluate its approach to those pollutants. For the same reason, the NSMB Group cannot say that it is not be causing or contributing to exceedances of receiving water limitations for mercury, selenium, and PAHs in the ocean. To be categorized as a Category 3 water body-pollutant combination, it is not necessary that an affirmative finding that the Permittees *are* causing or contributing to an exceedance of receiving water limitations; it is only necessary that they *may* be doing so. Here, in the absence of an adequate analysis showing that the NSMB Group is not responsible for the alterations of natural ocean water quality, mercury, selenium, and PAHs must be addressed in the EWMP and RAA as Category 3 pollutants. Should the NSMB Group make a sufficient

demonstration that it is not causing or contributing to the alterations of natural ocean water quality for these pollutants, that demonstration will need to be included in the EWMP and RAA instead.

c. The NSMB Group's Compliance Schedule

The NSMB EWMP lists a variety of Category 1, 2, and 3 pollutants.⁴⁷⁸ In the Malibu Creek Watershed (including Malibu Creek and Malibu Lagoon), nutrients and indicator bacteria are Category 1 pollutants. In Malibu Creek, trash is a Category 1 pollutant and sulfates and selenium are Category 2 pollutants. In Malibu Lagoon, pH is a Category 2 pollutant. As to the Santa Monica Bay Beaches, bacteria is a Category 1 pollutant. In Santa Monica Bay, trash, DDTs, and PCBs are Category 1 pollutants. Lastly, lead is a Category 2 pollutant and bacteria (*E. coli*) is a Category 3 pollutant in Topanga Canyon Creek. As it stands, this list is incomplete. It should, as discussed above, include mercury, selenium, and PAHs in the ASBS as Category 3 pollutants.

Of these pollutants, trash is not eligible for deemed-compliance and the NSMB Group found no need for reductions of DDTs and PCBs in Santa Monica Bay,⁴⁷⁹ pH in Malibu Lagoon,⁴⁸⁰ sulfates and selenium in Malibu Creek,⁴⁸¹ and bacteria in Topanga Creek.⁴⁸² Consistent with the Los Angeles MS4 Order and this order, no deemed-compliance is granted for these water body-pollutant combinations because no need for water quality improvement by the MS4 has been established, no RAA has been performed, and no compliance schedule has been proposed. RAAs were performed for bacteria in the Santa Monica Bay watershed⁴⁸³ and Malibu Creek watershed,⁴⁸⁴ nutrients in the Malibu Creek watershed,⁴⁸⁵ and lead in the Topanga Canyon Creek subwatershed.⁴⁸⁶

⁴⁷⁸ NSMB EWMP, Table 8, p. 45. We note that this Table is inconsistent with the NSMB EWMP's Table ES-1, which lists no Category 3 pollutants.

⁴⁷⁹ NSMB EWMP, § 2.3.2, p. 52.

⁴⁸⁰ NSMB EWMP, § 2.3.6, p. 55.

⁴⁸¹ NSMB EWMP, § 2.3.7, pp. 55-56.

⁴⁸² NSMB EWMP, § 2.3.1, p. 51.

⁴⁸³ NSMB EWMP, § 5.1.1, pp. 97-101.

⁴⁸⁴ NSMB EWMP, § 6.1.1, pp. 149-150.

⁴⁸⁵ NSMB EWMP, §§ 6.1.2-6.1.3, pp. 150-152.

⁴⁸⁶ NSMB EWMP, § 5.1.2, p. 101.

These RAAs led to the NSMB Group’s conclusion that no load reduction of nutrients and bacteria in the Malibu Creek watershed was needed.⁴⁸⁷ As such, the NSMB Group is not deemed in compliance with nutrient and bacteria receiving water limitations and WQBELs and other TMDL-specific limitations in the Malibu Creek watershed, the only exception being the area addressed by an existing regional project in Legacy Park, which was determined to already be capturing the 85th percentile, 24-hour design storm over the entire Legacy Park tributary area.⁴⁸⁸ For that area, the NSMB Group is deemed in compliance with all applicable receiving water limitations and WQBELs and other TMDL-specific limitations. Of course, as stated in the Los Angeles MS4 Order, the Group must use monitoring to determine whether “there is still a gap in required water quality improvement,” and, if there is, the Group must “close that gap with additional control measures in order for the Permittee[s] to be considered in compliance”⁴⁸⁹

Similarly, for lead in Topanga Canyon Creek, the EWMP concluded that “even in a critical condition, no load reduction is required . . . to meet the allowed load . . . , and therefore it is determined that reasonable assurance of compliance with the water quality objective has been demonstrated.”⁴⁹⁰ Again, consistent with our determinations above, because the NSMB Group found that no reduction of lead is needed and proposes no compliance schedule to address lead in Topanga Canyon Creek, it is not deemed in compliance with the receiving water limitations applicable to this water body-pollutant combination.

For bacteria in the Santa Monica Bay watershed, addressed by the Santa Monica Bay Bacteria TMDL, the NSMB Group calculated that a cumulative total load reduction of 7.3% was needed.⁴⁹¹ To address this, the NSMB Group relies on continued redevelopment of existing impervious area,⁴⁹² implementation of Order-required MCMs,⁴⁹³ a variety of programmatic non-structural BMPs,⁴⁹⁴ and a proposed regional BMP.⁴⁹⁵ The proposed regional

⁴⁸⁷ NSMB EWMP, § 6.2, p. 152. “Within the Malibu Creek Watershed analysis region, reasonable assurance of compliance with all [water body-pollutant combination] allowed loads was demonstrated since there is no required load reduction. As such, no new structural BMPs have been proposed for this watershed” (NSMB EWMP, § 6.3.1, p. 155.)

⁴⁸⁸ NSMB EWMP, § 6.2.4.1, p. 153. Figure 28 of the NSMB EWMP outlines the area addressed by the Legacy Park regional BMP. (NSMB EWMP, Figure 8, p. 154.)

⁴⁸⁹ State Water Board Order WQ 2015-0075, p. 45.

⁴⁹⁰ NSMB EWMP, § 5.1.2, p. 101.

⁴⁹¹ NSMB EWMP, § 5.1.1, p. 101.

⁴⁹² NSMB EWMP, § 5.2.3.2, pp. 116-117.

⁴⁹³ NSMB EWMP, § 5.2.2, pp. 106- 113.

⁴⁹⁴ NSMB EWMP, §§ 5.2.3.1, p. 116, 5.2.3.3, pp. 118-119.

⁴⁹⁵ NSMB EWMP, § 5.2.4.3, pp. 121-122.

BMP “is a large-scale green street project along Viewridge Road in the upper portion of the Topanga Canyon watershed. In total, approximately 80.7 acres of single family residential property are tributary to this project. By rerouting two of the existing storm drains in this neighborhood, runoff that would otherwise discharge directly to the canyon will be treated via the green street project [¶] [T]he project will consist of a combination of bioretention BMPs and flow-through biofiltration BMPs, dependent on soil conditions and other constraints.”⁴⁹⁶ The NSMB Group also plans on implementing distributed green street BMPs, identifying subwatersheds within which specific area (in acres) will be treated.⁴⁹⁷ No schedule is given for implementation of these BMPs, nor are any milestones given beyond those provided by the Santa Monica Bay Bacteria TMDL. The two milestones that fall after development of the EWMP are the requirement that the NSMB Group achieve a 50% cumulative percentage reduction from total exceedance reductions by July 15, 2018, and achievement of final receiving water limitations by July 15, 2021.⁴⁹⁸ This is clearly insufficient, particularly because the NSMB Group’s review of its data led it to the conclusion that “compliance with the 50 percent interim compliance milestone is currently being achieved.”⁴⁹⁹ With the milestone already met and no schedule for BMP implementation, there are no measures of compliance to which the NSMB Group can be held prior to the final milestone. There must be enough, per the Los Angeles MS4 Order, for the Los Angeles Water Board and the public to determine whether the NSMB Group is making reasonable progress towards its compliance deadlines. Schedules must be “adequate for measuring progress on a watershed scale once every two years” and “developed for both the strategies, control measures and BMPs implemented by each Permittee within [the EWMP’s] jurisdiction and for those that will be implemented by multiple Permittees on a watershed scale.”⁵⁰⁰ This standard clearly has not been met here.

In the absence of an adequate compliance schedule for any water body-pollutant combination addressed by the EWMP, the NSMB Group is not deemed in compliance for any combinations outside of those addressed by the regional BMP in Legacy Park. We expect that to obtain deemed-compliance for bacteria in the Santa Monica Bay watershed as the NSMB Group intended, the NSMB Group will immediately begin work on updating its EWMP to include a schedule adequate for measuring progress on a watershed scale once every two years.

⁴⁹⁶ NSMB EWMP, § 5.2.4.3.1, p. 122.

⁴⁹⁷ NSMB EWMP, § 5.2.4.4, pp. 125-134.

⁴⁹⁸ NSMB EWMP, Table 35, p. 158.

⁴⁹⁹ NSMB EWMP, § 7.2.1, p. 162.

⁵⁰⁰ Los Angeles MS4 Order, Parts VI.C.5.c.i-ii, p. 66.

Should the NSMB Group find that it needs to include additional water body-pollutant combinations in its EWMP as Category 1, 2, or 3 pollutants, including the ASBS-altering pollutants discussed above, it will need to ensure that an RAA adequate to address those water body-pollutant combinations is performed and a compliance schedule to address those combinations is included in its EWMP.

The NSMB Group may use the limiting pollutant approach to address one or more of the water body-pollutant combinations to be addressed by its updated EWMP so long as the Group's approach is consistent with the requirements of this order. Currently, the NSMB EWMP contains references to bacteria as the "controlling pollutant,"⁵⁰¹ however, it is unclear exactly what role this played in the RAA and planning processes since bacteria in the Santa Monica Bay watershed is the only water body-pollutant combination the NSMB EWMP appears to address. Consistent with the order above, the NSMB Group must clearly outline which pollutants are controlling or limiting for each water body, identify the pollutants for which those pollutants are intended to be controlling, and provide the rationale for why those pollutants are expected to be controlling for the others.

IV. PRECEDENTIAL EFFECT OF THIS ORDER

This order is precedential in all cases for those implementing the WMP/EWMP provisions of the Los Angeles MS4 Order. Outside of the Los Angeles region, however, its applicability is less straightforward. Some of the sections of this order relate broadly to the authorities of the regional water boards and their Executive Officers. Regional water boards or Executive Officers considering a conditional approval, whether to review a petition on its merits, or whether to use separate counsel from its staff while considering a petition should consult the discussions in sections II.A, III.A, and III.B of this order, respectively. The other sections of this order are likely to be less directly applicable to other regional water boards' programs. That said, we expect other permits will often share similar features. For that reason, the discussions above will have precedential value outside of the Los Angeles region in some circumstances.

Parties involved in the development or implementation of alternative compliance plans should reference the following: section II.B.2's discussion on the need to gather relevant, available data for use in the development of the alternative compliance plan and to explain how that data was used or why it was not used and, conversely, what to do when pertinent data is not available; that same section's discussion on how to appropriately justify the use of a limiting

⁵⁰¹ NSMB EWMP, §§ 4.2, p. 70, 5.1.4, p. 104, & 6.2.1, p. 152.

or representative pollutant or pollutant class; and section II.B.3's discussions on the need for regular, clearly presented, enforceable, non-contingent milestones and deadlines and on the need for Permittees to demonstrate actual compliance with milestones and deadlines not generated through reliance on the relevant permit's required analytical process.

Parties involved with determining municipal compliance with ASBS standards should reference section III.C of this order for our discussions on incorporating ASBS standards into municipal plans, determining the existence of and appropriately reacting to alterations of natural ocean water quality, and determining whether a discharger's treatment of its outfalls complies with the General Exception.

V. CONCLUSION

In implementing this order, interested parties should be mindful of two dates. The first is six months after the adoption of this order. With exceptions identified in the order above, we have determined it is appropriate to allow the WMP Groups six months to determine whether they have met their 2017 milestones as written and report their conclusions, with supporting documentation, to the Los Angeles Water Board Executive Officer for review. If a WMP Group has failed to meet its 2017 milestones, it may request modifications to its WMP and/or time schedule orders. A WMP Group that has met its 2017 milestones will retain its deemed-compliance status for all water body-pollutant combinations addressed by those milestones, even if based on an improper limiting pollutant approach, until, at latest, 12 months from the date of this order's adoption, as discussed in the following paragraph. Those water body-pollutant combinations for which no schedule was proposed do not receive the same allowance. This deadline does not apply to the SMB JG7 Group, whose plan included neither an RAA nor a compliance schedule, nor does it apply to the NSMB Group and the City of El Monte, whose plans did not include schedules with which either the public or the Los Angeles Water Board could determine compliance. All are expected to immediately comply with receiving water limitations and WQBELs and other TMDL-specific limitations and, in the case of the NSMB Group and the City of El Monte, should begin updating their programs to be consistent with the requirements of this order immediately.

The second date of which interested parties should be mindful is 12 months from the date of this order's adoption. This is the date by which we expect that the WMP Groups will have updated their WMPs to be consistent with the requirements of this order. Regardless of their implementation of the WMPs as written, WMP Groups will lose deemed-compliance for any water body-pollutant combination for which they are deemed in compliance unless that water

body-pollutant combination is addressed in a manner consistent with this order by this second date.

In Order WQ 2015-0075, we observed:

Addressing the water quality impacts of municipal storm water is a complex and difficult undertaking, requiring innovative approaches and significant investment of resources. We recognize and appreciate the commendable effort of the Los Angeles Water Board to come up with a workable and collaborative solution to the difficult technical, policy, and legal issues, as well as the demonstrated commitment of many of the area's MS4 dischargers and of the environmental community to work with the Los Angeles Water Board in the development and implementation of the proposed solution We must balance requirements for and enforcement of immediate, but often incomplete, solutions with allowing enough time and leeway for dischargers to invest in infrastructure that will provide for a more reliable trajectory away from storm water-caused pollution and degradation. We believe that the Los Angeles MS4 Order, with the revisions we have made, strikes that balance at this stage in our storm water programs, but expect that we will continue to revisit the question of the appropriate balance as the water boards' experience in implementing watershed-based solutions to storm water grows.⁵⁰²

We remain as committed now as we were then to balancing the many factors that influence storm water planning and treatment. A watershed-based approach to storm water planning and management is fundamental to protecting and improving the quality of California's water, to implementing ambitious projects with wide-ranging benefits, and to ensuring that gains made now are long-lasting. Reviewing the programs, we are optimistic that the Los Angeles area's MS4 dischargers are on the right path. The programs contain aggressive goals, ambitious plans, and real projects that should, when implemented, contribute greatly to the protection and improvement of water quality in Los Angeles County and provide benefits in areas like flood control and water supply. The changes ordered herein are intended not to undermine these efforts; rather, they are meant to ensure the enforceability, rigor, and transparency needed to justify the benefit of deemed-compliance to the public, ensure the Los Angeles Water Board is able to effectively enforce the terms of the programs, and allow the MS4 dischargers to customize their pollutant reduction approaches via schedules that are clearly defined and limited to identified pollutants such that failure to implement one portion will not result in a jurisdictional loss of deemed-compliance. We believe these changes serve the

⁵⁰² State Water Board Order WQ 2015-0075, pp. 79-80.

programs well in their functions as both planning documents and justifications to the public for why deemed-compliance should be made available to their Permittee members.

VI. ORDER

For the reasons discussed in this order:

1. The Los Angeles MS4 Order is amended as described above in this order. The Los Angeles Water Board is directed to prepare a complete version of the Los Angeles MS4 Order (including any necessary non-substantive conforming corrections), post the conformed Los Angeles MS4 Order on its website, and distribute it as appropriate.
2. The Los Angeles Water Board is directed to ensure that each WMP and EWMP Group follows the directives of this order. Specifically, it is directed to ensure the LLAR, LSGR, and LAR UR2 Groups make the changes directed in sections II.B.2 and II.B.3 of this order; the SMB JG7 Group, the ESGV, the City of Walnut, the AB/LCC Group, the City of El Monte, and the LCC Group make the changes directed in section II.C of this order; and the NSMB Group make the changes directed in section III.C of this order.
3. The Los Angeles Water Board is directed to ensure that the WMP Groups have, within six months of the adoption of this order, demonstrated attainment of their 2017 milestones as written. Provided they have met their milestones, the WMP Groups will continue to be deemed in compliance with the receiving water limitations and WQBELs and other TMDL-specific limitations for the water body-pollutant combinations addressed by those milestones, even if those combinations are addressed through a flawed limiting pollutant approach. This allowance lasts only until the WMPs are updated to be consistent with the terms of this order or the date by which their 2019 adaptive management updates are due, whichever is sooner. This allowance does not apply to the Santa Monica Bay Jurisdictional Group 7 WMP, which proposed no compliance schedule for any water body-pollutant combination, nor does it apply to the City of El Monte WMP or the NSMB EWMP, which failed to include enforceable compliance schedules. Both must actually comply with applicable receiving water limitations and WQBELs and other TMDL-specific limitations, the only exception being the North Santa

Monica Bay Group's Legacy Park area, which is already being treated by an EWMP-compliant regional project.

4. The Los Angeles Water Board is directed to ensure that the WMP Groups have, by 12 months from the date of this order's adoption, updated their WMPs to be consistent with the requirements of this order. Failure to do so will result in a loss of deemed-compliance for those water body-pollutant combinations addressed by a schedule created for another pollutant and where the use of the limiting pollutant is not appropriately justified.
5. The Los Angeles Water Board is directed to ensure that all Los Angeles MS4 Order Permittees are complying with the General Exception requirements to not cause or contribute to alterations of natural water quality in ASBS and to meet Ocean Plan Table 1 objectives at ASBS outfalls as described in this order.
6. The Los Angeles Water Board is directed to ensure that all other approved WMPs and EWMPs, including those that may be approved in the future and future iterations of the WMPs and EWMPs addressed by this order, conform to this order's requirements. WMP and EWMP Groups that find their compliance schedules or limiting pollutant approaches do not meet the standards set by this order should work with the Los Angeles Water Board for time schedule orders that allow them until, at latest, 12 months from the date of this order's adoption to update their plan to comply with this order.
7. Lastly, the Los Angeles Water Board Executive Officer is directed to report to the State Water Board on the progress of the Los Angeles Water Board, the WMP Groups, and the EWMP Group in complying with this order within one year of the adoption of this order and annually thereafter.