



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

JUN 20 2019

Hope A. Smythe  
Executive Officer  
Santa Ana Regional Water Quality Control Board  
3737 Main Street, Suite 500  
Riverside, CA 92501

Subject: Santa Ana Regional Water Quality Control Board (SARWQCB) Compliance Schedule  
Authorizing Provisions for the Newport Bay Watershed Freshwater Selenium Total  
Maximum Daily Loads (TMDLs)


Dear Ms. Smythe:

I am pleased to approve the subject amendment to include compliance schedule authorizing provisions for the freshwater selenium TMDLs in the Newport Bay watershed. The amendments are consistent with the requirements of section 303(c) of the Clean Water Act (CWA) and 40 C.F.R. Part 131. Supported by robust science and stakeholder engagement, the compliance schedules, as part of the larger TMDL package, will assist in safeguarding aquatic life and aquatic-dependent wildlife.

The approved compliance schedule authorizing provisions take effect immediately for CWA purposes. Incorporated as part of this letter are Enclosure A (text of Approved Standards) and Enclosure B (EPA's detailed analyses of the standards and rationale for approval).

I look forward to our continued partnership to protect California's water quality and advance human health and wildlife protection. Please call me if you would like to discuss this further, or your staff may contact Diane Fleck at (213) 244-1836 with specific questions concerning this approval.

Sincerely,

  
Tomás Torres *June 20, 2019*  
Director, Water Division

Enclosures

cc: Terri Reeder, SARWQCB  
Rebecca Fitzgerald, State Water Resources Control Board

## Enclosure A

### 1. SARWQCB Resolution No. R8-2017-0014 (August 4, 2017), Attachment A2, Amendment to the Water Quality Control Plan for the Santa Ana River Basin to Incorporate Total Maximum Daily Loads for Selenium in Freshwater: Newport Bay Watershed, Orange County, California (Basin Plan Amendment, BPA)

Table of Final WLAs, Footnote 8:

#### Final WLAs as a Semi-Annual Arithmetic Mean<sup>1</sup> (for Implementation Purposes)

WLAs	Tissue-based Water Column WLAs <sup>2,3,4,5,6,7,8</sup> (Based upon Biodynamic Model) (µg Se/L)			CTR-based Water Column WLAs <sup>2,8,14,16</sup> (µg Se/L)	Conditional Mass based WLAs <sup>15,16</sup> (lbs)
	San Diego Creek Subwatershed <sup>9,12,13,16</sup>	Santa Ana-Delhi Channel Subwatershed <sup>10,12,13,16</sup>	Big Canyon Wash Subwatershed <sup>11,12,13,16</sup>		
MS4 Permittees	10	11	1	5	Optional. Applies when discharger meets the following conditions: a. Participates in approved Offset and Trading Program b. Offsets entirety of discharge (concentration x flow), including any specified offset ratio
Other NPDES Permittees					

- (1) Semi-annual arithmetic mean: April 1 through September 30 and October 1 through March 31.
- (2) Allocations apply year-round during non-wet weather (i.e. dry) conditions. Wet weather conditions are any day with 0.1 inches of rain or more, as measured at the Tustin-Irvine Ranch Rain Gauge Station, and the following three days (72 hours).
- (3) The tissue-based WLAs are based on probable water column concentrations derived from the biodynamic model, as detailed in the Linkage Analysis of these proposed selenium TMDLs. The biodynamic model is directly incorporated herein to these WLAs and is represented by the following equations:
  - (1) Fish tissue target of 8.1 or 5 µg Se/g dw (piscivorous fish):  $C_{\text{water}} (\mu\text{g Se/L}) = [(((C_{\text{fish target}} / \text{TTF}_{\text{piscivorous fish}}) / \text{TTF}_{\text{invertivorous fish}}) / \text{TTF}_{\text{invertebrate}}) / K_d] * 1000$ ;
  - (2) Fish tissue target of 8.1 or 5 µg Se/g dw (invertivorous fish):  $C_{\text{water}} (\mu\text{g Se/L}) = [((C_{\text{fish target}} / \text{TTF}_{\text{invertivorous fish}}) / \text{TTF}_{\text{invertebrate}}) / K_d] * 1000$ ;
  - (3) Fish tissue target of 8.1 or 5 µg Se/g dw (detritivorous fish):  $C_{\text{water}} (\mu\text{g Se/L}) = [(C_{\text{fish target}} / \text{TTF}_{\text{detritivorous fish}}) / K_d] * 1000$ ;
  - (4) Bird egg target of 8.0 µg Se/g dw (piscivorous bird):  $C_{\text{water}} (\mu\text{g Se/L}) = [(((C_{\text{bird target}} / \text{TTF}_{\text{bird}}) / \text{TTF}_{\text{invertivorous fish}}) / \text{TTF}_{\text{invertebrate}}) / K_d] * 1000$ ;
  - (5) Bird egg target of 8.0 µg Se/g dw (invertivorous bird):  $C_{\text{water}} (\mu\text{g Se/L}) = [((C_{\text{bird target}} / \text{TTF}_{\text{bird}}) / \text{TTF}_{\text{invertebrate}}) / K_d] * 1000$
- (4)  $\text{TTF}_{\text{bird}}$  = trophic transfer factor from fish or invertebrates to bird egg,  $\text{TTF}_{\text{piscivorous fish}}$  = trophic transfer factor from small fish to predatory fish,  $\text{TTF}_{\text{invertivorous fish}}$  = trophic transfer factor from invertebrates to fish,  $\text{TTF}_{\text{detritivorous fish}}$  = trophic transfer factor from particulates to fish,  $\text{TTF}_{\text{invertebrate}}$  = trophic transfer factor from particulates to invertebrates,  $K_d$  = partitioning coefficient from dissolved selenium in water to particulates.
- (5) Initial values for all TTFs and  $K_d$ s are specified in the Linkage Analysis of these selenium TMDLs. TTF values may vary by specific water body. In water bodies where predatory fish are not present, the  $\text{TTF}_{\text{predatory fish}}$  value should equal 1 to represent that one less step is occurring in the food chain.
- (6) During the development of the proposed selenium TMDLs, a range of probable water column concentrations was derived from the tissue-based numeric targets, based on the values assumed for the variables in the equation. The initial WLA values selected are based upon consideration of the most sensitive endpoint in the watershed and existing tissue data. During Phase I of these proposed selenium TMDLs, that endpoint has been identified as fish tissue for the protection of fish (numeric target of 8.1 µg Se/g dw) for the SDC and SADC subwatersheds and as bird egg tissue for the protection of birds (8.0 µg Se/g dw) in BCW.
- (7) During the TMDL Reconsideration and during Phase II of these proposed selenium TMDLs, the biodynamic model inputs and resulting probable water column concentrations will be reevaluated and updated as necessary and per the schedule included in Table 6.1. Se.2. Subject to review and written comment via a public participation process, if updates are determined to be appropriate, such revised values will then replace the initial values in the biodynamic model equations, resulting in revised allocations. Such revisions can be made via approval by the Executive Officer, per delegated authority by the Regional Board, unless during the public review process a request is made to bring the modification before the Regional Board for consideration.
- (8) The final allocations are to be achieved as soon as possible, but no later than 30 years from the effective date of the reconsidered TMDLs, as discussed in the Implementation Plan.
- (9) Assessed in the receiving water at San Diego Creek at Campus Drive for Regulated Parties (as defined in the Implementation Plan other

- than MS4 Permittees) that opt to implement a BMP Strategic Plan consistent with the Implementation Plan.
- (10) Assessed in the receiving water at Santa Ana-Delhi Channel at Irvine Avenue for Regulated Parties (as defined in the Implementation Plan other than MS4 Permittees) that opt to implement a BMP Strategic Plan consistent with the Implementation Plan.
  - (11) Assessed in the receiving water at Big Canyon Wash at Back Bay Drive for Regulated Parties (as defined in the Implementation Plan other than MS4 Permittees) that opt to implement a BMP Strategic Plan consistent with the Implementation Plan.
  - (12) Assessed at 'end of pipe' for Individual Action Plan point sources that elect not to pursue an offset. Compliance with allocations will be determined pursuant to the compliance options outlined under the heading "Compliance with WLAs". Such compliance options are directly incorporated herein as part of the assumptions and requirements of these WLAs.
  - (13) Assessment location for the MS4 permittees (urban runoff) is the Costa Mesa Channel. This location was selected as a surrogate urban runoff site because the subwatershed is approximately 1 square mile in area, it has predominantly urban land uses, and it is outside of the areas impacted by rising groundwater.
  - (14) The CTR-based water column WLAs will no longer apply to these proposed selenium TMDLs if and when revised objectives (e.g., SSOs) have been approved and are in effect and the current CTR chronic criterion for selenium in freshwater is de-promulgated.
  - (15) The Offset and Trading Program and any applicable offset ratios, described in the Implementation Plan is incorporated herein to these conditional mass-based WLAs.
  - (16) Compliance with allocations will be determined pursuant to the compliance options outlined under the heading "Compliance with WLAs". Such compliance options are directly incorporated herein as part of the assumptions and requirements of these WLAs.

**2. SARWQCB Resolution No. R8-2017-0014 (August 4, 2017), Attachment A2, BPA, Page 2:**

**Table 6.1. Se.1: Total Maximum Daily Load (TMDL) Summary - Newport Bay Watershed Selenium TMDLs**

Phasing of the Selenium TMDLs
<p>These selenium TMDLs are being established and implemented as phased TMDLs, consistent with USEPA guidance (USEPA, 2006b) and based upon a three-part structure:</p> <ul style="list-style-type: none"> <li>• Phase I – Completion as soon as possible, but no later than 6 years from the effective date of the proposed selenium TMDLs<sup>1</sup>.</li> <li>• TMDL Reconsideration – Completion as soon as possible, but no later than 2 years after Phase I. Reconsideration of the proposed selenium TMDLs will be no later than 8 years from the effective date of the proposed selenium TMDLs.</li> <li>• Phase II – Completion as soon as possible, but no later than 30 years from the effective date of the reconsidered selenium TMDLs<sup>2</sup>. If reconsidered selenium TMDLs are not in effect 8 years after the effective date of the original proposed selenium TMDLs, Phase II actions will commence at this time. In this circumstance, changes in the reconsidered selenium TMDLs will be incorporated into Phase II at the time they become effective.</li> </ul> <p>Phased TMDL Structure. Phase I and Phase II must be completed as soon as possible, but no later than, the specified timeframes</p>
<p><sup>1</sup> Each individual action will be scheduled as a specific number of years/months from the effective date of the proposed selenium TMDL/reconsidered selenium TMDL (as applicable).</p> <p><sup>2</sup> <i>Ibid.</i></p>

U.S. Environmental Protection Agency. 2006b. Clarifications Regarding "Phased" Total Maximum Daily Loads. USEPA memorandum dated August 2, 2006 from B. Best-Wong, Director, Assessment and Watershed Protection Division, Washington, D.C. to Water Division Directors, Regions I-X.

3. SARWQCB Resolution No. R8-2017-0014 (August 4, 2017), Attachment A2, BPA, pages 44 - 46:

**Table 6.1. Se.2 Newport Bay Watershed Selenium TMDLs Implementation and Compliance Schedule**

<b>PHASE I</b>		
<b>Date</b>	<b>Action</b>	<b>Implemented By</b>
3 months from TMDL effective date	Submit Phase I BMP Strategic Plan for approval by the Executive Officer; implement upon approval	MS4 Permittees; Other NPDES Permittees (existing discharges) opting to participate in a BMP Strategic Plan
3 months from TMDL effective date	Submit Regional Monitoring Program for approval by the Executive Officer; implement upon approval.	MS4 Permittees; existing Other NPDES Permittees opting to participate in a BMP Strategic Plan (in lieu of an Individual Action Plan)
3 months from TMDL effective date	Submit Offset and Trading Program for approval by the Executive Officer; implement upon approval.	MS4 Permittees; existing Other NPDES Permittees opting to participate in an Offset and Trading Program
Submit with Notice of Intent	Submit Individual Action Plan OR documentation of participation in an approved BMP Strategic Plan	Other NPDES Permittees (new discharges) <sup>1</sup>
1 year from approval of Phase I BMP Strategic Plan, then annually thereafter	Submit annual report to Regional Board	MS4 Permittees; Other NPDES Permittees opting to participate in a BMP Strategic Plan
As determined in the approved Individual Action Plan	Submit reports to Regional Board	Other NPDES Permittees opting to implement an Individual Action Plan in lieu of participation in a BMP Strategic Plan
To be considered during the TMDL Reconsideration - 5 years from TMDL effective date	Complete any special studies and submit final report on study to Regional Board	MS4 Permittees; Other NPDES Permittees opting to implement a Special Study
Within 5 years from TMDL effective date	Complete development of selenium SSO	Regional Board with support from MS4 Permittees and Other NPDES Permittees
6 years from TMDL effective date	Complete implementation of Phase I BMP Strategic Plans	MS4 Permittees; Other NPDES Permittees opting to participate in a BMP Strategic Plan (in lieu of an Individual Action Plan)
<b>TMDL RECONSIDERATION</b>		
As soon as possible after the completion of Phase I, but no later than 8 years from the TMDL effective date	Reconsider TMDL -the entirety, or selected sections, of the selenium TMDLs and supporting documentation may be modified during the TMDL Reconsideration	Regional Board
Throughout TMDL Reconsideration Period	Continue to implement Phase I BMP Strategic Plan	MS4 Permittees; Other NPDES Permittees (existing discharges) opting to participate in the BMP Strategic Plan

<b>PHASE II</b>		
<b>Date</b>	<b>Action</b>	<b>Implemented By</b>
6 months from Reconsidered TMDL effective date	Submit Phase II BMP Strategic Plan <sup>2</sup> for approval by the Executive Officer; implement upon approval	MS4 Permittees; Other NPDES Permittees (existing discharges) opting to participate in a BMP Strategic Plan
6 months from Reconsidered TMDL effective date	Submit Regional Monitoring Program for approval by the Executive Officer; implement upon approval	MS4 Permittees; existing Other NPDES Permittees opting to participate in a BMP Strategic Plan
Submit with Notice of Intent	Submit Individual Action Plan OR documentation of participation in an approved BMP Strategic Plan	Other NPDES Permittees (new discharges) <sup>1</sup> opting to implement an Individual Action plan in lieu of participation in the BMP Strategic Plan and Other NPDES Permittees opting to participate in a BMP Strategic Plan
1 year from approval of Phase II BMP Strategic Plan, then annually thereafter	Submit annual report to Regional Board	MS4 Permittees; Other NPDES Permittees opting to participate in a BMP Strategic Plan
As determined in the approved Individual Action Plan	Submit reports to Regional Board	Other NPDES Permittees (new discharges) opting to implement an Individual Action Plan in lieu of participation in the BMP Strategic Plan
9 years from Reconsidered TMDL Effective Date	Evaluate WLAs/LAs and submit report with recommendations to the Regional Board <sup>3</sup>	MS4 Permittees; Other NPDES Permittees opting to participate in the BMP Strategic Plan
10 years from Reconsidered TMDL effective date	TMDL Reopener	Regional Board
19 years from Reconsidered TMDL effective date	Evaluate WLAs/LAs and submit report with recommendations to the Regional Board <sup>3</sup>	MS4 Permittees; Other NPDES Permittees opting to participate in the BMP Strategic Plan
20 years from Reconsidered TMDL effective date	TMDL Reopener	Regional Board
As soon as possible but no later than 30 years from Reconsidered TMDL effective date	Complete implementation of Phase II BMP Strategic Plans	MS4 Permittees; Other NPDES Permittees opting to participate in the BMP Strategic Plan
As soon as possible but no later than 30 years from Reconsidered TMDL effective date	Attain Final WLAs <sup>4</sup>	MS4 Permittees and Other NPDES Permittees opting to participate in a BMP Strategic Plan AND Other NPDES Permittees (new discharges) opting to implement an Individual Action Plan in lieu of participation in the BMP Strategic Plan
	Attain Final WLAs <sup>4</sup>	Non-Point Source dischargers

<sup>1</sup> = The TMDL considers that there may be new dischargers after the TMDL becomes effective (e.g., a short-term groundwater discharger that was not discharging at the time the TMDL became effective).

<sup>2</sup> = The schedule in the approved Phase II BMP Strategic Plan will include periodic updates and revisions, anticipated to be every 5 years throughout Phase II of these proposed selenium TMDLs. The schedule is subject to approval by the Executive Officer.

<sup>3</sup> = As the models are directly incorporated into the assumptions and requirements of the WLAs and LAs, the Regional Board can re-evaluate the allocations at any time and, through a public review process, modify the allocations. The discrete tasks here reflect the minimum frequency for re-evaluation of the allocations. Any additional reviews beyond those specified in the implementation schedule would be at the discretion of the Regional Board or at the request of Regulated Parties.

<sup>4</sup> = While the tissue-based WLAs and LAs are expected to result in attainment of the tissue-based numeric targets, bioaccumulation in the various foodwebs in the watershed may be different than what was modeled with the biodynamic model as part of the Linkage Analysis. Therefore, where tissue-based numeric targets are attained, the corresponding WLAs/LAs will also be deemed to be attained, regardless of the actual measured water column concentration.



## Enclosure B



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

### MEMORANDUM

**DATE:** June 17, 2019

**SUBJECT:** Recommendation for EPA's Approval Under Clean Water Act Section 303(c) of Authorizing Compliance Schedule Provisions for the Santa Ana Regional Water Quality Control Board's Newport Bay Watershed Freshwater Selenium Total Maximum Daily Loads

**FROM:** Diane E. Fleck, P.E., Esq. ᠏᠙᠑

**THROUGH:** Terrence Fleming, Acting Section Chief  
Standards and Assessment Section (WTR-2-1)

**TO:** Administrative Record

This memorandum provides the rationale for the recommendation that EPA approve the compliance schedule authorizing provisions (CSAPs) for the Santa Ana Regional Water Quality Control Board's (SARWQCB's) Newport Bay Watershed Freshwater Selenium Total Maximum Daily Loads (TMDLs). The SARWQCB adopted the TMDLs and CSAPs (the Basin Plan Amendment, (BPA)) on August 4, 2017 under SARWQCB Resolution No. R8-2017-0014. The State Water Resources Control Board (SWRCB) approved the BPA on September 20, 2018 under SWRCB Resolution 2018-0041. The Office of Administrative Law (OAL) approved the BPA on April 19, 2019 (OAL Matter Number 2019-0307-05).

This memorandum pertains only to the portions of the BPA that are subject to EPA approval under Clean Water Act (CWA) section 303(c) and 40 C.F.R. Part 131.21, i.e., the provisions that revise water quality standards as described below. Portions of the BPA that are subject to EPA approval under CWA section 303(d) are discussed in separate correspondence.

#### **I. Background**

CWA section 303(d) requires states to identify waters within its boundaries that do not meet water quality standards. The SARWQCB included the San Diego Reach Subwatershed, a tributary to Newport Bay, on its 303(d) list of impaired waterbodies in 2006 for selenium. In approximately 2008, the SARWQCB, started to develop TMDLs for the selenium impaired freshwater portions of the Newport Bay Watershed. After reviewing selenium fish and bird tissue data, and selenium water column data, the SARWQCB found that two other freshwater areas

within the watershed were impaired for selenium: the Santa Ana Delhi Channel Subwatershed, and the Big Canyon Wash Subwatershed. After extensive analyses and work with stakeholder groups, in August 2017, the SARWQCB adopted TMDLs (and the CSAPs), and in September 2018, the SWRCB approved TMDLs (and the CSAPs), for the three areas impaired for selenium in the Newport Bay watershed.

In 2000, EPA promulgated the California Toxics Rule (CTR) (40 C.F.R. 131.38 et seq.). The CTR established water quality criteria for California for priority toxic pollutants including selenium. The aquatic life freshwater chronic selenium criterion in the CTR is 5 µg/L (total selenium, 4-day average). This criterion is the currently applicable water quality criterion for the three impaired freshwater subwatersheds.

In 2018, EPA proposed a revised aquatic life and aquatic-dependent wildlife freshwater selenium water quality criterion for California (83 FR 64059, December 13, 2018). The criterion consists of a bird egg tissue element, fish tissue elements, and a Performance-Based Approach<sup>1</sup> incorporated by reference, to determine site-specific water column concentration elements associated with the tissue-based elements. The Performance-Based Approach consists of two methodologies for deriving site-specific water column criterion elements: the mechanistic modeling approach and the empirical bioaccumulation factor (BAF) approach.

The SARWQCB's TMDL package adopts numeric bird and fish tissue targets consistent with EPA's proposed tissue criterion elements. The linkage analysis in the TMDL package uses the mechanistic modeling approach for deriving site-specific water column allocations for each of the subwatersheds. The TMDL package also adopts targets and allocations based on the existing water column criterion of 5 µg/L. The tissue-based allocations and the CTR-based allocation apply concurrently within each subwatershed. Depending on site-specific factors, the translated tissue to water column concentrations (the tissue-based allocations) can be more or less stringent than the existing CTR selenium water column criterion of 5 µg/L.

According to the SWRCB's *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits* (Resolution No. 2008-0025; hereinafter Compliance Schedule Policy) compliance schedules are not authorized for CTR criteria. However, the Compliance Schedule Policy allows compliance schedules for CTR criteria in permits if they are consistent with Waste Load Allocations (WLAs) specified in a TMDL established through a basin plan amendment, provided that the TMDL contains an implementation plan with a compliance schedule. Under certain circumstances, the Policy also allows compliance schedules in a permit for existing dischargers to implement a new, revised or newly interpreted water quality criterion or objective (i.e., translated tissue value) that results in a permit limitation that is more stringent than the limitation previously imposed.

CSAPs are water quality standards actions subject to EPA approval (40 C.F.R. §131.15). The SARWQCB requested EPA approval pursuant to CWA section 303(c) for the compliance schedule authorizations associated with the Newport Bay Watershed TMDL package.

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<sup>1</sup> The Performance-Based Approach proposed for California is described in: *Draft Translation of Selenium Tissue Criterion Elements to Site-Specific Water Column Criterion Element for California Version 1*, August 8, 2018 (see 83 FR 64059, December 13, 2018).



## II. Water Quality Standards Provision Subject to EPA Review

The BPA contains a table of final allocations entitled, “Final WLAs as a Semi-Annual Arithmetic Mean (for Implementation Purposes).” Footnote 8 in the table states, “The final allocations are to be achieved as soon as possible, but no later than 30 years from the effective date of the reconsidered TMDLs, as discussed in the Implementation Plan.” Footnote 8 is located on (and applies to) two columns, the column for the tissue-based water column WLAs and the column for the CTR-based water column WLA. The footnote is intended to allow NPDES permittees compliance schedules to achieve the final water column WLAs, where appropriate.

This CSAP would allow SARWQCB to issue compliance schedules to dischargers that are authorized and comply with the State’s Compliance Schedule Policy during Phase I, the TMDL Reconsideration, and Phase II. See Table 6.1. Se.1: *Total Maximum Daily Load (TMDL) Summary - Newport Bay Watershed Selenium TMDLs* in the BPA at page 2. The interim steps under each phase are outlined in Table 6.1. Se.2 *Newport Bay Watershed Selenium TMDLs Implementation and Compliance Schedule*, in the BPA at pages 44 – 46 and reproduced in Enclosure A of this approval document.

EPA previously approved the State’s Compliance Schedule Policy. In brief, the general compliance schedule requirements in the Policy require that a discharger seeking a compliance schedule demonstrate to the satisfaction of the Regional Board that the discharger needs time to implement actions to comply with a more stringent permit limitation. When incorporating WLAs into permits, the Regional Boards will provide justification supporting the compliance schedules meet all the requirements of 40 C.F.R. §122.47. Permits containing a compliance schedule must document that the schedule in question will lead to attainment with the permit’s water quality-based effluent limit “as soon as possible” and no later than the schedule of implementation in the TMDLs. The entire compliance schedule, including interim requirements and final permit limitations, must be included as enforceable terms of the permit, whether or not the final compliance date is within the permit term.

Even though the BPA does not explicitly include the provisions included in the Policy, it must adhere to the State’s Compliance Schedule Policy when considering whether a compliance schedule should be utilized for an individual discharger in the Newport Bay Watershed, under the provisions of the selenium TMDLs. Given that EPA has previously approved the Policy as consistent with EPA requirements, it is appropriate that the SARWQCB implement the Policy where appropriate for the Newport Bay Watershed TMDLs.

Timeframes: The CSAPs require Phase 1 of the TMDLs be completed as soon as possible, but no later than 6 years after the effective date of the TMDLs.<sup>2</sup> The TMDL Reconsideration must be completed as soon as possible, but no later than 2 years from the completion of Phase 1; and Phase II must be completed as soon as possible, but no later than 30 years after the completion of the effective date of the reconsidered TMDLs. The SARWQCB estimated reasonable timeframes for each phase, and each timeframe is a discrete amount of time (i.e., not indefinite). The maximum time for permittees to achieve the allocations is 38 years (6 years for Phase 1, plus 2 years for the Reconsideration, plus 30 years for Phase II).

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<sup>2</sup> The effective date of the TMDLs is the date of EPA approval of the package.

In the SARWQCB's Responses to Public Comments document, the SARWQCB states (in response to concerns about the length of time for each phase, as well as the total length of time):

The proposed compliance schedule is based on the time deemed necessary to implement the first Phase of the TMDLs, collect and analyze sufficient data to determine the efficacy of the TMDLs and the measures taken to implement them, to develop and seek approval of a revised TMDL, as appropriate, and to implement the revised TMDL. The schedule is based on experiential evidence of the time required to implement selenium reduction projects, to collect and analyze receiving water and management practice data, and to process revisions to the TMDLs, including the implementation plan.

Appendix S (Implementation Plan Actions) to the technical staff report was developed to support the need for the 30-year schedule for Phase II of implementation. There are reevaluations every 10 years, which provides a built-in structure to lower allocations, loads, etc. if necessary or to change the final compliance date if warranted (e.g., at the first 10 year reopener, if it appears that the stakeholders are close to meeting the TMDLs, then the compliance schedule length can be reduced). These TMDL Reopeners are specifically designed to evaluate if further selenium reductions are necessary, which is the intent of the adaptive management structure already incorporated into the Basin Plan.

(Responses to Public Comments, pages 2-3.) In addition to explaining how the timeframes for each phase was developed, the SARWQCB included a public comment period whereby other stakeholders could comment on implementation plans including proposed timeframes. The Responses to Public Comment document at page 3 states:

Additionally, each Best Management Practices (BMP) Strategic Plan will be circulated for public review and comment for a period of no less than 30 days, and the Regional Board will hold a public hearing prior to considering approval of each plan. If no significant public comments are received, then the Executive Officer may approve the plan. Regional Board staff intend to oversee the pace of implementation actions as well as the schedule for implementation. By providing the 30-year time frame for Phase II from the start, the Regional Board maintains its discretion to shorten that time period if implementation of the BMP Strategic Plans achieves the necessary reductions or a reasonable and feasible treatment technology is developed that can easily be implemented in the watershed.

The SARWQCB also included an example to illustrate (and explain) why it may take several years to implement appropriate projects:

Based upon the efforts to install the pipeline diversion project in Peters Canyon Wash, Board staff recognize that these large public works projects take time to be conceptualized, assessed for feasibility, budgeted and then put out for bid, designed, permitted, constructed, operated and maintained properly. In addition,

time is needed after the project is in operation to evaluate whether it is removing selenium as designed without resulting in localized or downstream impacts to biological resources.

(Responses to Public Comments, page 3.) The SARWQCB also included a list of other TMDLs that include CSAPs of similar length (Responses to Public Comments, page 4):

Regional Board staff would also note that other regions have adopted extended compliance/attainment schedules for complex TMDLs. For example:

- 2002 Moro Bay Sediment TMDL – 50 years;
- 2007 San Francisco Bay PCBs TMDL – 20+ years;
- 2010 Lake Tahoe TMDLs for nitrogen, phosphorous, and sediment – 65 years;
- 2014 TMDLs for Nitrogen Compounds and Orthophosphate in Streams of the Lower Salinas River and Reclamation Canal Basin, and the Moro Cojo Slough Subwatershed – 30 years.
- 2015 Pajaro River Basin Nutrient TMDLs – 30 years;

The SARWQCB fully explains the proposed maximum length of the time necessary to complete the work. It also notes that each phase must be completed as soon as possible which allows the SARWQCB to accelerate the process where “it is demonstrably feasible to accelerate the process” (Responses to Public Comments, page 3). EPA staff finds the proposed timeframes reasonable and recommends approval of the CSAPs.

### **III. Endangered Species Act**

Section 7(a)(2) of the Endangered Species Act requires that each federal agency shall, in consultation with the Services, ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any federally listed endangered or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. If EPA determines that its action will have no effect on listed species or critical habitat, a consultation is not necessary. Because the CSAPs do not change the underlying protective water quality standard, EPA concludes that approval of the CSAPs in the Newport Bay Watershed selenium TMDL package will have no effect on listed species or their critical habitat. The CSAP instead requires compliance with the water quality standard as soon as possible.

### **IV. Conclusion**

Based on the above analysis, EPA staff finds that the CSAPs for the three freshwater selenium TMDLs in the Newport Bay Watershed meet the requirements of 40 C.F.R. §131.15 and recommends approval of the provisions pursuant to CWA section 303(c).