

**ATTACHMENT Q – TMDLS IN THE LOS ANGELES RIVER WATERSHED MANAGEMENT AREA**

**I. LOS ANGELES RIVER WATERSHED TRASH TMDL**

- A. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
- B. Permittees shall comply with the water quality-based effluent limitation of zero trash discharged to the Los Angeles River and its tributaries as of the effective date of the Order and every water year thereafter.
- C. Permittees shall comply with the water quality-based effluent limitations for trash per the provisions in Part IV.B.3 of the Order.

**II. LOS ANGELES RIVER NITROGEN COMPOUNDS AND RELATED EFFECTS TMDL**

- A. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
- B. Permittees shall comply with the following water quality-based effluent limitations for discharges to the Los Angeles River and its tributaries as of the effective date of the Order:

| Los Angeles River Segment   | Effluent Limitation Ammonia (NH <sub>3</sub> -N) |                       |                   |                                 |
|---|--|-----------------------|-------------------|---------------------------------|
|   | 1-hour Average (mg/L)                            | 30-day Average (mg/L) |                   |                                 |
|   |  | Year Round            | Year Round        | ELS Absent October 1 – March 31 |
| Reach 6 above Balboa Blvd.  | 4.7  | 1.6                   | ---               | ---                             |
| Reach 5 Balboa Blvd. to Sepulveda Dam   | 4.7  | ---                   | <del>2.19</del>   | <del>1.82.4</del>               |
| Reach 4 Sepulveda Dam to Riverside Drive  | 4.7  | ---                   | <del>2.15</del>   | <del>2.15</del> <sup>1</sup>    |
| Reach 3 Riverside Drive to above Los Angeles-Glendale Water Reclamation Plant (LAG WRP) | 4.7  | ---                   | <del>4.13.6</del> | <del>2.44</del>                 |
| Reach 3 Below LAG WRP to Figueroa Street  | 8.7  | ---                   | <del>4.13.6</del> | <del>2.44</del>                 |
| Reach 2 Figueroa Street to Carson Street  | 8.7  | 2.4                   | ---               | ---                             |
| Reach 1 Carson Street to Estuary  | 8.7  | 2.4                   | ---               | ---                             |
| Los Angeles River Tributaries Excluding Rio Hondo Reach 3 (above Whittier Narrows Dam)  | 10.1   | 2.3                   | ---               | ---                             |
| Rio Hondo Reach 3 (above Whittier Narrows Dam)  | 10.1   | ---                   | <del>4.38</del>   | 2.8                             |

- C. Permittees shall comply with the following water quality-based effluent limitations for discharges to the Los Angeles River and its tributaries as of the effective date of the Order:

| Constituent                                  | Effluent Limitation 30-day Average (mg/L) |
|--|---|
| Nitrate as Nitrogen (NO <sub>3</sub> -N)     | 8.0                                       |
| Nitrite as Nitrogen (NO <sub>2</sub> -N)     | 1.0                                       |
| Nitrate as Nitrogen plus Nitrite as Nitrogen | 8.0                                       |

<sup>1</sup> The Los Angeles River Reach 4 ammonia effluent limitation of ~~2.15~~ mg/L for ELS Absent is year-round.

**III. LOS ANGELES RIVER AND TRIBUTARIES METALS TMDL**

- A. Permittees subject to the provisions below are identified in Attachment J, Tables J-11 and J-12.
- B. Water Quality-Based Effluent Limitations
  - 1. Permittees shall comply with the following grouped<sup>2</sup> dry weather<sup>3</sup> mass-based water quality-based effluent limitations no later than January 11, 2024, expressed as total recoverable metals:

| Waterbody               | Effluent Limitations Daily Maximum (kg/day) |        |      |
|-------------------------|---|--------|------|
|                         | Copper                                      | Lead   | Zinc |
| LA River Reach 6        | 0.53  | 3.0    | ---  |
| LA River Reach 5        | 0.05  | 0.31   | ---  |
| LA River Reach 4        | 1.27  | 1.04   | ---  |
| LA River Reach 3        | 0.24  | 1.18   | ---  |
| LA River Reach 2        | 0.52  | 0.89   | ---  |
| LA River Reach 1        | 0.56  | 0.64   | ---  |
| Bell Creek              | 0.06  | 0.33   | ---  |
| Tujunga Wash            | 0.008                                       | 0.0053 | ---  |
| Burbank Western Channel | 0.71  | 0.61   | ---  |
| Verdugo Wash            | 0.39  | 0.82   | ---  |
| Arroyo Seco             | 0.01  | 0.06   | ---  |
| Rio Hondo Reach 1       | 0.097                                       | 0.045  | 0.16 |
| Compton Creek           | 0.13  | 0.16   | ---  |

- 2. In lieu of calculating loads, Permittees may demonstrate compliance with the following concentration-based water quality-based effluent limitations during dry weather<sup>4</sup> no later than January 11, 2024, expressed as total recoverable metals:

| Waterbody                              | Effluent Limitations Daily Maximum (µg/L total recoverable metals) |      |      |
|--|--|------|------|
|  | Copper   | Lead | Zinc |
| LA River Reach 5, 6 and Bell Creek     | 30   | 170  | ---  |
| LA River Reach 4                       | 103  | 83   | ---  |
| Tujunga Wash                           | 166  | 83   | ---  |
| LA River Reach 3 above LA-Glendale WRP | 91   | 102  | ---  |
| Verdugo Wash                           | 50   | 102  | ---  |

<sup>2</sup> The dry weather effluent limitations are grouped-based and shared among all the MS4 Permittees, including Caltrans, that are located within the drainage area.

<sup>3</sup> Dry weather is defined as any day when the maximum daily flow in the Los Angeles River is less than 500 cfs measured at the Wardlow gage station.

<sup>4</sup> Dry weather is defined as any day when the maximum daily flow in the Los Angeles River is less than 500 cfs measured at the Wardlow gage station.

| Waterbody                                 | Effluent Limitations Daily Maximum<br>(µg/L total recoverable metals) |      |      |
|---|---|------|------|
|   | Copper  | Lead | Zinc |
| LA River Reach 3 below<br>LA-Glendale WRP | 103   | 100  | ---  |
| Burbank Western<br>Channel (above WRP)    | 124   | 126  | ---  |
| Burbank Western<br>Channel (below WRP)    | 90  | 751  | ---  |
| LA River Reach 2                          | 87  | 94   | ---  |
| Arroyo Seco                               | 29  | 94   | ---  |
| LA River Reach 1                          | 91  | 102  | ---  |
| Compton Creek                             | 64  | 73   | ---  |
| Rio Hondo Reach 1                         | 126   | 37   | 131  |

3. Permittees shall comply with the following grouped<sup>5</sup> wet weather<sup>6</sup> mass-based water quality-based effluent limitations no later than January 11, 2028, expressed as total recoverable metals discharged to all reaches of the Los Angeles River and its tributaries:

| Constituent | Effluent Limitations<br>Daily Maximum (kg/day)                  |
|-------------|---|
| Cadmium     | $2.8 \times 10^{-9} \times \text{Daily Storm Volume (L)} - 1.8$ |
| Copper      | $6.0 \times 10^{-8} \times \text{Daily Storm Volume (L)} - 9.5$ |
| Lead        | $8.5 \times 10^{-8} \times \text{Daily Storm Volume (L)} - 32$  |
| Zinc        | $1.4 \times 10^{-7} \times \text{Daily Storm Volume (L)} - 83$  |

4. In lieu of calculating loads, Permittees may demonstrate compliance with the following concentration-based water quality-based effluent limitations during wet weather no later than January 11, 2028, expressed as total recoverable metals discharged to all reaches of the Los Angeles River and its tributaries:

| Constituent | Effluent Limitations Daily Maximum<br>(µg/L total recoverable metals) |
|-------------|---|
| Cadmium     | $2.8 - \frac{1.8 \times 10^9}{\text{Daily Storm Volume (L)}}$         |
| Copper      | $60 - \frac{9.5 \times 10^9}{\text{Daily Storm Volume (L)}}$          |
| Lead        | $85 - \frac{3.2 \times 10^{10}}{\text{Daily Storm Volume (L)}}$       |
| Zinc        | $140 - \frac{8.3 \times 10^{10}}{\text{Daily Storm Volume (L)}}$      |

<sup>5</sup> The wet weather effluent limitations are grouped-based and shared among all the MS4 Permittees located within the drainage area.

<sup>6</sup> Wet weather is defined as any day when the maximum daily flow in the Los Angeles River is equal to or greater than 500 cfs measured at the Wardlow gage station.

- C. Permittees shall comply with the dry and wet weather water quality-based effluent limitations for metals discharged to the Los Angeles River and its tributaries, per the schedule below:

| Deadline                    | Percentage of Total Drainage Area Served by the MS4 required to meet the Effluent Limitations |             |
|-----------------------------|---|-------------|
|                             | Dry weather   | Wet weather |
| Effective Date of the Order | 75%   | 25%         |
| January 11, 2024            | 100%  | 50%         |
| January 11, 2028            | 100%  | 100%        |

**IV. LOS ANGELES RIVER WATERSHED BACTERIA TMDL**

- A. Permittees subject to the provisions below are identified in Attachment J, Tables J-11, J-13, and J-14.
- B. Permittees shall comply with the following final water quality-based effluent limitations for discharges to the Los Angeles River and its tributaries. Permittees shall comply with the single sample limitations during dry weather according to the schedule in Table Q - 1, and during wet weather no later than March 23, 2037. Permittees shall comply with the geometric mean limitations no later than March 23, 2037.

| Constituent    | Effluent Limitation (MPN or cfu) |                |
|----------------|----------------------------------|----------------|
|                | Daily Maximum                    | Geometric Mean |
| <i>E. coli</i> | 235/100 mL                       | 126/100 mL     |

- C. Permittees shall comply with the following grouped<sup>7</sup> interim dry weather single sample bacteria water quality-based effluent limitations for specific river segments and tributaries as listed in the table below, according to the schedule in Table Q - 1:

| River Segment or Tributary  | Daily Maximum <i>E. coli</i> Load (10 <sup>9</sup> MPN/Day) |
|---|---|
| Los Angeles River Segment A (Rosecrans Avenue to Willow Street)   | 301   |
| Los Angeles River Segment B (Figueroa Street to Rosecrans Avenue) | 518   |
| Los Angeles River Segment C (Tujunga Avenue to Figueroa Street)   | 463   |
| Los Angeles River Segment D (Balboa Boulevard to Tujunga Avenue)  | 454   |
| Los Angeles River Segment E (Headwaters to Balboa Boulevard)      | 32  |
| Aliso Canyon Wash   | 23  |

<sup>7</sup> The interim dry weather effluent limitations are group-based and shared among all MS4 Permittees, which includes Caltrans, located within the drainage area to the outfall(s) within the designated segment or tributary. The interim dry weather effluent limitations may be distributed based on proportional drainage area, upon approval of the Los Angeles Water Board Executive Officer.

| River Segment or Tributary | Daily Maximum <i>E. coli</i> Load (10 <sup>9</sup> MPN/Day) |
|----------------------------|---|
| Arroyo Seco                | 24  |
| Bell Creek                 | 14  |
| Bull Creek                 | 9   |
| Burbank Western Channel    | 86  |
| Compton Creek              | 7   |
| Dry Canyon                 | 7   |
| McCoy Canyon               | 7   |
| Rio Hondo                  | 2   |
| Tujunga Wash               | 10  |
| Verdugo Wash               | 51  |

1. Unexpectedly high-loading outfalls may be excluded from interim compliance calculations under the following circumstances: If an outfall which was 1) loading *E. coli* at a rate less than the 25<sup>th</sup> percentile of outfalls during the monitoring events used to develop the “MS4 Load Reduction Strategy” (LRS), but, at the time of compliance monitoring, is 2) loading *E. coli* at a rate greater than the 90<sup>th</sup> percentile of outfalls, and 3) actions are taken prior to the end of the first phase (i.e. 10 years after the beginning of the segment or tributary specific phase) such that the outfall is returned to a loading less than the 50<sup>th</sup> percentile of the outfalls at compliance monitoring, then the 90<sup>th</sup> percentile data from the outfall may be excluded from the compliance loading calculations.
2. If an outfall which was 1) the subject of a dry weather diversion is found, at the time of compliance monitoring, to be 2) contributing greater than the 90<sup>th</sup> percentile loading rate, and 3) actions are taken such that the outfall is returned to a loading less than the 50<sup>th</sup> percentile of the outfalls at compliance monitoring, and a maintenance schedule for the diversion is submitted with the compliance report, then the 90<sup>th</sup> percentile data from the outfall may be excluded from the compliance loading calculations.

**D. Receiving Water Limitations**

1. Permittees shall comply with the following grouped<sup>8</sup> final single sample bacteria receiving water limitations at each monitoring station in the Los Angeles River and its tributaries during dry weather according to the schedule in Table Q - 1, and during wet weather<sup>9</sup> no later than March 23, 2037:

<sup>8</sup> The final receiving water limitations are group-based and shared among all MS4 Permittees, which includes Caltrans, located within the drainage area to a segment or tributary. The final receiving water limitations may be distributed based on proportional drainage area, upon approval of the Los Angeles Water Board Executive Officer.

<sup>9</sup> Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

| Time Period  | Annual Allowable Exceedance Days of the Single Sample Objective <sup>10</sup> |                            |
|--|---|----------------------------|
|  | Daily Sampling  | Weekly Sampling            |
| Dry Weather (November 1 to October 31)                                     | 5   | 1                          |
| Wet Weather (Non-HFS <sup>11</sup> Waterbodies) (November 1 to October 31) | 15  | 2                          |
| Wet Weather (HFS Waterbodies) (November 1 to October 31)                   | 10 (not including HFS days)   | 2 (not including HFS days) |

2. Permittees shall comply with the following geometric mean receiving water limitation for monitoring stations in the Los Angeles River and its tributaries no later than March 23, 2037:

| Constituent    | Geometric Mean (MPN or cfu) |
|----------------|-----------------------------|
| <i>E. coli</i> | 126/100 mL                  |

**Table Q - 1. Los Angeles River Bacteria Implementation Schedule for Dry Weather Only<sup>12</sup>**

| Implementation Action  | Responsible Parties  | Deadline              |
|--|--|-----------------------|
| <b>SEGMENT B (upper and middle Reach 2 – Figueroa Street to Rosecrans Avenue)</b>  |  |                       |
| <b>First phase – Segment B</b>   |  |                       |
| Achieve interim (or final) water quality-based effluent limitations and submit report to the Los Angeles Water Board   | MS4 Permittees discharging to Segment B, if using a Load Reduction Strategy (LRS)    | March 23, 2022        |
| <i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to the Los Angeles Water Board</i> | <i>MS4 Permittees discharging to Segment B, if using alternative compliance plan</i> | <i>March 23, 2022</i> |
| <b>Second phase, if necessary – Segment B for LRS approach only</b>  |  |                       |
| Submit a new LRS   | MS4 Permittees discharging to Segment B  | March 23, 2023        |
| Complete implementation of LRS   | MS4 Permittees discharging to Segment B, if using LRS                                | September 23, 2026    |

<sup>10</sup> The Single Sample Objectives are equivalent to the daily maximum values listed in subpart B above.

<sup>11</sup> Certain reaches and tributaries of the Los Angeles River are subject to a High Flow Suspension (HFS) of the recreational beneficial uses as identified in the Basin Plan, Chapter 2, Table 2-1a. The HFS applies during specific conditions as defined in Attachment A of the Order.

<sup>12</sup> Italics in this Table refer to Permittees using an alternative compliance plan instead of a Load Reduction Strategy.

| <b>Implementation Action</b>  | <b>Responsible Parties</b>   | <b>Deadline</b>           |
|---|--|---------------------------|
| Achieve final water quality-based effluent limitations in Segment B or demonstrate that non-compliance is only due to upstream contributions and submit report to the Los Angeles Water Board     | MS4 Permittees discharging to Segment B, if using LRS  | September 23, 2028        |
| <b>SEGMENT B TRIBUTARIES (Rio Hondo and Arroyo Seco)</b>  |  |                           |
| <b>First phase – Segment B Tributaries (Rio Hondo and Arroyo Seco)</b>  |  |                           |
| Achieve interim (or final) water quality-based effluent limitations and submit report to the Los Angeles Water Board  | MS4 Permittees discharging to Segment B tributaries, if using LRS                                | September 23, 2023        |
| <i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is only due to upstream contributions and submit report to the Los Angeles Water Board</i>           | <i>MS4 Permittees discharging to Segment B tributaries, if using alternative compliance plan</i> | <i>September 23, 2023</i> |
| <b>Second phase, if necessary – Segment B Tributaries (Rio Hondo and Arroyo Seco) for LRS approach only</b>   |  |                           |
| Submit a new LRS  | MS4 Permittees discharging to Segment B tributaries  | September 23, 2024        |
| Complete implementation of LRS  | MS4 Permittees discharging to Segment B tributaries, if using LRS                                | March 23, 2028            |
| Achieve final water quality-based effluent limitations Segment B tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to the Los Angeles Water Board | MS4 Permittees discharging to Segment B tributaries, if using LRS                                | March 23, 2030            |
| <b>SEGMENT A (lower Reach 2 and Reach 1 – Rosecrans Avenue to Willow Street)</b>  |  |                           |
| <b>First phase – Segment A</b>  |  |                           |
| <del>Complete implementation of LRS</del>   | <del>MS4 Permittees discharging to Segment A, if using LRS</del>                                 | <del>March 23, 2021</del> |

| <b>Implementation Action</b>   | <b>Responsible Parties</b>   | <b>Deadline</b>           |
|--|--|---------------------------|
| Achieve interim (or final) water quality-based effluent limitations and submit report to the Los Angeles Water Board   | MS4 Permittees discharging to Segment A, if using LRS  | March 23, 2024            |
| <i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to the Los Angeles Water Board</i>       | <i>MS4 Permittees discharging to Segment A, if using alternative compliance plan</i>           | <i>March 23, 2024</i>     |
| <b>Second phase, if necessary – Segment A for LRS approach only</b>  |  |                           |
| Submit a new LRS   | MS4 Permittees discharging to Segment A  | March 23, 2025            |
| Complete implementation of LRS   | MS4 Permittees discharging to Segment A, if using LRS  | September 23, 2029        |
| Achieve final water quality-based effluent limitations in Segment A or demonstrate that non-compliance is due to upstream contributions and submit report to the Los Angeles Water Board | MS4 Permittees discharging to Segment A, if using LRS  | September 23, 2031        |
| <b>SEGMENT A TRIBUTARY (Compton Creek)</b>   |  |                           |
| <b>First phase – Segment A Tributary</b>   |  |                           |
| Complete implementation of LRS   | MS4 Permittees discharging to Segment A tributary if using LRS                                 | September 23, 2022        |
| Achieve interim (or final) water quality-based effluent limitations and submit report to the Los Angeles Water Board   | MS4 Permittees discharging to Segment A tributary if using LRS                                 | September 23, 2025        |
| <i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to the Los Angeles Water Board</i>       | <i>MS4 Permittees discharging to Segment A tributary, if using alternative compliance plan</i> | <i>September 23, 2025</i> |
| <b>Second phase, if necessary – Segment A Tributary for LRS approach only</b>  |  |                           |
| Submit a new LRS   | MS4 Permittees discharging to Segment A tributary  | September 23, 2026        |
| Complete implementation of LRS   | MS4 Permittees discharging to Segment A tributary, if using LRS                                | March 23, 2030            |



| <b>Implementation Action</b>   | <b>Responsible Parties</b>   | <b>Deadline</b>       |
|--|--|-----------------------|
| Achieve final water quality-based effluent limitations in Segment A tributary or demonstrate that non-compliance is due to upstream contributions and submit report to the Los Angeles Water Board | MS4 Permittees discharging to Segment A tributary, if using LRS                      | March 23, 2032        |
| <b>SEGMENT E (Reach 6 – LA River headwaters [confluence with Bell Creek and Calabasas Creek] to Balboa Boulevard)</b>  |  |                       |
| <b>First phase – Segment E</b>   |  |                       |
| Complete implementation of LRS   | MS4 Permittees discharging to Segment E, if using LRS                                | March 23, 2022        |
| Achieve interim (or final) water quality-based effluent limitations and submit report to the Los Angeles Water Board   | MS4 Permittees discharging to Segment E, if using LRS                                | March 23, 2025        |
| <i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to the Los Angeles Water Board</i>                 | <i>MS4 Permittees discharging to Segment E, if using alternative compliance plan</i> | <i>March 23, 2025</i> |
| <b>Second phase, if necessary –Segment E for LRS approach only</b>   |  |                       |
| Submit a new LRS   | MS4 Permittees discharging to Segment E  | March 23, 2026        |
| Complete implementation of LRS   | MS4 Permittees discharging to Segment E, if using LRS                                | September 23, 2029    |
| Achieve final water quality-based effluent limitations in Segment E or demonstrate that non-compliance is due to upstream contributions and submit report to the Los Angeles Water Board           | MS4 Permittees discharging to Segment E, if using LRS                                | September 23, 2031    |
| <b>SEGMENT E TRIBUTARIES (Dry Canyon Creek, McCoy Creek, Bell Creek, and Aliso Canyon Wash)</b>  |  |                       |
| <b>First phase – Segment E Tributaries</b>   |  |                       |
| Submit a Load Reduction Strategy (LRS) for Segment E tributaries ( <i>or submit an alternative compliance plan</i> )   | MS4 Permittees discharging to Segment E tributaries                                  | September 23, 2021    |

| <b>Implementation Action</b>   | <b>Responsible Parties</b>   | <b>Deadline</b>       |
|--|--|-----------------------|
| Complete implementation of LRS   | MS4 Permittees discharging to Segment E tributaries if using LRS   | March 23, 2026        |
| Achieve interim (or final) water quality-based effluent limitations and submit report to the Los Angeles Water Board   | MS4 Permittees discharging to Segment E tributaries, if using LRS  | March 23, 2029        |
| <i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to the Los Angeles Water Board</i>   | <i>MS4 Permittees discharging to Segment E tributaries, if using alternative compliance plan</i>               | <i>March 23, 2029</i> |
| <b>Second phase, if necessary – Segment E Tributaries for LRS approach only</b>  |  |                       |
| Submit a new LRS   | MS4 Permittees discharging to Segment E tributaries  | March 23, 2030        |
| Complete implementation of LRS   | MS4 Permittees discharging to Segment E tributaries, if using LRS  | September 23, 2033    |
| Achieve final water quality-based effluent limitations in Segment E tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to the Los Angeles Water Board   | MS4 Permittees discharging to Segment E tributaries, if using LRS  | September 23, 2035    |
| <b>SEGMENT C (lower Reach 4 and Reach 3 – Tujunga Avenue to Figueroa Street)</b><br><b>SEGMENT C TRIBUTARIES (Tujunga Wash, Burbank Western Channel, and Verdugo Wash)</b><br><b>SEGMENT D (Reach 5 and upper Reach 4 – Balboa Boulevard to Tujunga Avenue)</b><br><b>SEGMENT D TRIBUTARIES (Bull Creek)</b> |  |                       |
| <b>First phase – Segment C, Segment C Tributaries, Segment D, Segment D Tributaries</b>  |  |                       |
| Submit a Load Reduction Strategies (LRS) for Segment C, Segment C tributaries, Segment D, Segment D tributaries (or submit an alternative compliance plan)   | MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries               | March 23, 2023        |
| Complete implementation of LRS   | MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using LRS | September 23, 2027    |

| <b>Implementation Action</b>  | <b>Responsible Parties</b>  | <b>Deadline</b>           |
|---|---|---------------------------|
| Achieve interim (or final) water quality-based effluent limitations and submit report to the Los Angeles Water Board  | MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using LRS                                | September 23, 2030        |
| <i>Achieve final water quality-based effluent limitations or demonstrate that non-compliance is due to upstream contributions and submit report to the Los Angeles Water Board</i>  | <i>MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries, if using alternative compliance plan</i> | <i>September 23, 2030</i> |
| <b>Second phase, if necessary - Segment C, Segment C Tributaries, Segment D, Segment D Tributaries for LRS approach only</b>  |   |                           |
| Submit a new LRS  | MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries  | September 23, 2031        |
| Complete implementation of LRS  | MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries if using LRS                                 | March 23, 2035            |
| Achieve final water quality-based effluent limitations in Segment C, Segment C tributaries, Segment D, Segment D tributaries or demonstrate that non-compliance is due to upstream contributions and submit report to the Los Angeles Water Board | MS4 Permittees discharging to Segment C, Segment C tributaries, Segment D, Segment D tributaries if using LRS                                 | March 23, 2037            |

**E. Compliance Determination**

1. Permittees may demonstrate compliance with the final dry weather receiving water limitations by demonstrating that the receiving water limitations are met in-stream or by demonstrating one of the following conditions at outfalls to the receiving waters:
  - a. Flow-weighted concentration of *E. coli* in MS4 discharges during dry weather is less than or equal to 235 MPN/100mL, based on a weighted-average using flow rates from all measured outfalls; or
  - b. Zero discharge during dry weather; or
  - c. Demonstration that the MS4 loading of *E. coli* to the segment or tributary during dry weather is less than or equal to a calculated loading rate that would not cause or contribute to exceedances based on the loading capacity representative of conditions in the River at the time of compliance.
2. In addition, individual Permittees or subgroups of Permittees may differentiate their dry weather discharges from other dischargers or upstream contributions by demonstrating

one of the following conditions at outfalls to the receiving water or at a segment, tributary or jurisdictional boundary:

- a. The flow-weighted concentration of *E. coli* in a Permittee’s individual discharge or in a group of Permittees’ collective discharge during dry weather is less than or equal to 235 MPN/100mL, based on a weighted-average using flow rates from all measured outfalls; or
- b. Zero discharge from a Permittee’s individual outfall(s) or from a group of Permittees’ outfalls during dry weather; or
- c. Demonstration that the MS4 loading of *E. coli* to the segment or tributary during dry weather is less than or equal to a calculated loading rate that would not cause or contribute to exceedances based on the loading capacity representative of conditions in the River at the time of compliance.

**V. LONG BEACH CITY BEACHES AND LOS ANGELES RIVER ESTUARY INDICATOR BACTERIA TMDL (U.S. EPA ESTABLISHED)**

- A. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
- B. Permittees shall comply with the following water quality-based effluent limitations and receiving water limitations per the provisions in Part IV.B.2.c of the Order (U.S. EPA Established TMDLs).
- C. Permittees shall comply with the following water quality-based effluent limitations for dry weather, wet weather, and geometric mean for discharges to the Long Beach City Beaches and the Los Angeles River Estuary aligning with the compliance schedules in Part IV.B.2.c of the Order:

| Constituent    | Effluent Limitations (MPN or cfu) |                |
|----------------|-----------------------------------|----------------|
|                | Daily Maximum                     | Geometric Mean |
| Total coliform | 10,000/100 mL <sup>13</sup>       | 1,000/100 mL   |
| Fecal coliform | 400/100 mL                        | 200/100 mL     |
| Enterococcus   | 104/100 mL                        | 35/100 mL      |

- D. Receiving Water Limitations
  - 1. Permittees shall comply with the following grouped<sup>14</sup> receiving water limitations during dry and wet weather<sup>15</sup> for each receiving water monitoring location at the Long Beach City Beaches with direct MS4 discharges<sup>16</sup>:

<sup>13</sup> Total coliform density shall not exceed a daily maximum of 1,000/100mL, if the ratio of fecal-to-total coliform exceeds 0.1.  
<sup>14</sup> The receiving water limitations are group-based and shared among all MS4 Permittees in the Order and Caltrans.  
<sup>15</sup> Wet weather is defined as a day with 0.1 inch of rain or greater and the three days following the rain event. Dry weather is defined as a non-wet day.  
<sup>16</sup> Monitoring locations less than or equal to 400 yards away from a storm drain and more than 200 meters apart from each other.

| Site ID | Monitoring Location                                | Annual Allowable Exceedance Days of the Single Sample Objectives <sup>17</sup> |                 |  |                 |  |                 |
|---------|--|--|-----------------|--|-----------------|--|-----------------|
|         |  | Winter Dry-Weather (November 1 to March 31)                                    |                 | Summer Dry-Weather (April 1 to October 31) |                 | Wet-Weather (November 1 to October 31) |                 |
|         |  | Daily sampling   | Weekly sampling | Daily sampling                             | Weekly sampling | Daily sampling                         | Weekly sampling |
| B63     | Long Beach City Beach, 3rd Place                   | 9  | 2               | 0  | 0               | 17                                     | 3               |
| B56     | Long Beach City Beach, projection of 10th Place    | 9  | 2               | 0  | 0               | 17                                     | 3               |
| B6      | Long Beach City Beach, projection of 16th Place    | 9  | 2               | 0  | 0               | 17                                     | 3               |
| B60     | Long Beach City Beach, projection of Molino Av.    | 9  | 2               | 0  | 0               | 17                                     | 3               |
| B7      | Long Beach City Beach, projection of Coronado Ave. | 9  | 2               | 0  | 0               | 17                                     | 3               |
| B62     | Long Beach City Beach, projection of 36th Place    | 9  | 2               | 0  | 0               | 17                                     | 3               |
| B8      | Long Beach City Beach - West side of Belmont Pier  | 9  | 2               | 0  | 0               | 17                                     | 3               |

2. Permittees shall comply with the following grouped<sup>18</sup> receiving water limitations during dry and wet weather for each receiving water monitoring location in the Los Angeles River Estuary:

| Annual Allowable Exceedance Days of the Single Sample Objectives <sup>19</sup> |                 |  |                 |  |                 |
|--|-----------------|--|-----------------|--|-----------------|
| Winter Dry-Weather (November 1 to March 31)                                    |                 | Summer Dry-Weather (April 1 to October 31) |                 | Wet-Weather (November 1 to October 31) |                 |
| Daily sampling   | Weekly sampling | Daily sampling                             | Weekly sampling | Daily sampling                         | Weekly sampling |
| 9  | 2               | 0  | 0               | 17                                     | 3               |

<sup>17</sup> The Single Sample Objectives are equivalent to the daily maximum values listed in subpart C above.

<sup>18</sup> The receiving water limitations are group-based and shared among all MS4 Permittees in the Order and Caltrans.

<sup>19</sup> The Single Sample Objectives are equivalent to the daily maximum values listed in subpart C above.

- 3. Permittees shall monitor at a minimum of three monitoring locations within the Los Angeles River Estuary where each receiving water monitoring location shall be located more than 200 meters apart from each other.
- 4. Permittees shall comply with the following geometric mean receiving water limitations for each receiving water monitoring location at the Long Beach City Beaches and the Los Angeles River Estuary:

| Constituent    | Rolling 30-day Geometric Mean (MPN or cfu) <sup>20</sup> |
|----------------|--|
| Total coliform | 1,000/100 mL   |
| Fecal coliform | 200/100 mL   |
| Enterococcus   | 35/100 mL  |

- 5. Permittees may demonstrate compliance with dry weather receiving water limitations for Los Angeles River Estuary as follows:
  - a. By demonstrating that the receiving water limitations expressed as allowable exceedance days are met in the Los Angeles River Estuary or by demonstrating one of the following conditions at outfalls discharging to the Los Angeles River Estuary:
    - i. Flow-weighted concentration of bacterial indicators in MS4 discharges during dry weather is less than or equal to the daily maximum water quality objectives in subpart C above, based on a weighted-average using flow rates from all measured outfalls; or
    - ii. Zero discharge during dry weather.
  - b. In addition, individual Permittees or subgroups of Permittees may differentiate their dry weather discharges from other dischargers or upstream contributions by demonstrating one of the following conditions at outfalls to the Los Angeles River Estuary or jurisdictional boundaries:
    - i. The flow-weighted concentration of bacterial indicators in a Permittee’s individual discharge or in a group of Permittees’ collective discharge during dry weather is less than or equal to the daily maximum water quality objectives in subpart C above, based on a weighted-average using flow rates from all measured outfalls; or
    - ii. Zero discharge from a Permittee’s individual outfall(s) or from a group of Permittees’ outfall(s) during dry weather.

**VI. LEGG LAKE TRASH TMDL**

- A. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
- B. Permittees shall comply with the water quality-based effluent limitation of zero trash discharged to Legg Lake as of the effective date of the Order and every water year thereafter.
- C. Permittees shall comply with the water quality-based effluent limitations for trash per the provisions in Part IV.B.3 of the Order.

<sup>20</sup> Geometric mean values shall be calculated on each sample day based on a statistically sufficient number of samples (generally not less than 5 samples equally spaced over a 30-day period) consistent with the REC-1 bacteria objectives.

**VII. LOS ANGELES AREA LAKES TMDLS (U.S. EPA ESTABLISHED) – LEGG LAKE, LAKE CALABASAS, ECHO PARK LAKE, AND PECK ROAD PARK LAKE**

**A. Legg Lake System<sup>21</sup> Nutrient TMDL**

1. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
2. Permittees shall comply with the following water quality-based effluent limitations and receiving water limitations per the provisions in Part IV.B.2.c of the Order (U.S. EPA Established TMDLs).
3. Permittees shall comply with the following mass-based water quality-based effluent limitations for discharges to the Legg Lake system:

| Subwatershed | Permittee              | Effluent Limitations <sup>22</sup> |                                      |
|--------------|------------------------|------------------------------------|--------------------------------------|
|              |                        | Total Phosphorus (lb/yr)           | Total Nitrogen <sup>23</sup> (lb/yr) |
| Northwestern | Los Angeles, County of | 53.6                               | 148.7                                |
| Northwestern | South El Monte         | 526.3                              | 1,500.6                              |
| Northeastern | El Monte               | 226.6                              | 590.3                                |
| Northeastern | Los Angeles, County of | 12.8                               | 39.2                                 |
| Northeastern | South El Monte         | 498.7                              | 1,394.8                              |

4. In lieu of demonstrating compliance per subpart 3 above, Permittees may elect to demonstrate compliance with concentration-based in-lake receiving water limitations and alternative water quality-based effluent limitations within the Legg Lake system as follows:
  - a. Permittees shall submit a request to both the Los Angeles Water Board and U.S. EPA that includes a Lake Management Plan describing actions that will be implemented to ensure that concentration-based in-lake receiving water limitations and alternative water quality-based effluent limitations in subpart c below are met.
  - b. The Los Angeles Water Board Executive Officer approves a request by a Permittee to comply with the concentration-based in-lake receiving water limitations and alternative water quality-based effluent limitations, and the U.S. EPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
  - c. Upon Los Angeles Water Board Executive Officer approval, Permittees shall comply with the following concentration-based in-lake receiving water limitations and alternative water quality-based effluent limitations:

| Constituent                | Receiving Water Limitations  |
|----------------------------|--|
| Ammonia (NH <sub>3</sub> ) | Applicable 30-day average (for Early Life Stage Present Condition) receiving water limitation per Table 3-2 of the Basin Plan  |
| Dissolved Oxygen           | ≥ <u>Greater than or equal to</u> 7 mg/L annual average and ≥ <u>greater than or equal to</u> 6 mg/L instantaneous maximum <u>except when natural conditions cause lesser concentrations</u> |

<sup>21</sup> The Legg Lake system refers to North Lake, Center Lake, and Legg Lake. Subwatersheds referenced in this section are defined in Section 9 of the Los Angeles Area Lakes TMDL.

<sup>22</sup> Measured at the point of discharge. The mass-based effluent limitations are equivalent to existing concentrations of 0.065 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.65 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

<sup>23</sup> Total Nitrogen shall be calculated as TKN plus Nitrate-N plus Nitrite-N.

| Constituent          | Receiving Water Limitations  |
|----------------------|--|
| pH                   | 6.5 – 8.5 instantaneous value; Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of MS4 discharges. |
| Chlorophyll <i>a</i> | 20 µg/L summer average (May – September) and annual average  |

| Constituent                  | Alternative Effluent Limitations                             |
|------------------------------|--|
| Total Phosphorus             | 0.1 mg/L summer average (May – September) and annual average |
| Total Nitrogen <sup>24</sup> | 1.0 mg/L summer average (May – September) and annual average |

- d. Permittees shall be in compliance with total phosphorus and total nitrogen alternative water quality-based effluent limitations in subpart c above, if receiving water limitations for ammonia, dissolved oxygen, and pH, and the chlorophyll *a* target are met.

**B. Lake Calabastas Nutrient TMDL**

1. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
2. Permittees shall comply with the following water quality-based effluent limitations and receiving water limitations per the provisions in Part IV.B.2.c of the Order (U.S. EPA Established TMDLs).
3. Permittees shall comply with the following mass-based water quality-based effluent limitations for discharges to Lake Calabastas:

| Permittee  | Effluent Limitations <sup>25</sup> |                                      |
|------------|------------------------------------|--------------------------------------|
|            | Total Phosphorus (lb/yr)           | Total Nitrogen <sup>26</sup> (lb/yr) |
| Calabastas | 48.5                               | 220                                  |

4. In lieu of demonstrating compliance per subpart 3 above, Permittees may elect to demonstrate compliance with concentration-based in-lake receiving water limitations and alternative water quality-based effluent limitations for Lake Calabastas as follows:
  - a. Permittees shall submit a request to both the Los Angeles Water Board and U.S. EPA that includes a Lake Management Plan describing actions that will be implemented to ensure that concentration-based in-lake receiving water limitations and alternative water quality-based effluent limitations in subpart c below are met.
  - b. The Los Angeles Water Board Executive Officer approves a request by a Permittee to comply with the concentration-based in-lake receiving water limitations and alternative water quality-based effluent limitations, and the U.S. EPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
  - c. Upon Los Angeles Water Board Executive Officer approval, Permittees shall comply with the following concentration-based in-lake receiving water limitations and alternative water quality-based effluent limitations:

<sup>24</sup> Total Nitrogen shall be calculated as TKN plus Nitrate-N plus Nitrite-N.

<sup>25</sup> Measured at the point of discharge. The mass-based effluent limitations are equivalent to existing concentrations of 0.066 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.66 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

<sup>26</sup> Total Nitrogen shall be calculated as TKN plus Nitrate-N plus Nitrite-N.



| Constituent                | Receiving Water Limitations  |
|----------------------------|--|
| Ammonia (NH <sub>3</sub> ) | Applicable 30-day average (for Early Life Stage Absent Condition) receiving water limitation per Table 3-3 of the Basin Plan   |
| Dissolved Oxygen           | <u>≥Greater than or equal to 7 mg/L annual average and ≥greater than or equal to 5 mg/L instantaneous maximum except when natural conditions cause lesser concentrations</u> |
| pH                         | 6.5 – 8.5 instantaneous value; Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of MS4 discharges.                             |
| Chlorophyll a              | 20 µg/L summer average (May – September) and annual average  |

| Constituent                  | Alternative Effluent Limitations                             |
|------------------------------|--|
| Total Phosphorus             | 0.1 mg/L summer average (May – September) and annual average |
| Total Nitrogen <sup>27</sup> | 1.0 mg/L summer average (May – September) and annual average |

- d. Permittees shall be in compliance with total phosphorus and total nitrogen alternative water quality-based effluent limitations in subpart c above, if receiving water limitations for ammonia, dissolved oxygen, and pH, and the chlorophyll a target are met.

**C. Echo Park Lake<sup>28</sup> Nutrient TMDL**

1. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
2. Permittees shall comply with the following mass-based water quality-based effluent limitations for discharges to Echo Park Lake as of the effective date of the Order:

| Subwatershed | Permittee           | Effluent Limitations <sup>29</sup> |                                      |
|--------------|---------------------|------------------------------------|--------------------------------------|
|              |                     | Total Phosphorus (lb/yr)           | Total Nitrogen <sup>30</sup> (lb/yr) |
| Northern     | City of Los Angeles | 24.7                               | 156                                  |
| Southern     | City of Los Angeles | 7.129                              | 49.69                                |

3. In assessing compliance, Permittees assigned both northern and southern subwatershed water quality-based effluent limitations may combine their water quality-based effluent limitations.
4. In lieu of demonstrating compliance per subpart 2 above, Permittees may elect to demonstrate compliance with the following concentration-based in-lake receiving water limitations for Echo Park Lake as of the effective date of the Order:

| Constituent                | Receiving Water Limitations  |
|----------------------------|--|
| Ammonia (NH <sub>3</sub> ) | Applicable 30-day average (for Early Life Stage Absent Condition) receiving water limitation per Table 3-3 of the Basin Plan   |
| Dissolved Oxygen           | <u>≥Greater than or equal to 7 mg/L annual average and ≥greater than or equal to 5 mg/L instantaneous maximum except when natural conditions cause lesser concentrations</u> |

<sup>27</sup> Total Nitrogen shall be calculated as TKN plus Nitrate-N plus Nitrite-N.

<sup>28</sup> Subwatersheds referenced in this section are defined in Section 6 of the Los Angeles Area Lakes TMDL.

<sup>29</sup> Measured at the point of discharge using a three-year average. The mass-based effluent limitations are equivalent to existing concentrations of 0.12 mg/L total phosphorus as a summer average (May-September) and annual average, and 1.2 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

<sup>30</sup> Total Nitrogen shall be calculated as TKN plus Nitrate-N plus Nitrite-N.

| Constituent          | Receiving Water Limitations  |
|----------------------|--|
| pH                   | 6.5 – 8.5 instantaneous value; Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of MS4 discharges. |
| Chlorophyll <i>a</i> | 20 µg/L summer average (May – September) and annual average  |

5. Permittees shall be in compliance with total phosphorus and total nitrogen water quality-based effluent limitations in subpart 2 above, if receiving water limitations for ammonia, dissolved oxygen, pH, and chlorophyll *a* are met.

**D. Echo Park Lake<sup>31</sup> PCBs TMDL**

1. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
2. Permittees shall comply with the following water quality-based effluent limitations per the provisions in Part IV.B.2.c of the Order (U.S. EPA Established TMDLs).
3. Permittees shall comply with the following water quality-based effluent limitations for discharges to Echo Park Lake:

| Subwatershed | Permittee           | Daily Maximum Effluent Limitations <sup>32</sup>    |                                       |
|--------------|---------------------|---|---------------------------------------|
|              |                     | Total PCBs in Suspended Sediment (µg/kg dry weight) | Total PCBs in the Water Column (ng/L) |
| Northern     | City of Los Angeles | 1.77  | 0.17                                  |
| Southern     | City of Los Angeles | 1.77  | 0.17                                  |

4. In lieu of demonstrating compliance per subpart 3 above, Permittees may elect to demonstrate compliance with alternative water quality-based effluent limitations for discharges to Echo Park Lake as follows:
  - a. Permittees shall submit documentation to the Los Angeles Water Board and U.S. EPA demonstrating that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin off fillets from at least five common carp each measuring at least 350 mm in length.
  - b. The Los Angeles Water Board Executive Officer approves a request by a Permittee to comply with alternative water quality-based effluent limitations, and the U.S. EPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
  - c. Upon Los Angeles Water Board Executive Officer approval, Permittees shall comply with the following alternative water quality-based effluent limitations:

| Subwatershed | Permittee           | Alternative Daily Maximum Effluent Limitations <sup>33</sup> |                                       |
|--------------|---------------------|--|---------------------------------------|
|              |                     | Total PCBs in Suspended Sediment (µg/kg dry weight)          | Total PCBs in the Water Column (ng/L) |
| Northern     | City of Los Angeles | 59.8   | 0.17                                  |
| Southern     | City of Los Angeles | 59.8   | 0.17                                  |

<sup>31</sup> Subwatersheds referenced in this section are defined in Section 6 of the Los Angeles Area Lakes TMDL.

<sup>32</sup> Measured at the point of discharge.

<sup>33</sup> Ibid.

**E. Echo Park Lake<sup>34</sup> Chlordane TMDL**

1. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
2. Permittees shall comply with the following water quality-based effluent limitations per the provisions in Part IV.B.2.c of the Order (U.S. EPA Established TMDLs).
3. Permittees shall comply with the following water quality-based effluent limitations for discharges to Echo Park Lake:

| Subwatershed | Permittee           | Daily Maximum Effluent Limitations <sup>35</sup>         |  |
|--------------|---------------------|--|--|
|              |                     | Total Chlordane in Suspended Sediment (µg/kg dry weight) | Total Chlordane in the Water Column (ng/L) |
| Northern     | City of Los Angeles | 2.10   | 0.59                                       |
| Southern     | City of Los Angeles | 2.10   | 0.59                                       |

4. In lieu of demonstrating compliance per subpart 3 above, Permittees may elect to demonstrate compliance with alternative water quality-based effluent limitations for discharges to Echo Park Lake as follows:
  - a. Permittees shall submit documentation to the Los Angeles Water Board and U.S. EPA demonstrating that the fish tissue target of 5.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin off fillets from at least five common carp each measuring at least 350 mm in length.
  - b. The Los Angeles Water Board Executive Officer approves a request by a Permittee to comply with alternative water quality-based effluent limitations, and the U.S. EPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
  - c. Upon Los Angeles Water Board Executive Officer approval, Permittees shall comply with the following alternative water quality-based effluent limitations:

| Subwatershed | Permittee           | Alternative Daily Maximum Effluent Limitations <sup>36</sup> |  |
|--------------|---------------------|--|--|
|              |                     | Total Chlordane in Suspended Sediment (µg/kg dry weight)     | Total Chlordane in the Water Column (ng/L) |
| Northern     | City of Los Angeles | 3.24   | 0.59                                       |
| Southern     | City of Los Angeles | 3.24   | 0.59                                       |

**F. Echo Park Lake<sup>37</sup> Dieldrin TMDL**

1. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
2. Permittees shall comply with the following water quality-based effluent limitations per the provisions in Part IV.B.2.c of the Order (U.S. EPA Established TMDLs).
3. Permittees shall comply with the following water quality-based effluent limitations for discharges to Echo Park Lake:

<sup>34</sup> Subwatersheds referenced in this section are defined in Section 6 of the Los Angeles Area Lakes TMDL.

<sup>35</sup> Measured at the point of discharge.

<sup>36</sup> Ibid.

<sup>37</sup> Subwatersheds referenced in this section are defined in Section 6 of the Los Angeles Area Lakes TMDL.

| Subwatershed | Permittee           | Daily Maximum Effluent Limitations <sup>38</sup>  |                                     |
|--------------|---------------------|---|-------------------------------------|
|              |                     | Dieldrin in Suspended Sediment (µg/kg dry weight) | Dieldrin in the Water Column (ng/L) |
| Northern     | City of Los Angeles | 0.80  | 0.14                                |
| Southern     | City of Los Angeles | 0.80  | 0.14                                |

4. In lieu of demonstrating compliance per subpart 3 above, Permittees may elect to demonstrate compliance with alternative water quality-based effluent limitations for discharges to Echo Park Lake as follows:
  - a. Permittees shall submit documentation to the Los Angeles Water Board and U.S. EPA demonstrating that the fish tissue target of 0.46 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin off fillets from at least five common carp each measuring at least 350 mm in length.
  - b. The Los Angeles Water Board Executive Officer approves a request by a Permittee to comply with alternative water quality-based effluent limitations, and the U.S. EPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
  - c. Upon Los Angeles Water Board Executive Officer approval, Permittees shall comply with the following alternative water quality-based effluent limitations:

| Subwatershed | Permittee           | Alternative Daily Maximum Effluent Limitations <sup>39</sup> |                                     |
|--------------|---------------------|--|-------------------------------------|
|              |                     | Dieldrin in Suspended Sediment (µg/kg dry weight)            | Dieldrin in the Water Column (ng/L) |
| Northern     | City of Los Angeles | 1.90   | 0.14                                |
| Southern     | City of Los Angeles | 1.90   | 0.14                                |

**G. Echo Park Lake Trash TMDL**

1. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
2. Permittees shall comply with the water quality-based effluent limitation of zero trash discharged to Echo Park Lake and its shoreline as of the effective date of the Order, and every water year thereafter as follows:

| Permittee           | Trash (Gallons/year) |
|---------------------|----------------------|
| City of Los Angeles | 0                    |

3. Permittees shall comply with water quality-based effluent limitations for trash per the provisions in Part IV.B.3 of the Order.

**H. Peck Road Park Lake<sup>40</sup> Nutrient TMDL**

1. Permittees subject to the provisions below are identified in Attachment J, Table J-11.

<sup>38</sup> Measured at the point of discharge.

<sup>39</sup> Ibid.

<sup>40</sup> Subwatersheds referenced in this section are defined in Section 4 of the Los Angeles Area Lakes TMDL.

2. Permittees shall comply with the following mass-based water quality-based effluent limitations for discharges to Peck Road Park Lake as of the effective date of the Order:

| Subwatershed | Permittee              | Effluent Limitations <sup>41</sup> |                                      |
|--------------|------------------------|------------------------------------|--------------------------------------|
|              |                        | Total Phosphorus (lb/yr)           | Total Nitrogen <sup>42</sup> (lb/yr) |
| Eastern      | Arcadia                | 383                                | 2,320                                |
| Eastern      | Bradbury               | 497                                | 3,223                                |
| Eastern      | Duarte                 | 1,540                              | 9,616                                |
| Eastern      | Irwindale              | 496                                | 3,487                                |
| Eastern      | Los Angeles, County of | 924                                | 5,532                                |
| Eastern      | Monrovia               | 6,243                              | 38,736                               |
| Near Lake    | Arcadia                | 158                                | 1,115                                |
| Near Lake    | El Monte               | 96.2                               | 602                                  |
| Near Lake    | Irwindale              | 28.2                               | 207                                  |
| Near Lake    | Los Angeles, County of | 129                                | 773                                  |
| Near Lake    | Monrovia               | 60.4                               | 415                                  |
| Western      | Arcadia                | 2,840                              | 16,334                               |
| Western      | Los Angeles, County of | 467                                | 2,818                                |
| Western      | Monrovia               | 425                                | 2,678                                |
| Western      | Sierra Madre           | 695                                | 4,254                                |

3. In lieu of demonstrating compliance per subpart 2 above, Permittees may elect to demonstrate compliance with the following concentration-based in-lake receiving water limitations for Peck Road Park Lake as of the effective date of the Order:

| Constituent                | Receiving Water Limitations  |
|----------------------------|--|
| Ammonia (NH <sub>3</sub> ) | Applicable 30-day average (for Early Life Stage Absent Condition) receiving water limitation per Table 3-3 of the Basin Plan   |
| Dissolved Oxygen           | <u>≥Greater than or equal to 7 mg/L annual average and ≥greater than or equal to 5 mg/L instantaneous maximum except when natural conditions cause lesser concentrations</u> |
| pH                         | 6.5 – 8.5 instantaneous value; Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of MS4 discharges.                             |
| Chlorophyll a              | 20 µg/L summer average (May – September) and annual average  |

4. Permittees shall be in compliance with total phosphorus and total nitrogen water quality-based effluent limitations in subpart 2 above, if receiving water limitations for ammonia, dissolved oxygen, pH, and chlorophyll a are met.

**I. Peck Road Park Lake<sup>43</sup> PCBs TMDL**

1. Permittees subject to the provisions below are identified in Attachment J, Table J-11.

<sup>41</sup> Measured at the point of discharge using a three-year average. The mass-based effluent limitations are equivalent to existing concentrations of 0.076 mg/L total phosphorus as a summer average (May-September) and annual average, and 0.76 mg/L total nitrogen as a summer average (May-September) and annual average based on approved flow conditions.

<sup>42</sup> Total Nitrogen shall be calculated as TKN plus Nitrate-N plus Nitrite-N.

<sup>43</sup> Subwatersheds referenced in this section are defined in Section 4 of the Los Angeles Area Lakes TMDL.

2. Permittees shall comply with the following water quality-based effluent limitations per the provisions in Part IV.B.2.c of the Order (U.S. EPA Established TMDLs).
3. Permittees shall comply with the following water quality-based effluent limitations for discharges to Peck Road Park Lake:

| Subwatershed | Permittee              | Daily Maximum Effluent Limitations <sup>44</sup>    |                                       |
|--------------|------------------------|---|---------------------------------------|
|              |                        | Total PCBs in Suspended Sediment (µg/kg dry weight) | Total PCBs in the Water Column (ng/L) |
| Eastern      | Arcadia                | 1.29  | 0.17                                  |
| Eastern      | Bradbury               | 1.29  | 0.17                                  |
| Eastern      | Duarte                 | 1.29  | 0.17                                  |
| Eastern      | Irwindale              | 1.29  | 0.17                                  |
| Eastern      | Los Angeles, County of | 1.29  | 0.17                                  |
| Eastern      | Monrovia               | 1.29  | 0.17                                  |
| Near Lake    | Arcadia                | 1.29  | 0.17                                  |
| Near Lake    | El Monte               | 1.29  | 0.17                                  |
| Near Lake    | Irwindale              | 1.29  | 0.17                                  |
| Near Lake    | Los Angeles, County of | 1.29  | 0.17                                  |
| Near Lake    | Monrovia               | 1.29  | 0.17                                  |
| Western      | Arcadia                | 1.29  | 0.17                                  |
| Western      | Los Angeles, County of | 1.29  | 0.17                                  |
| Western      | Monrovia               | 1.29  | 0.17                                  |
| Western      | Sierra Madre           | 1.29  | 0.17                                  |

4. In lieu of demonstrating compliance per subpart 3 above, Permittees may elect to demonstrate compliance with alternative water quality-based effluent limitations for discharges to Peck Road Park Lake as follows:
  - a. Permittees shall submit documentation to the Los Angeles Water Board and U.S. EPA demonstrating that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin off fillets from at least five largemouth bass each measuring at least 350 mm in length.
  - b. The Los Angeles Water Board Executive Officer approves a request by a Permittee to comply with alternative water quality-based effluent limitations, and the U.S. EPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
  - c. Upon Los Angeles Water Board Executive Officer approval, Permittees shall comply with the following alternative water quality-based effluent limitations:

| Subwatershed | Permittee | Alternative Daily Maximum Effluent Limitations <sup>45</sup> |                                       |
|--------------|-----------|--|---------------------------------------|
|              |           | Total PCBs in Suspended Sediment (µg/kg dry weight)          | Total PCBs in the Water Column (ng/L) |
| Eastern      | Arcadia   | 59.8   | 0.17                                  |
| Eastern      | Bradbury  | 59.8   | 0.17                                  |
| Eastern      | Duarte    | 59.8   | 0.17                                  |

<sup>44</sup> Measured at the point of discharge.

<sup>45</sup> Ibid.

| Subwatershed | Permittee              | Alternative Daily Maximum Effluent Limitations <sup>45</sup> |                                       |
|--------------|------------------------|--|---------------------------------------|
|              |                        | Total PCBs in Suspended Sediment (µg/kg dry weight)          | Total PCBs in the Water Column (ng/L) |
| Eastern      | Irwindale              | 59.8   | 0.17                                  |
| Eastern      | Los Angeles, County of | 59.8   | 0.17                                  |
| Eastern      | Monrovia               | 59.8   | 0.17                                  |
| Near Lake    | Arcadia                | 59.8   | 0.17                                  |
| Near Lake    | El Monte               | 59.8   | 0.17                                  |
| Near Lake    | Irwindale              | 59.8   | 0.17                                  |
| Near Lake    | Los Angeles, County of | 59.8   | 0.17                                  |
| Near Lake    | Monrovia               | 59.8   | 0.17                                  |
| Western      | Arcadia                | 59.8   | 0.17                                  |
| Western      | Los Angeles, County of | 59.8   | 0.17                                  |
| Western      | Monrovia               | 59.8   | 0.17                                  |
| Western      | Sierra Madre           | 59.8   | 0.17                                  |

**J. Peck Road Park Lake<sup>46</sup> Chlordane TMDL**

1. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
2. Permittees shall comply with the following water quality-based effluent limitations per the provisions in Part IV.B.2.c of the Order (U.S. EPA Established TMDLs).
3. Permittees shall comply with the following water quality-based effluent limitations for discharges to Peck Road Park Lake:

| Subwatershed | Permittee              | Daily Maximum Effluent Limitation <sup>47</sup>          |  |
|--------------|------------------------|--|--|
|              |                        | Total Chlordane in Suspended Sediment (µg/kg dry weight) | Total Chlordane in the Water Column (ng/L) |
| Eastern      | Arcadia                | 1.73   | 0.59                                       |
| Eastern      | Bradbury               | 1.73   | 0.59                                       |
| Eastern      | Duarte                 | 1.73   | 0.59                                       |
| Eastern      | Irwindale              | 1.73   | 0.59                                       |
| Eastern      | Los Angeles, County of | 1.73   | 0.59                                       |
| Eastern      | Monrovia               | 1.73   | 0.59                                       |
| Near Lake    | Arcadia                | 1.73   | 0.59                                       |
| Near Lake    | El Monte               | 1.73   | 0.59                                       |
| Near Lake    | Irwindale              | 1.73   | 0.59                                       |
| Near Lake    | Los Angeles, County of | 1.73   | 0.59                                       |
| Near Lake    | Monrovia               | 1.73   | 0.59                                       |
| Western      | Arcadia                | 1.73   | 0.59                                       |
| Western      | Los Angeles, County of | 1.73   | 0.59                                       |
| Western      | Monrovia               | 1.73   | 0.59                                       |
| Western      | Sierra Madre           | 1.73   | 0.59                                       |

<sup>46</sup> Subwatersheds referenced in this section are defined in Section 4 of the Los Angeles Area Lakes TMDL.

<sup>47</sup> Measured at the point of discharge.

4. In lieu of demonstrating compliance per subpart 3 above, Permittees may elect to demonstrate compliance with alternative water quality-based effluent limitations for discharges to Peck Road Park Lake as follows:
  - a. Permittees shall submit documentation to the Los Angeles Water Board and U.S. EPA demonstrating that the fish tissue target of 5.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin off fillets from at least five largemouth bass each measuring at least 350 mm in length.
  - b. The Los Angeles Water Board Executive Officer approves a request by a Permittee to comply with alternative water quality-based effluent limitations, and the U.S. EPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
  - c. Upon Los Angeles Water Board Executive Officer approval, Permittees shall comply with the following alternative water quality-based effluent limitations:

| Subwatershed | Permittee              | Alternative Daily Maximum Effluent Limitations <sup>48</sup> |  |
|--------------|------------------------|--|--|
|              |                        | Total Chlordane in Suspended Sediment (µg/kg dry weight)     | Total Chlordane in the Water Column (ng/L) |
| Eastern      | Arcadia                | 3.24   | 0.59                                       |
| Eastern      | Bradbury               | 3.24   | 0.59                                       |
| Eastern      | Duarte                 | 3.24   | 0.59                                       |
| Eastern      | Irwindale              | 3.24   | 0.59                                       |
| Eastern      | Los Angeles, County of | 3.24   | 0.59                                       |
| Eastern      | Monrovia               | 3.24   | 0.59                                       |
| Near Lake    | Arcadia                | 3.24   | 0.59                                       |
| Near Lake    | El Monte               | 3.24   | 0.59                                       |
| Near Lake    | Irwindale              | 3.24   | 0.59                                       |
| Near Lake    | Los Angeles, County of | 3.24   | 0.59                                       |
| Near Lake    | Monrovia               | 3.24   | 0.59                                       |
| Western      | Arcadia                | 3.24   | 0.59                                       |
| Western      | Los Angeles, County of | 3.24   | 0.59                                       |
| Western      | Monrovia               | 3.24   | 0.59                                       |
| Western      | Sierra Madre           | 3.24   | 0.59                                       |

**K. Peck Road Park Lake<sup>49</sup> DDTs TMDL**

1. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
2. Permittees shall comply with the following water quality-based effluent limitations per the provisions in Part IV.B.2.c of the Order (U.S. EPA Established TMDL).
3. Permittees shall comply with the following water quality-based effluent limitations for discharges to Peck Road Park Lake:

<sup>48</sup> Ibid.

<sup>49</sup> Subwatersheds referenced in this section are defined in Section 4 of the Los Angeles Area Lakes TMDL.



| Subwatershed | Permittee              | Daily Maximum Effluent Limitations <sup>50</sup>    |   |
|--------------|------------------------|---|---|
|              |                        | Total DDTs in Suspended Sediment (µg/kg dry weight) | Total DDTs in the Water Column (ng/L) <sup>51</sup> |
| Eastern      | Arcadia                | 5.28  | 0.59  |
| Eastern      | Bradbury               | 5.28  | 0.59  |
| Eastern      | Duarte                 | 5.28  | 0.59  |
| Eastern      | Irwindale              | 5.28  | 0.59  |
| Eastern      | Los Angeles, County of | 5.28  | 0.59  |
| Eastern      | Monrovia               | 5.28  | 0.59  |
| Near Lake    | Arcadia                | 5.28  | 0.59  |
| Near Lake    | El Monte               | 5.28  | 0.59  |
| Near Lake    | Irwindale              | 5.28  | 0.59  |
| Near Lake    | Los Angeles, County of | 5.28  | 0.59  |
| Near Lake    | Monrovia               | 5.28  | 0.59  |
| Western      | Arcadia                | 5.28  | 0.59  |
| Western      | Los Angeles, County of | 5.28  | 0.59  |
| Western      | Monrovia               | 5.28  | 0.59  |
| Western      | Sierra Madre           | 5.28  | 0.59  |

**L. Peck Road Park Lake<sup>52</sup> Dieldrin TMDL**

1. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
2. Permittees shall comply with the following water quality-based effluent limitations per the provisions in Part IV.B.2.c of the Order (U.S. EPA Established TMDLs).
3. Permittees shall comply with the following water quality-based effluent limitations for discharges to Peck Road Park Lake:

| Subwatershed | Permittee              | Daily Maximum Effluent Limitations <sup>53</sup>  |                                     |
|--------------|------------------------|---|-------------------------------------|
|              |                        | Dieldrin in Suspended Sediment (µg/kg dry weight) | Dieldrin in the Water Column (ng/L) |
| Eastern      | Arcadia                | 0.43  | 0.14                                |
| Eastern      | Bradbury               | 0.43  | 0.14                                |
| Eastern      | Duarte                 | 0.43  | 0.14                                |
| Eastern      | Irwindale              | 0.43  | 0.14                                |
| Eastern      | Los Angeles, County of | 0.43  | 0.14                                |
| Eastern      | Monrovia               | 0.43  | 0.14                                |
| Near Lake    | Arcadia                | 0.43  | 0.14                                |
| Near Lake    | El Monte               | 0.43  | 0.14                                |
| Near Lake    | Irwindale              | 0.43  | 0.14                                |
| Near Lake    | Los Angeles, County of | 0.43  | 0.14                                |

<sup>50</sup> Measured at the point of discharge.

<sup>51</sup> If analytical results ~~that resolve for~~ individual DDT compounds are available, then ~~all~~ the CTR criteria should be applied ~~individually. The CTR criteria should be applied~~ as follows ~~in lieu of the total DDT daily maximum effluent limitation~~: 4-4' DDT and 4-4' DDE ~~is-are each~~ assigned a ~~daily maximum~~ effluent limitation of 0.59 ng/L; 4-4' DDD is assigned a ~~daily maximum~~ effluent limitation of 0.83 ng/L.

<sup>52</sup> Subwatersheds referenced in this section are defined in Section 4 of the Los Angeles Area Lakes TMDL.

<sup>53</sup> Measured at the point of discharge.

| Subwatershed | Permittee              | Daily Maximum Effluent Limitations <sup>53</sup>  |                                     |
|--------------|------------------------|---|-------------------------------------|
|              |                        | Dieldrin in Suspended Sediment (µg/kg dry weight) | Dieldrin in the Water Column (ng/L) |
| Near Lake    | Monrovia               | 0.43  | 0.14                                |
| Western      | Arcadia                | 0.43  | 0.14                                |
| Western      | Los Angeles, County of | 0.43  | 0.14                                |
| Western      | Monrovia               | 0.43  | 0.14                                |
| Western      | Sierra Madre           | 0.43  | 0.14                                |

4. In lieu of demonstrating compliance per subpart 3 above, Permittees may elect to demonstrate compliance with alternative water quality-based effluent limitations for discharges to Peck Road Park Lake as follows:
- a. Permittees shall submit documentation to the Los Angeles Water Board and U.S. EPA demonstrating that the fish tissue target of 0.46 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin off fillets from at least five largemouth bass each measuring at least 350 mm in length.
  - b. The Los Angeles Water Board Executive Officer approves a request by a Permittee to comply with alternative water quality-based effluent limitations, and the U.S. EPA does not object to the Executive Officer’s decision within 60 days of receiving notice.
  - c. Upon Los Angeles Water Board Executive Officer approval, Permittees shall comply with the following alternative water quality-based effluent limitations:

| Subwatershed | Permittee              | Alternative Daily Maximum Effluent Limitations <sup>54</sup> |                                     |
|--------------|------------------------|--|-------------------------------------|
|              |                        | Dieldrin in Suspended Sediment (µg/kg dry weight)            | Dieldrin in the Water Column (ng/L) |
| Eastern      | Arcadia                | 1.90   | 0.14                                |
| Eastern      | Bradbury               | 1.90   | 0.14                                |
| Eastern      | Duarte                 | 1.90   | 0.14                                |
| Eastern      | Irwindale              | 1.90   | 0.14                                |
| Eastern      | Los Angeles, County of | 1.90   | 0.14                                |
| Eastern      | Monrovia               | 1.90   | 0.14                                |
| Near Lake    | Arcadia                | 1.90   | 0.14                                |
| Near Lake    | El Monte               | 1.90   | 0.14                                |
| Near Lake    | Irwindale              | 1.90   | 0.14                                |
| Near Lake    | Los Angeles, County of | 1.90   | 0.14                                |
| Near Lake    | Monrovia               | 1.90   | 0.14                                |
| Western      | Arcadia                | 1.90   | 0.14                                |
| Western      | Los Angeles, County of | 1.90   | 0.14                                |
| Western      | Monrovia               | 1.90   | 0.14                                |
| Western      | Sierra Madre           | 1.90   | 0.14                                |

<sup>54</sup> Ibid.

**M. Peck Road Park Lake Trash TMDL**

1. Permittees subject to the provisions below are identified in Attachment J, Table J-11.
2. Permittees shall comply with the water quality-based effluent limitation of zero trash discharged to Peck Road Park Lake and its shoreline as of the effective date of the Order, and every water year thereafter as follows:

| <b>Permittee</b>       | <b>Trash<br/>(gallons/year)</b> |
|------------------------|---------------------------------|
| Arcadia                | 0                               |
| Bradbury               | 0                               |
| Duarte                 | 0                               |
| El Monte               | 0                               |
| Irwindale              | 0                               |
| Los Angeles, County of | 0                               |
| Monrovia               | 0                               |
| Sierra Madre           | 0                               |

3. Permittees shall comply with water quality-based effluent limitations for trash per the provisions in Part IV.B.3 of the Order.