The requirements in this Attachment implement State Water Board Resolution 2015-0019, which amended the Water Quality Control Plan for Ocean Waters of California and the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California to include trash-related requirements, referred to in this Order as the "Trash Provisions." The Trash Provisions are statewide prohibitions and requirements implemented in part through NPDES stormwater permits. This Attachment includes the trash-related prohibitions and requirements implemented through this Order.

E1. TRASH DISCHARGE PROHIBITION
The Department shall comply with the prohibition of discharge of trash to surface waters of the State or deposition of trash where it may be discharged into surface waters of the State through compliance with the requirements of this Attachment.

E2. TRASH REQUIREMENTS COMPLIANCE DEADLINE
By December 2, 2030, the Department shall demonstrate full compliance with the requirements of this Attachment.

E3. TRASH PROVISIONS IMPLEMENTATION
Implementation of the Trash Provisions includes the following:

1. The Department shall install, operate, and maintain any combination of full capture systems, other treatment controls, and/or institutional controls for all storm drains that capture runoff from Significant Trash Generating Areas. The Department shall develop and implement monitoring plans that demonstrate that such combinations achieve full capture system equivalency.

2. The Department shall coordinate efforts with municipal separate storm sewer system permittees subject to NPDES permits that implement the Trash Provisions, to install, operate, and maintain full capture systems, other treatment controls, and/or institutional controls in Significant Trash Generating Areas and/or Priority Land Uses.

E4. SIGNIFICANT TRASH GENERATING AREAS
Significant Trash Generating Areas include all locations or facilities within the Department’s jurisdiction where trash accumulates in substantial amounts, such as:

1. Highway on-ramps and off-ramps in high density residential, commercial, and industrial land uses (as such land uses are defined under Priority Land Uses in Attachment B of this Order).

2. Rest areas and park-and-rides.

3. State highways in commercial and industrial land uses (as such land uses are defined under Priority Land Uses in Attachment B of this Order).
4. Mainline highway segments to be identified by the Department through pilot studies and/or surveys.

5. Areas identified by the State Water Board Executive Director in consultation with the appropriate Regional Board Executive Officer to be significant trash generating areas.

E5. **STATE WATER BOARD-CERTIFIED FULL CAPTURE SYSTEMS**

The Trash Provisions require the Department to address all significant trash generating areas either through the use of certified full capture systems or through an approach that achieves full capture system equivalency. The Department is not required to demonstrate full capture system equivalency (section E6) where it installs certified full capture systems, as defined in the Trash Provisions and as provided below:

1. Certified full capture systems are those that are certified by the State Water Board Executive Director. Certified full capture systems include both trash treatment control devices and multi-benefit treatment systems. Certified full capture systems are listed on the State Water Board’s [Trash Implementation Program](http://www.waterboards.ca.gov/water_issues/programs/stormwater/trash_implementation.html) website.

   Certified full capture systems trap all particles 5-millimeters or greater, and have a design treatment capacity that is either:

   a. Not less than the peak flow rate, Q, resulting from a one-year, one-hour, storm in the sub-drainage area, or

   b. Designed and sized to carry at least the same flows as the corresponding storm drain.

   The Rational equation is used to compute the peak flow rate: $Q = C \cdot I \cdot A$, where $Q =$ design flow rate (cubic feet per second); $C =$ runoff coefficient (dimensionless); $I =$ design rainfall intensity (inches per hour, as determined per the rainfall isohyetal map specific to each region, and $A =$ sub-drainage area (acres).

   To add a new trash treatment control device to the State Water Board Executive Director’s Certified Full Capture System List of Trash Treatment Control Devices, the Department shall submit a Trash Treatment Control Device application to the State Water Board Executive Director. The Executive Director will issue a written determination approving or denying the certification of the proposed trash treatment control device.

2. Installation of other treatment controls that are not certified full capture systems will not satisfy the requirements of this section; however, they may be considered as part of an approach to achieve Full Capture System Equivalency under section E6.
E6. FULL CAPTURE SYSTEM EQUIVALENCY

For areas where the Department is not implementing all certified full capture systems and is seeking approval of a full capture system equivalency approach, the Department shall demonstrate that any combination of other treatment controls, source control activities, and/or institutional controls achieves full capture equivalency. Full capture system equivalency is a trash load reduction equivalent to the performance of certified full capture systems that are properly installed, operated, and maintained for all storm drains that capture runoff from Significant Trash Generating Areas. Full capture system equivalency is a Trash load reduction target that the Department quantifies by using an approach, and technically acceptable and defensible assumptions and methods for applying the approach, for review and consideration of approval by the State Water Board Executive Director.

E7. TRASH REDUCTION MILESTONES AND FINAL COMPLIANCE

The Department shall report its status towards compliance with the Trash Requirements of this Order, annually in the Trash Annual Monitoring Report described in section E12 of this Attachment, per the following Trash Reduction Milestones:

1. First Milestone. By December 2, 2025, the Department shall achieve full capture system equivalency at 35 percent or more of the 16,645 acres of Significant Trash Generating Areas identified in its April 12, 2019 Statewide Trash Implementation Plan submitted to the State Water Board.

2. Second Milestone. By December 2, 2028, the Department shall achieve full capture system equivalency at 70 percent or more of the following:
   a. The 16,645 acres identified in the Department’s April 12, 2019 Statewide Trash Implementation Plan submitted to the State Water Board, plus
   b. The acres identified as Significant Trash Generating Areas in its Revised Trash Assessment Map required in section E10.

3. Final Compliance. By December 2, 2030, the Department shall achieve full capture system equivalency at 100 percent of the acres identified as Significant Trash Generating Areas in the Revised Trash Assessment Map required in section E10.

4. Until the Department completes its Trash Monitoring Plan as required in section E11, the Department shall implement its existing procedures and schedules to achieve compliance with the above milestones.

5. The Department may submit its own Trash Reduction Milestones for State Water Board Executive Director review and consideration of approval as part of the Trash Monitoring Plan required in section E11.1. If approved, the Department’s own Trash Reduction Milestones will supersede the above First and Second Milestones. Without
approval of custom Trash Reduction Milestones, the Department must comply with the milestones above.

E8. ANNUAL TRASH REDUCTION ASSESSMENT

The Department shall provide an annual assessment of the amount of trash reduction achieved through implementation of full capture systems, other treatment controls, and institutional controls. The annual trash reduction assessment shall be reported in the Trash Annual Report described in section E13, below.

E9. TRASH ASSESSMENT METHODOLOGY

The Department’s Trash Assessment Methodology shall establish mechanisms to assess the Department’s entire transportation system regulated under this Order. The Trash Assessment Methodology shall include all requirements set forth in sections E9.1 through E9.4, below.

By the Effective Date of this Order, the Department shall amend its Trash Assessment Methodology submitted on April 12, 2019 and submit the amended Trash Assessment Methodology to the State Water Board Executive Director for review and consideration of approval. The Executive Director will provide a 30-day public comment period, and consider public comments prior to consideration of approval of the amended Trash Assessment Methodology.

The amended Trash Assessment Methodology must address the deficiencies in the Trash Assessment Methodology submitted on April 12, 2019 and include all the following required elements.

1. Regardless of the population, trash assessments shall include the Department’s rights-of-way that are within a municipal separate storm sewer system’s jurisdiction.

2. The Department’s amended trash assessment methodology shall demonstrate compliance with the requirements of this Attachment, and includes:
   a. Proposed implementation schedule for each fiscal year following the Effective Date of this Order until December 2, 2030,
   b. Identification and geographic information system mapping of Significant Trash Generating Areas (section E4),
   c. Determination of full capture equivalency (section E6),
   d. Compliance with interim trash reduction milestones (section E7), and
   e. Assessment of the amount of annual trash reduction (section E8).

3. The Department’s trash assessment methodology shall:
a. Identify all locations or facilities within the Department’s jurisdiction that are located outside of other permitted municipal separate storm sewer systems where trash accumulates in substantial amounts;

b. Include visual assessment of all highway segments, highway on-ramps, and highway off-ramps within or adjacent to the jurisdiction of permitted municipal separate storm sewer systems to identify where trash accumulates in substantial amounts; and

c. Include an assessment of known homeless encampments within the Department’s right-of-way.

d. Include technical details on how substitutes for visual assessments are performed, which shall include data sources, type of statistical analysis, and other documentation necessary to fully describe the substitute in technical terms.

e. Identify locations where substitutes for visual assessments are performed.

4. The Department shall report all results of its trash assessment methodology in units of trash volume per acre per year.

E10. REVISED TRASH ASSESSMENT MAP

Within six months of receiving Executive Director approval of its Trash Assessment Methodology as required in section E9, the Department shall revise its trash assessment map to implement the Executive Director-approved trash assessment methodology identifying the Department’s Significant Trash Generating Areas by geographic information system mapping of Significant Trash Generating Areas (as required in section E9.1.b).

E11. TRASH MONITORING PLAN REQUIREMENTS

E11.1 Procedures and Schedules

Within six months of receiving Executive Director approval of its Trash Assessment Methodology, the Department shall develop and submit a Trash Monitoring Plan for State Water Board Executive Director review and consideration of approval. The Trash Monitoring Plan shall contain procedures and schedules demonstrating, at minimum, the following elements:

1. Implementation of the approved trash assessment methodology,

2. Compliance with interim milestones in this Order or approved by the State Water Board Executive Director,

3. The quantification and reporting methods for the actual annual trash reduction,

4. The effectiveness of implemented full capture systems, other treatment controls, and/or institutional controls,
5. Compliance with full capture system equivalency,

6. Necessary maintenance of the full capture systems, other treatment controls, and/or institutional controls. Maintenance frequency shall not be less than maintenance frequencies required for best management practices in Attachment C (Stormwater Management Plan) of this Order.

7. The compared quantity of trash discharged from the Department’s municipal separate storm sewer system from the previous year.

8. The quantity of trash in the receiving waters, compared from the previous year and by how much it has decreased.

E11.2 Maps, Trash Generation, Trash Controls, and Tracking

The Trash Monitoring Plan shall include the following elements:

1. Geographic information system-mapped locations and drainage areas of all Significant Trash Generating Areas;

2. Geographic information system-mapped locations of all implemented full capture systems, other treatment controls, and/or institutional controls;

3. Estimated trash generation in all Significant Trash Generating Areas based upon trash assessments; and

4. Identification of each implemented full capture systems, other treatment controls, and/or institutional controls.

E12. OFFSITE/ONSITE TRASH TREATMENT DUE TO INFEASIBILITY

The following information provides the requirements for offsite trash treatment:

1. Where the Department finds that it is infeasible to implement trash controls sufficient to achieve full capture system equivalency, due to: (1) site-specific limitations within the Department’s right-of-way or (2) health and safety concerns, the Department shall submit an Offsite Trash Treatment Project proposal for equivalent offsite treatment through implementation of permanent structural trash control devices for review and consideration of approval by the Deputy Director of Water Quality. Implementation of controls is not considered infeasible where the trash generated at the significant trash generating area can be treated through implementation of controls in the jurisdiction of the immediately adjacent municipal separate storm sewer system. Any such proposal must include, if applicable:

   a. Specific identification of the significant trash generating area or portion of significant trash generating area for which achievement of full capture system equivalency is infeasible;
b. Demonstration that the trash generated at the significant trash generating area cannot be treated through implementation of controls in the jurisdiction of the immediately adjacent municipal separate storm sewer system, if any;

c. Detailed explanation of the factors that have made achievement of full capture system equivalency infeasible;

d. Detailed proposal for equivalent offsite compliance, measured by the volume of trash captured, through implementation of permanent structural trash control devices at locations not subject to specific requirements for the control of trash under the Trash Provisions or through an NPDES permit, WDR, or waiver of WDRs. Equivalent offsite compliance is the treatment of an equal or greater amount of trash than would be treated at the significant trash generating area for which treatment is infeasible. The off-site locations shall be determined as follow:

   i. The locations must be outside the Department’s right-of-way, have significant trash generation, and must discharge to the same receiving water body or watershed as the significant trash generating area for which treatment is infeasible.

   ii. If the Department cannot identify locations with significant trash generation within the same receiving water body or watershed, the Department may select a location within the Department’s right-of-way without significant trash generation that discharges to the same water body or watershed as the significant trash generating area for which treatment is infeasible.

   iii. If the Department cannot identify locations consistent with subsections E12.d.i-ii above, the Department may select locations with significant trash generation that do not discharge to the same water body or watershed as the significant trash generating area for which treatment is infeasible.

e. Detailed quantitative justification of the Department’s assessment that the proposal will result in equivalent trash treatment on an ongoing basis; and

f. Copies of any agreements with non-Department entities necessary for access to, the installation of, and the long-term operation and maintenance of the offsite trash control devices.

2. Prior to approval or denial of a proposal for offsite trash treatment, State Water Board staff shall provide public notice of the proposal and a minimum 30-day period for public comments.


4. Upon receiving approval for a proposal, the Department shall identify the location(s) that will not achieve full capture equivalency in its Revised Trash Assessment Map and the equivalent offsite location(s).
5. No proposal for an Offsite Trash Treatment Project will be approved for implementation prior to passage of the First Milestone in Section E.7 this Attachment.

**E13. ANNUAL TRASH MONITORING REPORT REQUIREMENTS**

By November 30 of each year, the Department shall submit to the State Water Board its Annual Trash Monitoring reports that addresses the reporting period of July 1 through June 30 of each year. The Annual Trash Monitoring Report shall be in accordance with the Department’s Trash Monitoring Plan and shall include the following:

1. Status of compliance with interim trash reduction milestones as required in section E7 of this Attachment;
2. Annual amount of trash reduction as required in section E8 of this Attachment;
3. Implementation summary of the approved assessment methodology as required in section E9 of this Attachment;
4. Effectiveness of implemented controls as required in section E11.1.4 of this Attachment;
5. Compliance with full capture system equivalency as required in section E11.1.5 of this Attachment;
6. Geographic information system-maps as required in section E11.2.1 of this Attachment;
7. Estimated trash generation in all remaining Significant Trash Generating Areas; and
8. Description of each of the implemented full capture systems, other treatment controls, and/or institutional controls.
9. Proposed implementation schedule for the upcoming five fiscal years.
10. Status of any approved offsite projects as described in E12.