

## **Appendix I Lake Stream and River Work Condition**

When working in or adjacent to the bed, channel, or bank of any river, stream, or lake regulated pursuant to Fish and Game Code Sections 1600-1616, the Water Authority will implement the following work conditions to avoid or minimize substantial adverse effects:

1. CDFG employees are authorized to conduct on-site inspections relevant to San Diego County Water Authority NCCP/HCP Section 6.6.1.1, upon reasonable notice.
2. Silty/turbid water shall not be discharged into the stream. Such water shall be settled, filtered, or otherwise treated prior to discharge. The Crew's/Contractor's ability to minimize turbidity/siltation shall be the subject of pre-construction planning and design feature implementation.
3. Preparation shall be made so that runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential. Frequent water checks shall be placed on dirt roads, cat tracks, or other work trails to control erosion.
4. Water containing mud, silt, or other pollutants from equipment washing or other activities shall not be allowed to enter a lake or flowing stream or placed in locations that may be subjected to high storm flows.
5. If off-stream siltation pond(s) is/are used to control sediment, pond(s) shall be constructed in a location, or shall be designed, such that potential spills into the stream/lake during periods of high water levels/flow are precluded.
6. If silt catchment basin(s) is/are used, the basin(s) shall be constructed across the stream immediately downstream of the project site. Catchment basins shall be constructed of materials that are free from mud and silt. Upon completion of the project, all basin materials along with the trapped sediments shall be removed from the stream in such a manner that said removal shall not introduced sediment to the stream.
7. Silt settling basins shall be located away from the stream or lake to prevent discolored, silt-bearing water from reaching the stream or lake during any flow regime.

8. Notwithstanding the use of silt catchment basins, upon Department determination that turbidity/siltation levels resulting from project related activities constitute a significant threat to aquatic life, activities associated with the turbidity/siltation, shall be halted until effective Department approved control devices are installed or abatement procedures are initiated.
9. Precautions to minimize turbidity/siltation shall be taken into account during project planning and shall be installed prior to construction. This may require that the work site be isolated and that water be diverted around the work area by means of a barrier, temporary culvert, new channel, or other means approved by CDFG. Precautions may also include placement of silt fencing, straw bales, sand bags, and/or the construction of silt catchment basins so that silt or other deleterious materials are not allowed to pass to downstream reaches. The method used to prevent siltation shall be monitored and cleaned/repared weekly, or more frequently if warranted by local conditions. CDFG shall provide any determinations or approvals in writing within 14 days of receiving from the Water Authority or its agents a written request which includes a plan sheet or diagram indicating how the work site will be isolated.
10. No equipment shall be operated in ponded or flowing areas except as otherwise addressed in Water Authority project's Notification of Lake or Streambed Alteration application, contract specifications, and any applicable regulatory permits.
11. Rock, gravel, and/or other materials shall not be imported to, taken from, or moved within the bed or banks of the stream except as otherwise specifically identified in the project's Notification of Lake or Streambed Alteration application.
12. Temporary fills shall be constructed of nonerodible materials and shall be removed immediately upon work completion.
13. If operations require moving equipment across a flowing stream, such operations shall be conducted without substantially increasing stream turbidity. Where repeated crossings could result in a substantial increase in stream turbidity, the Water Authority shall install a permanent or temporary bridge, culvert, or rock-fill crossing as approved by the Water Authority Project Engineer.
14. If a stream channel and/or gradient have been temporarily altered during construction, it shall be returned as nearly as possible to pre-project conditions without creating a possible future bank erosion problem. If a lake margin has been altered, it shall be returned as nearly as possible to pre-project conditions without creating a future bank erosion problem.

15. Structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high water mark before such flows occur.
16. Spoil sites shall not be located within a stream/lake, or where spoil shall be washed back into a stream/lake, or where it will cover aquatic or riparian vegetation, unless the site is specifically identified in the project's Notification of Lake or Streambed Alteration application.
17. Staging/storage areas for equipment and materials shall be located outside of the stream, unless the area is specifically identified in the project's Notification of Lake or Streambed Alteration application.
18. Access to the work site shall be via existing roads and access ramps when legally available to the Water Authority and its contractors for such use.
19. No equipment maintenance shall be done within or near any stream channel where petroleum products or other pollutants from the equipment may enter these areas under any flow.
20. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, oil or petroleum products or other organic or earthen material from any construction, or associated activity of whatever nature shall be allowed to enter into or placed where it may be washed by rainfall or runoff into waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any stream or lake.
21. The Water Authority and its contractors, subcontractors, and employees shall comply with all litter and pollution laws. It is the responsibility of the Water Authority to ensure compliance.
22. Any equipment or vehicles driven and/or operated within or adjacent to the stream/lake shall be checked and maintained daily to prevent leaks of materials that if introduced to water could be deleterious to aquatic life.
23. Stationary equipment such as motors, pumps, generators, and welders located within or adjacent to the stream/lake shall be positioned over drip pans or confined within berms capable of containing any spills.
24. The clean-up of all spills shall begin immediately. CDFG shall be notified immediately by the Water Authority of any spills that affect aquatic habitat, and shall be consulted regarding clean-up procedures.

25. Any materials placed in seasonally dry portions of a stream or lake that could be washed downstream or could be deleterious to aquatic life shall be removed from the project site prior to inundation by high flows.
26. Installation of bridges, culverts, or other structures shall be such that water flow is not impaired. Bottoms of temporary culverts shall be placed at or below stream channel grade, and bottoms of permanent culverts shall be placed below stream channel grade. Excavation of the streambed and banks shall be limited to the extent necessary, as determined by the Water Authority Project Engineer, to install bottoms of culverts below stream grade. Temporary culverts placed on existing streambed grade shall be done so with minimal disturbance.
27. The inlet and outlet of all permanent culverts shall be protected by the placement of head walls that shall be constructed of rock riprap, gabions, concrete, or other suitable nonerodible material as determined by the Water Authority project engineer. To prevent undercutting, the head walls shall be keyed in place. To prevent erosion, energy dissipaters will be installed.
28. Culverts shall be long enough to extend completely beyond the toe of the fill (unless both the up and downstream sides of the fill are adequately protected to the maximum high-water mark).
29. All in-stream structures shall be designed so that no sudden change in stream velocity shall occur above, below, or in the structure. If a sudden change in stream velocities occurs upon installation of the structure, the structure shall be removed immediately.
30. If any wildlife is encountered in the stream or lake zone during the course of construction, said wildlife shall be allowed to leave the construction area unharmed.
31. All diversion channels shall be designed to maintain velocities at levels acceptable to all native and recreational fish species determined to be in the project impact area and adjacent upstream and downstream reaches.