

Standard Procedures for the Maintenance and Cleaning of Culvert/Stream/Swale Cleaning

GOALS: To remove accumulated sediments from drainage culverts, nearby stream channels, and swales, thereby restoring the historic hydraulic capacities of those structures so that they can continue to prevent flooding, protect public health and property, and prevent pollution and sedimentation of wetland resource areas.

1. The limits of work shall be no farther upstream or downstream than 25 feet from the end of the pipe or the face of the culvert.
2. The work undertaken at each location will be minimized to the extent possible while still achieving the goals of flood control and pollution prevention.
3. Work will be scheduled to avoid periods of high groundwater or high flow rates.
4. Silts and sediments may be removed either by hand, by mechanical equipment (backhoe, e.g.), or by a suction line.
5. Excavation of sediments shall be limited to the historic limits of the swale or channel. Over-excavation beyond the bottom of the pipe or culvert will not be allowed.
6. Where evidence of scour or erosion is apparent, stone rip-rap may be added to shore up the earth and prevent further erosion.
7. Where evidence of scour or erosion is apparent at the end of a drainage pipe, a flared-end section of similar material may be installed to dissipate energy and prevent erosion.
8. Where evidence of excessive sedimentation from storm drains is apparent, a sediment forebay (and possibly a check-dam) may be constructed to prevent sediments from reaching resource areas in the future. This area would be vegetated appropriately and/or reinforced with stone rip-rap, turf-reinforcing mats, or similar methods.
9. There shall be no increase in impervious area. There shall be no loss of wetland resource area or degradation of resource area values. Swales and stream channels shall not be paved. Natural stream banks shall not be replaced with man-made structures.
10. Vegetation removal will only be done where the vegetation interferes with the performance or maintenance of the drainage structure. Plant and tree roots will be left in place for erosion control and bank stabilization unless they would otherwise be removed along with sediments