

Stormwater Facility Operation and Maintenance Fact Sheet

► **WET PONDS, CONSTRUCTED WETLANDS, AND EXTENDED (“DRY”) DETENTION BASINS**

These larger-scale facilities remove pollutants by detaining runoff in a quiescent pool long enough for some of the particulates to settle to the bottom. They require both routine (preventative) maintenance and non-routine maintenance.

For any basin, vault or other device that is designed to hold, or does hold water for longer than 72 hours, coordinate with the San Diego County Vector Control Program (SDCVCP). The following may be required:

- Provide a copy of the site operation and maintenance plan to the SDCVCP.
- Access to all potential vector-producing areas will be given to SDCVCP personnel.
- Copies of O&M reports will be supplied to SDCVCP.
- The SDCVCP will be given advance notice of O&M activities such as silt management, vegetation management, and water management.
- A schedule of routine O&M activities will be given to the SDCVCP.
- O&M personnel will cooperate with SDCVCP and adjust activities as necessary to facilitate control of mosquitoes and vectors.

Typical routine maintenance consists of the following:

- Examine **inlets** to ensure that piping is intact and not plugged. Remove accumulated sediment or debris near the inlet.
- Examine **outlets** and **overflow structures** and remove any debris or sediment that could plug the outlets. Identify and correct any sources of sediment and debris. Check rocks or other armoring and replace as necessary.
- Inspect **embankments**, dikes, berms, and side slopes for signs of erosion or structural deficiencies.
- Confirm that any **fences** around the facility are secure.
- Control **vectors** by filling any holes in or around the pond and examine the pond for evidence of mosquito larvae.

Typical non-routine maintenance includes the following:

- **Dredge** accumulated sediment. This may be required every five to 15 years, and more frequently if there are excess sources of sediment (as may occur on newly constructed

sites where soils are not yet stabilized). Dredging is usually a major project requiring mechanized equipment. The work will include an initial survey of depths and elevations; sediment sampling and testing; removal, transport, and disposal of accumulated sediment, and reestablishment of original design grades and sections.

- Remove **invasive plants**. Depending on the success of the design and the rate of sedimentation, ponds may be subject to excessive growth of rooted macrophytes, which reduce the effective area of the pond and create quiescent surface water that supports mosquito larvae. Removal may require a level of effort similar to dredging.