



Standard Operating Procedures: Filter Berm

The Lake Quannapowitt filter berm serves as a stormwater treatment facility at an outlet where there has historically been a heavy pollutant load. The berm was constructed to capture and treat stormwater prior to entering the Lake Quannapowitt during certain storm frequencies. The berm shall be cleaned and inspected annually. The Town will provide these services in a responsible manner balancing Public Works fiduciary responsibility to the residents and the commitment to infrastructure inspection, environment, and water quality improvements.

Operations:

The Parks and Forest Divisions clean excessive plant growth from the edges and also scrape the top layer of dirty sand from the berm. The dirty sand must be hauled to an appropriate disposal site and be replaced with clean sand so that the berm may continue to operate effectively. Public Works will maintain the berm during the summer dry months, typically August. This time allows for increased workability via the reduction in water stored within the berm.

Priorities:

- **STORMWATER MANAGEMENT**- Inspect all stormwater treatment structures at least annually and conduct maintenance as necessary comply with EPA's National Pollutant Discharge Elimination System (NPDES) Stormwater Permit Program
- **LAKE QUANNAPOWITT** – Stormwater treatment facilities adjacent to natural assets shall be in high priority/frequency and shall be continually cleaned and inspected to ensure clean water is entering our water ways.

Procedures

- Yearly monitoring
- Seasonal refurbishing by pumping out
- Determine the most appropriate equipment and method for cleaning out the filter berm.
 - Manually use a shovel to remove accumulated sediments, or
 - Use spring rakes a remove accumulated sediments, or
 - Use a skimming net to remove floating debris, or
 - Use earth moving (ie. backhoe, excavator) equipment to take out sand and debris
- Cut back sucker growth on rip rap sides



- Scrape top layers of soiled sand
- Replace with new washed sand
- Properly dispose of collected sediments and debris.
- If illicit discharges are observed or suspected, notify the proper division.
- Report additional maintenance or repair needs to the appropriate Department.

Disposal of Screenings

Vegetation and sand may be disposed at any landfill that is permitted by MassDEP to accept solid waste. MassDEP does not routinely require removed materials to be tested before disposal, unless there is evidence that they have been contaminated by a spill or some other means. Screenings may need to be placed in a drying bed to allow water to evaporate before proper disposal. In this case, ensure that the screenings are managed to prevent pollution.

Revising the SOP

- These procedures are reviewed annually and updated as needed

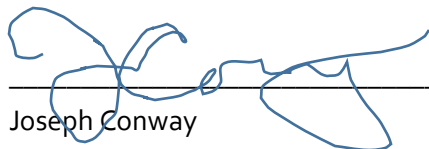
Effective

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