Shore Friendly Mason | Mini-Grant Program

Drainage Improvement Projects

Water management and slope instability are common concerns for waterfront property owners. On developed properties, slope failures are frequently linked to water management issues. Managing site drainage properly is an important way to limit your contribution to slope problems. Curtain drains, conveyance pipes, and water dispersion with a diffuser tee are a few tools for managing runoff on a shoreline property. Proper design and installation of these drainage systems are critical to maintain or restore a properly-functioning shoreline. In the long run, consistent monitoring and maintenance of drainage systems is a critical part of waterfront property ownership. This mini-grant is intended to assist property owners with installation of drainage improvements to avoid contributions to slope and/or beach erosion, not to aid in the installation of a new or replacement gutter and downspout system.

Minimum Requirements for a mini-grant:

- Eligible projects must address observed drainage issues that are either contributing to erosion or soil saturation near marine shoreline bluffs and banks, or have a significant potential to do so. This determination will be based on a site review with MCD technical staff. Mini-Grant funds can be used to install new drainage management systems or to install recommended improvements to existing systems, where appropriate. The drainage systems must be (1) professionally designed by an engineer or (2) reviewed by the MCD engineer (or a designated representative) *before and during* installation.

Above: a problematic drainage pipe that releases water on the face of a slope rather than at the base. The water does not slow down as it leaves the pipes, which results in scouring and bare soil. The slope is beginning to erode and will only get worse without improvements.

Above: a pipe with a “diffuser tee” that outlets water near the base of a slope. The diffuser is attached to the end of the pipe to slow the water down and decrease its energy as it exits, thus preventing beach erosion.

Above: a well-secured, solid drain pipe carries water down the face of a bluff to a safe outlet near the base of the slope. A system like this is easy to clean and monitor for leaks.

Above: an example of a failed drainage system associated with a landslide. Poorly-secured pipe connections, undersized drainage pipes, or leaks in conveyance pipes can compromise the integrity of drainage systems. Good design and regular monitoring can help identify issues and prevent failures.

Project completion:

- If 2 months lapse with no evidence of progress, MCD reserves the right to withdraw the grant award and offer it to another property owner who is ready to proceed.
- Because surface and subsurface drainage can greatly impact slope stability, MCD staff will work closely with property owners throughout the design and installation process.
- Before and after pictures, original receipts for expenses and site checks during and after completion are required for grant reimbursement.

Reimbursement:

- 50% of the project cost up to a maximum of $250 will be reimbursed for projects completed as designed. Reimbursement typically takes 4 weeks after all receipts and paperwork are received and the project has been reviewed for completion according to specifications.