



Shore Friendly Mason | Mini-Grant Program



Images: H. Shipman

BEFORE: An unnecessary wood bulkhead with fill impacts the beach and makes access more difficult.



AFTER: The bulkhead removed, restoring the beach to natural conditions and making it easily accessible.

Hard Shoreline Armor Removal Projects

Hard armor was long thought to be the best response to signs of waterfront erosion, even in low-erosion areas where there was no need for expensive engineered protection. Hard armor typically refers to concrete bulkheads, rock revetments or walls, piles of broken concrete, wood or creosote walls - and even piles of tires. Unfortunately, we now understand that hard armor causes a lot of unanticipated problems for property owners and for the beach. Armor can intensify beach erosion in front of the wall when waves scour sand and sediments away. Armor also blocks off the natural supply of sediment that builds beaches through gradual shoreline erosion. As a result, the beach level lowers and it changes character, from sand to cobble and gravel - or even to hardpan clay. Neighboring beaches are also impacted by armor when it restricts available beach sediment, or concentrates extra erosion at the ends of a section of bulkhead. Access to the beach can become more difficult, requiring additional structures such as stairs which also impact the beach. Habitat for small forage fishes and other creatures can be destroyed, which then stresses Puget Sound creatures such as the salmon and orcas that depend on this food web. **Over 50% of residential waterfront parcels in Mason County have beach armor, and much of it is unnecessary.**

In cases where erosion is not a risk to a home and site conditions are appropriate, removing old armor can provide many benefits to a homeowner, including safer, easier beach access, a beautiful natural shoreline, and the knowledge that your property is contributing to a healthier marine environment. This mini-grant program supports these goals.

Reimbursement: 50% of the project cost, up to \$1500, will be reimbursed for projects completed as designed. Reimbursement typically takes 4 weeks after all paperwork is received. Site reviews are required.



Hard armor along the waterfront is unnecessary in areas with low erosion and where a home is not at risk. Armor used to be a standard addition to shoreline properties. Removing unnecessary / failing armor offers many benefits, including improved beach access and support of marine life and processes. *Images- MCD*

Minimum Requirements for a mini-grant:

- All hard armor removal projects require a site feasibility analysis and will typically involve a degree of engineering design or oversight. Mason Conservation District (MCD) may assist with project design and permitting where possible. This practice will almost always be combined with a native planting project after removal, to stabilize the waterfront naturally (see “Waterfront Planting Project”).
- Some projects may involve a combination of armor removal and soft shore stabilization, as site conditions require.

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 homeowner who is ready to proceed.
- Because armor removal is typically more complex, MCD staff will work closely with property owners throughout the process.
- Before and after pictures, original receipts for expenses, and a site check after completion are required for grant reimbursement.



BEFORE: A failing bulkhead serving no practical purpose.



AFTER: The bulkhead removed, restoring the beach to natural conditions and making it more accessible.

Above Images: H. Shipman