

**Executive Summary**

**SOFT-ARMORING AND THE CORPS: The Impact of Army Corps of Engineers  
Permitting On State Coastal Protection Policies**

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**a. Introduction and Purpose**

As sea levels rise due to global climate change, coastal states are looking for methods to protect their shores and all the valuable economic and ecological services provided by those shores. Traditional methods such as seawalls and levees (“hard armoring”) may hold back the tide for a while, but they often do so at the cost of the very shorelines they mean to protect. As such, coastal states are considering alternative methods of coastal protection using soft armoring – alternatives that use the natural ability of coastal landforms to buffer against flooding, such as wetlands restoration or living shorelines. However, the Army Corps of Engineers (“Corps”) administers permitting of shoreline armoring under Section 404 of the Clean Water Act, and current permitting processes favor the construction of traditional hard armoring.

The purpose of this document is to examine aspects of the Corps’ regulatory permitting process that could potentially favor hard projects. It identifies potential barriers and highlights actions that states could take in order to favor soft-armoring projects.

**b. Army Corps Permitting—Effects on Soft Armoring**

Many coastal projects fall under the Corps’ permitting jurisdiction. Under Section 404 of the Clean Water Act (“CWA”) and Section 10 of the Rivers and Harbors Act, the Corps has authority to issue permits for essentially all ground-disturbing activities in navigable waters and adjacent wetlands.

Coastal projects can proceed under one of three permitting scenarios: no permit, general permit, and individual permit.

- **No Permit:** Activities outside of Corps jurisdiction—those that are inland of the mean high tide line—do not require a Corps’ permit. The landowner need only comply with state and local permitting requirements. This can facilitate hard-armoring approaches because it is easier to build an effective hard structure entirely above the mean high tide line than it is to design a soft project. The Clean Water Act also specifically exempts maintenance of hard-armored structures, but does not exempt any soft-armoring activities. Landowners with walls currently in place may decide to maintain those walls under the statutory exemption rather than go through the Corps’ permitting process to implement a soft-armoring solution.
- **General Permit:** Some projects can proceed under general permits, which are streamlined for certain activities that have minimal environmental impacts. A general permit is essentially a “pre-issued” permit. The Corps does much of the administrative work up front, which simplifies the process for approving these projects and reduces the administrative burden on the project applicant. Some general permits authorize different types of small-scale hard-armoring projects.
- **Individual Permit:** All other projects must obtain an individual permit, which requires a much more onerous project-specific review. Unlike general permits, where the Corps undertakes most of the administrative

burden, each project proceeding under an individual permit requires a project-specific review and environmental assessment by the Corps.

Corps compliance with other federal laws also may have the effect of adding to the time and expense of obtaining an individual permit. In issuing any permit, the Corps must comply with other federal laws that require consultation with state and federal agencies (such as the National Environmental Protection Act (“NEPA”), Section 401 of the CWA, the Coastal Zone Management Act (“CZMA”) and the Endangered Species Act (“ESA”)). Depending on which permitting scenario is triggered, compliance with these other federal laws can add significant time and expense for the applicant in obtaining a permit. For general permits, the Corps completes an environmental review under NEPA and consults with the relevant agencies to ensure compliance with water quality programs, coastal management programs and the ESA, essentially completing these requirements *in advance* for the general permit applicant. With individual permits, however, these requirements must be fulfilled at the applicant’s expense and on his or her clock (i.e., after he or she has already applied for the permit), significantly delaying project approval.

In this way, general permits may encourage hard armoring. General permits streamline and front-load the approval process for some small-scale hard-armoring projects, minimizing the time and expense for the permit applicant to undertake these types of projects. In contrast, most soft projects likely require an individual permit, forcing the applicant to go through the more time-consuming and expensive project-specific review. This increases the administrative burden on the applicant, which could have the effect of discouraging soft-armoring. Applicants may seek to avoid the administrative hassle required to implement a soft-armoring project and may build hard protection under a general permit instead.

### **c. Breaking Down Regulatory Barriers—Options for States**

Although the current regulatory framework may favor hard armoring, there are many ways that states could try to encourage soft-armoring alternatives within the existing 404 framework.

- **Programmatic general permits:** States could assume more permitting authority by obtaining a Programmatic General Permit (PGP) from the Corps. The Corps adopts PGPs following the same procedures as for other general permits. Under PGPs, states can assume permitting authority over small projects and issue permits on behalf of the Corps with limited Corps involvement. PGPs generally have four categories of activities. Category I activities have minimal adverse environmental impacts and can proceed with no federal review. Category II and III projects require pre-construction notification to the Corps and varying degrees of federal coordination to ensure that the project will have minimal adverse environmental impacts. Category IV activities, cannot proceed under the PGP but, instead, require an individual permit from the Corps. Under Maryland’s PGP, 85 percent of projects fall under Category I. The state is implementing its Living Shoreline Protection Act under its PGP, which requires landowners to use soft-armoring alternatives, where feasible. One potential problem with using PGPs is that they increase the cost to the state, because they take on most of the burdens of administering the permitting program from the Corps.
- **State certification:** States could also use their power to certify Corps’ permits to encourage soft armoring. States have authority to certify that Corps’ permits—both general and individual—are consistent with state programs (water quality programs under Section 401 of the CWA and the state’s coastal management program under the CZMA). States have three choices; they can choose to certify the whole permit, certify but impose conditions, or deny certification. First, states can impose state-specific conditions on general permits. Second, states can require some projects to obtain individual certification from the state by denying certification of general permits. Third, states can effectively prohibit a project by denying certification of an

individual permit. States can use this authority to encourage soft projects by denying certification of permits or imposing conditions on permits.

- General permits for soft armoring: States could advocate that the Corps issue more general permits for soft projects. This would facilitate soft armoring by creating a streamlined process for the approval of small-scale soft-armoring projects. One potential problem is that the Corps may face an obstacle in showing that soft-armoring projects are sufficiently “similar in nature.” Soft-armoring options can vary widely depending on the geology and hydrology of the site, among other things, and therefore may not be appropriate for categorical approval.
- Agency guidance on soft-armoring: States could encourage the Corps to include technical guidance about the construction and design of soft armoring in its Coastal Engineering Manual (CEM). Although the CEM does not impose any regulatory requirements, the technical document is used by permit applicants in developing protection projects and could detail the entire range of options for coastal protection. Developing this kind of technical guidance for soft projects could also help the Corps develop the expertise necessary to adopt general permits for soft armoring. Having the Corps create some measurement standards would allow applicants to weigh the costs and benefits of soft versus hard armoring.

The Corps’ permitting process does not have to lead inexorably towards hard armoring. There are various ways for states to implement or encourage soft armoring within the existing regulatory framework. This document is intended to help policymakers identify potential alternatives to overcome the current permitting regime that favors hard armoring.