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Legal Sidebar

Nonstructural Shoreline Stabilization Projects, or "Beach Renourishment," and the Coastal Barrier Resources Act (CBRA)

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Coastal areas have often been popular sites for development for a variety of commercial, scientific, and personal purposes. The U.S. coastal areas are twice as developed as the rest of the country, and such development has been increasing. The National Oceanic and Atmospheric Administration reports that 127 million people lived in coastal counties as of 2014 and that population density along the coast has been increasing. However, such areas are also susceptible to erosion, flooding, and damage from severe storms that can bring high winds, powerful waves, heavy precipitation, and storm surge. These challenges for people living and working along the coast are likely to increase with the impacts of climate change, such as sea level rise, potential changes in weather patterns, and potential exacerbation of algal blooms.

Congress has sought to reduce federal incentives for additional development along coastal barriers. The Coastal Barrier Resources Act (CBRA or "act"; 16 U.S.C. §§ 3501-3510), enacted in 1982 and subsequently amended, restricts the use of new federal funding that may encourage development on or around certain coastal barriers. The CBRA imposes these restrictions "to minimize the loss of human life, wasteful expenditure of federal revenues, and the damage to fish, wildlife, and other natural resources associated with the coastal barriers." The act allows for certain exceptions to these restrictions, including one for nonstructural shoreline stabilization projects. The Department of the Interior (DOI) has changed its interpretation of this restriction twice in the past four years—most recently in July 2021. These changing interpretations have potential implications for projects Congress has authorized the U.S. Army Corps of Engineers (USACE) to undertake and for projects that Congress may authorize in the future. This Sidebar considers how the CBRA has been interpreted over time to apply to removal of sediment from covered coastal barriers for the purpose of replenishing beaches not subject to the act.

Coastal Barriers

Coastal barriers may serve as a natural defense against damage to coastal areas from erosion, flooding, and severe weather. According to the U.S. Fish and Wildlife Service (FWS), *coastal barriers* are "unconsolidated sediments," such as sand or gravel, near or connected to the mainland or offshore islands. These naturally occurring formations, which exist in a variety of forms along the U.S. coast (see **Figure**

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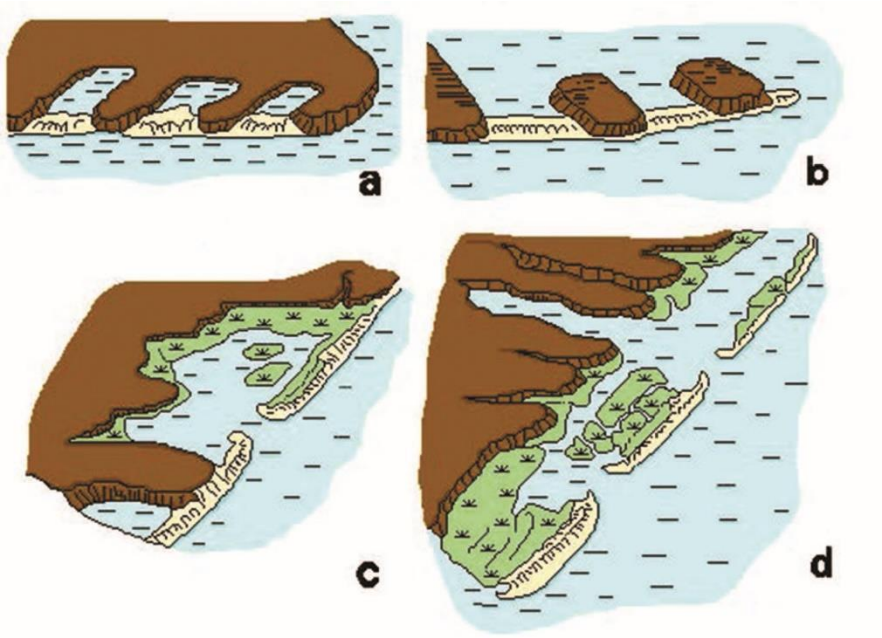
1), may protect the mainland, including developed areas, from severe storms and erosion by bearing the brunt of intense waves and reducing flooding through the absorption of storm surge in the wetlands formed behind the barriers. They also may protect aquatic habitats such as wetlands and estuaries that provide commercial, recreational, scenic, scientific, and ecological value. For instance, such habitats serve as feeding, spawning, nesting, or resting areas for a variety of organisms, including many commercial fish and shellfish species.

Figure 1. Examples of Coastal Barriers



Source: FWS, Chapter 1: Overview of the Coastal Barrier Resources System, Digital Mapping Pilot Project (2016), https://www.fws.gov/cbra/projects/pilot/Chapter-1-John-H-Chafee-CBRS-Digital-Mapping-Pilot-Project-Report-2016.pdf.

Notes: Bay barriers (a), tombolos (b), barrier spits (c), and barrier islands (d).

Coastal barriers tend to be unstable landforms due to their composition, impacts of tides and wave energy, and variable sediment supply from rivers and other sources. Exposure to waves and weather can diminish coastal barriers through erosion or make them more robust by depositing sediment. Coastal barriers often recover on their own from such modifications over time if sources of new sediment are available and unimpeded by human structures, though their shape and location may shift in the process.

Damaged or eroded coastal barriers may also be artificially restored through nonstructural shoreline stabilization projects, also referred to as *beach nourishment* or beach renourishment. This process entails removing sediment from another location with sufficiently similar sediment and adding it onto or adjacent to the depleted beach, and it may also include periodic renourishment to replace sediment as it erodes. Beach nourishment has been used for coastal barriers as well as for beaches on the mainland or on offshore islands. Like coastal barriers, well-nourished beaches may absorb wave energy, protect inland areas from flooding and erosion, and protect dunes and developments along the beach. USACE was authorized in 1956 (P.L. 79-826) to undertake beach nourishment projects at publicly owned beaches for shoreline protection.

The Coastal Barrier Resources Act

The CBRA established the John H. Chafee Coastal Barrier Resources System (System). The System generally consists of certain undeveloped coastal barriers and other areas along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts. The act defines an *undeveloped coastal barrier* as a "depositional geologic feature," such as a bay barrier or barrier island, that is subject to "wave, tidal, and wind energies" and protects landward aquatic habitats from direct wave attacks, as well as associated aquatic habitats such as marshes or estuaries. Such areas constitute *undeveloped* coastal barriers only if they include no more than a few manmade structures and any such structures "do not significantly impede geomorphic and ecological processes." A *System unit* is any undeveloped coastal barrier or a combination of closely related undeveloped coastal barriers within the System. FWS is responsible for maintaining and amending System maps.

Subject to certain exceptions, Section 5 of the CBRA prohibits new federal expenditures or financial assistance "within the System." Among other things, federal funds may not be used for "any project to prevent the erosion of, or to otherwise stabilize, any inlet, shoreline, or inshore area," with certain exceptions for specific units and emergencies. Expenditures or financial assistance are considered *new* if, as of the date the System unit was added to the System, no expenditures had been appropriated for construction or purchasing purposes and there were no legally binding commitments for the expenditure or financial assistance.

Section 6 provides for certain exceptions to the Section 5 prohibition, allowing new federal expenditures and financial assistance within the System for certain purposes after the relevant federal officer consults with FWS. Among other exceptions, Section 6(a)(6)(G) allows federal funds to be used for "nonstructural projects for shoreline stabilization that are designed to mimic, enhance, or restore a natural stabilization system" so long as providing federal funds for the project is consistent with the purposes of the CBRA. In addition, Section 6(a)(2) allows new federal funds to be used to maintain or construct improvements of existing federal navigation channels, including disposing of related dredge materials. Each federal agency, in consultation with FWS, is responsible for assessing whether federal funds may be used for a particular project based on its connection to any coastal barrier resources and qualification for any exceptions.

When the CBRA prohibits the use of federal funds for a project as proposed, and no statutory exception applies, federal and nonfederal partners generally have two options to comply with the restrictions of the CBRA. First, the project sponsors may redesign the project to avoid activities in System areas. For example, they may choose to use sediment from non-System areas in lieu of System units if such resources are available. This alternative may increase the cost of the project for both federal and nonfederal partners if obtaining non-System resources is more expensive. For example, it may cost more to transport sediment from a location that is farther from the beach renourishment site than the System unit would have been. Second, the nonfederal partners can fund the aspects of the project that occur within the System; the CBRA limits only the use of *federal* funds within the System. This alternative generally would increase the cost of the project for nonfederal partners and potentially reduce the cost for the federal partners.

Nonstructural Shore Stabilization Projects

On multiple occasions, USACE and other stakeholders have sought clarification from FWS as to whether certain authorized projects that involve areas both within and outside the System are exempt from the prohibition on federal expenditures or assistance. Specifically, FWS has considered whether sediment may be removed from System areas—for example, in connection with dredging for navigation purposes—and used for nonstructural shore stabilization projects outside the System. DOI, which includes FWS, has modified its interpretation of Section 6(a)(6)(G) over time in the context of such

projects. As of July 2021, DOI does not interpret the CBRA as allowing federal funds to be used for projects that remove sediment from System units to renourish beaches outside the System.

1994 DOI Memorandum Reflecting Narrow Interpretation of Exemption

In 1994, DOI concluded that the exemption for nonstructural shore stabilization projects applied only to projects stabilizing shorelines within the System. DOI reached that conclusion in a memorandum that assessed a proposal from USACE to dredge sediment from the Midway Inlet Unit—within the System—and use it to renourish the beach on Pawley's Island—outside the System. DOI determined that the Section 6(a)(6)(G) exemption referred only to projects designed *solely* to stabilize shorelines within the System. Accordingly, federal funds could not be used to renourish a beach *outside* the System. Moreover, DOI determined that the project would be inconsistent with the purposes of the CBRA because the proposed dredging would harm the natural environment. DOI therefore concluded that using federal funding or financial assistance for the USACE's proposed beach renourishment project would violate Section 5, having failed to qualify for the exemption under Section 6.

In 1995, USACE requested that DOI reconsider its interpretation of the CBRA exemption as it applied to a beach renourishment project in Folly Beach, South Carolina, and other similar projects. To support reversing the interpretation, USACE observed that (1) its studies showed that the impacts from the project were either neutral or beneficial to the System unit, (2) legislation authorizing the project modification had referenced a district engineer's report that included the use of sediment from the System unit borrow area, (3) FWS had previously allowed the System unit to be used for sediment removal, and (4) the interpretation placed "unexpected financial burdens" on the federal government and nonfederal partners.

In response, DOI affirmed its interpretation. DOI stated that the requirement that the project be entirely within the System was sufficient to disqualify a project from the exemption, regardless of any non-detrimental or beneficial effect. With respect to the project authorization, DOI asserted that activities authorized by subsequent legislation must still comply with pre-existing statutory requirements unless specifically exempted from them by the legislation. DOI acknowledged that FWS had previously authorized the use of sediment removal for the Folly Beach project but noted that there had been conflicting interpretations of the provision, which had led FWS to request the DOI solicitor's office interpretation and DOI to issue the 1994 memorandum. Finally, DOI observed that the CBRA was intended to prevent federal funds from being used contrary to the purposes of the act. To the extent DOI's interpretation resulted in increased expenditure of state, local, or other stakeholder funds rather than federal funds (i.e., if the nonfederal partners bore the full cost of the activities within the System rather than cost-sharing with the federal partners), DOI viewed this result as consistent with the act's intention to impose such costs on those conducting activities within the System.

DOI did not formally change its interpretation of Section 6(a)(6)(G) for more than 20 years, although it appears that FWS and USACE may not have consistently applied or implemented that interpretation after DOI's 1995 memorandum. The issue arose again before Congress when a Member became concerned that FWS's position had increased local municipalities' share of the costs of a New Jersey project. DOI subsequently revisited its earlier position.

2019 DOI Memorandum Revising Application of Exemption to In-System Expenditures Within Broader Projects

In October 2019, DOI revisited its interpretation of the Section 6(a)(6)(G) exemption for nonstructural shoreline stabilization projects. In its revised interpretation, DOI concluded that Section 6(a) authorizes certain federal expenditures so long as those expenditures take place "within the System," even if certain enumerated activities within the project take place outside the System. Thus, if project funds were expended within the System to remove sediment consistent with a Section 6 exemption, and if the

removed sediment were applied to a nonstructural shoreline stabilization project that complied with Section 6(a)(6)(G), then in DOI's view it made no difference where that shoreline stabilization component would take place.

DOI noted that the text of Section 6(a)(6) did not state that an exempted project or activity must occur within the System, only that such activities must be consistent with the purposes of the CBRA. DOI also observed that the exemption for nonstructural shoreline stabilization projects in Section 6(a)(6)(G) likewise did not specify that such projects must be within the System. DOI accordingly concluded that the statutory text did not expressly limit removing sediment from within the System and applying it outside the System to stabilize shorelines.

DOI viewed this interpretation as reflecting a congressional intent to give agencies flexibility to address the broader CBRA purposes by allowing excepted activities to occur within and outside the System. DOI used the example of dredging existing navigation channels within the System and observed that House and Senate reports specified that such dredge materials need not be deposited within the System. DOI also concluded that, to the extent the statute was ambiguous, its interpretation was reasonable and furthered the purposes of the act by allowing federal agencies to protect coastal land in general.

For purposes of implementation, DOI acknowledged that FWS and the federal agency proposing to use federal funds for a project must still evaluate the project on a case-by-case basis to ensure it is consistent with the purposes of the act and with the limitations of any applicable exemptions. For projects that would remove sediment from within the System to renourish beaches outside the System, DOI concluded that any such project must still "mimic, enhance, or restore natural stabilization systems," as required by the exemption for nonstructural shoreline stabilization projects.

In the memorandum, DOI acknowledged that its interpretation represented a change in the agency's position from the 1994 interpretation. DOI explained its change in position by asserting that the 1994 memorandum did not analyze the statute and that the legislative history and plain text of the statute point to the revised interpretation as more reasonable.

The National Audubon Society challenged the 2019 interpretation. While the litigation was pending, there was a change in Administration. On January 20, 2021, President Biden issued Executive Order 13,990, which directed executive agencies to review public health and environmental regulations and other decisions issued during the Trump Administration. The Biden Administration identified the 2019 memorandum as an action for review pursuant to the executive order. The litigation was stayed and ultimately dismissed with prejudice in July 2021 pursuant to a stipulation by the parties.

2021 DOI Memorandum Reverting to 1994 Interpretation

In July 2021, DOI revised its interpretation of the Section 6(a)(6)(G) exemption to revert to its 1994 position that the exemption from the CBRA's federal funding prohibition for nonstructural shoreline stabilization projects applies only to projects within the System rather than projects removing sediment from the System to stabilize shorelines outside the System. In the memorandum, DOI noted that Section 6 imposes two conditions: (1) the relevant federal officer must consult with FWS and (2) the federal expenditure or financial assistance must be made within the System. DOI determined that an introductory set of conditions followed by a colon and an enumerated list of exempted projects or activities should be read to apply those conditions to each item in the list. Accordingly, DOI concluded that each type of project or activity listed in Section 6(a)(6) must be "within the System" to be exempt from the Section 5 prohibition.

To support its interpretation, DOI asserted that the Section 6 exceptions must be read in connection with the prohibition in Section 5, which prohibits expenditures for any purpose *within the System*. DOI concluded that each exempted activity therefore must be one that would otherwise be prohibited by

Section 5—ones that occur within the System. DOI continued by observing that federal expenditures are "not authorized in a vacuum" but for a particular project. For beach renourishment projects, DOI explained that removing sediment from one location and placing it in another to stabilize the shoreline would be two components of one project rather than a project to remove sediment and another to stabilize the shoreline. DOI concluded that all of the components of the project must be "within the System" to be exempt.

DOI viewed this interpretation as consistent with both the statutory focus on the System, rather than on coastal resources in general, and the statutory purpose of limiting federal expenditures to minimize loss of human life; waste of federal resources; and harm to fish, wildlife, and other natural resources along the coast. Requiring the entire project to occur within the System to be exempt reduces the number of projects that qualify for the exemption, resulting in less federal spending within the System and less sediment removed from System units. DOI further reviewed the legislative history and concluded that Congress considered beach renourishment to be an unwise use of federal funds because of the potential harm to existing habitats from removing sediment and the potential encouragement of new development elsewhere from nourishing beaches. Based on its review, DOI concluded that allowing System units "to be mined for resources, such as sand and gravel" to use outside the System for beach renourishment would not be consistent with congressional intent.

Considerations for Congress

DOI's changing interpretations of the CBRA's nonstructural shoreline stabilization project exception over time may be of interest to Congress in a number of ways. For example, the revised interpretation may affect projects that USACE developed under the 2019 interpretation and that Congress authorized in the Water Resources Development Act of 2020 (WRDA 2020; Division AA of P.L. 116-260). (For more information about WRDA, see this CRS In Focus.) Two planned renourishment projects in North Carolina for Wrightsville Beach and Carolina Beach that were authorized by WRDA 2020 would have used sediment dredged within the System based on DOI's 2019 interpretation of the CBRA, according to FWS. Federal funds had not been committed to the projects when FWS issued the 2021 memorandum. FWS states that it no longer considers such projects to be permissible uses of federal funds under the CBRA and suggests using alternative borrow sites or funding sources for these and any other affected projects. Changes in the availability of federal funds for using System sediment to renourish beaches outside the System have previously been of interest to Members of Congress.

DOI's revised interpretation may also affect the appropriations required for any projects that were authorized based on USACE plans to use System sediment to renourish beaches outside the System. Such projects may require additional federal funding if USACE modifies the project to obtain the sediment from outside the System with federal funds at a higher cost than System sediment. Alternatively, such projects may require less federal funding if USACE and the nonfederal partners move forward with the project as planned but with the nonfederal partners bearing the full cost of obtaining sediment from within the System.

In addition, Congress has begun its process for developing a WRDA for 2022, holding committee hearings between January and March 2022 with USACE officials, stakeholders, and Members. WRDA is one avenue for Congress to authorize or modify water resources projects such as the beach renourishment projects that are subject to DOI's CBRA interpretation. In light of DOI's revised interpretation, Congress may choose in the 2022 WRDA to modify project authorizations for projects that planned to use System sediment for non-System beach renourishment. If Congress sought to fund projects that would obtain System sediment to nourish beaches outside the System, it would have to override the CBRA limitation explicitly under DOI's current interpretation.

In general, as coastal areas are increasingly affected by the impacts of climate change, Congress may wish to consider whether the CBRA and DOI's interpretation of the statutory text reflect Congress's preferred policy with respect to the management of undeveloped coastal barriers. To the extent the interpretation is consistent or Congress wishes to leave these determinations to the agency's discretion, Congress may wish to leave the CBRA as is and adjust USACE project authorizations as needed to reflect DOI's interpretation. To the extent DOI's interpretation is not consistent with Congress's current priorities or Congress wishes to curtail DOI's discretion over how CBRA exceptions are interpreted, Congress may wish to consider amending the CBRA. Congress may also wish to consider whether other legislation may be required to achieve its goals with respect to coastal barrier resources and development.

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