



February 2021

# COASTAL BARRIER RESOURCES ACT

## Fish and Wildlife Service Should Better Ensure It Carries Out Required Consultation and Mapping Activities

# GAO@100 Highlights

Highlights of [GAO-21-258](#), a report to the Chairman, Committee on Natural Resources, House of Representatives

## Why GAO Did This Study

CBRA was enacted to remove federal incentives to develop certain areas—mostly along the Atlantic and Gulf coasts—that contain coastal barriers such as islands and wetlands. The act generally prohibits new federal expenditures and financial assistance in these areas. It allows exceptions for certain projects in the CBRS but requires federal agencies to consult with FWS before making expenditures or providing assistance within the CBRS. FWS is also responsible for maintaining and updating CBRS maps, which can be used to determine whether properties are in the CBRS.

GAO was asked to review FWS and Corps activities under CBRA. This report examines (1) FWS's consultation process and consultations by selected FWS field offices in fiscal years 2018-2019, (2) FWS's processes for updating CBRS maps, and (3) Corps projects in the CBRS and the Corps' process for complying with CBRA. GAO reviewed FWS and Corps guidance and interviewed officials at headquarters, regional, and field levels. GAO also examined documents from selected FWS field offices and Corps districts chosen based on geographic diversity and other factors.

## What GAO Recommends

GAO recommends that FWS (1) ensure its guidance directs staff to provide consultation when requested and (2) develop a strategy for complying with the CBRA requirement to review and, as necessary, update CBRS maps every 5 years. The Department of the Interior concurred with GAO's recommendations.

View [GAO-21-258](#). For more information, contact Mark Gaffigan at (202) 512-3841 or [gaffiganm@gao.gov](mailto:gaffiganm@gao.gov)

February 2021

## COASTAL BARRIER RESOURCES ACT

### Fish and Wildlife Service Should Better Ensure It Carries Out Required Consultation and Mapping Activities

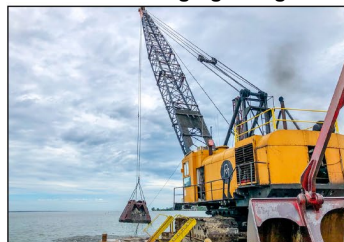
## What GAO Found

Under the Coastal Barrier Resources Act (CBRA), federal agencies must consult with the Department of the Interior's Fish and Wildlife Service (FWS) before making expenditures pursuant to statutory exceptions in certain relatively undeveloped coastal areas. These areas, designated as the Coastal Barrier Resources System (CBRS), help defend the mainland from coastal storms. However, FWS declined to provide an opinion for 18 of the 31 consultation requests GAO reviewed from selected FWS field offices for fiscal years 2018 and 2019, even though CBRA requires FWS to provide consultation when requested. This was most common in the two FWS regions that issued guidance in 2018 directing staff not to respond to such requests due to competing priorities. By ensuring that FWS guidance directs staff to provide consultation when requested, FWS could help ensure compliance with CBRA.

FWS is responsible for maintaining maps of the CBRS, and the act requires FWS to review and, if necessary, update the maps every 5 years. However, FWS has not reviewed and updated maps as often as required because of resource constraints and competing priorities, according to agency officials. FWS officials said the agency received additional funding and staff in 2015 to review maps and plans to meet the 5-year requirement in the future. However, even with the additional resources, FWS has not met the 5-year review requirement. Further, FWS does not have a strategy to guide its mapping efforts, including information on factors that may affect priorities, resource needs, and time frames. A strategy could help FWS update maps in a timely manner.

As of August 2020, U.S. Army Corps of Engineers districts in GAO's review had 51 active projects in the CBRS, most for dredging channels or nourishing beaches (see photo). The Corps uses its project planning process to document compliance with CBRA, and the agency is developing more specific CBRA guidance. Some Corps projects may be affected by a 2019 legal opinion from the Solicitor of the Interior reversing Interior's position on whether certain beach nourishment projects meet an exception under CBRA.

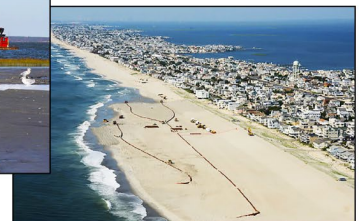
## Process for Dredging Navigation Channels and Using Sand to Nourish Beaches



**Step 1:** Sand is dredged from navigation channel to make the channel deeper.



**Step 2:** Sand is pumped onto shore through a pipe.



**Step 3:** Sand is deposited on the shore to replace sand that has been eroded or to build dunes on the beaches.

Source: GAO summary of U.S. Army Corps of Engineers photographs. | [GAO-21-258](#)

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## Abbreviations

CBRA	Coastal Barrier Resources Act
CBRS	Coastal Barrier Resources System
FEMA	Federal Emergency Management Agency
FWS	U.S. Fish and Wildlife Service
NEPA	National Environmental Policy Act of 1969
NOAA	National Oceanic and Atmospheric Administration
OPA	Otherwise Protected Area
TAILS	Tracking and Integrated Logging System

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February 24, 2021

The Honorable Raúl M. Grijalva  
Chairman  
Committee on Natural Resources  
House of Representatives

Dear Mr. Chairman:

The Coastal Barrier Resources Act (CBRA) was enacted in 1982 to remove federal incentives to develop certain coastal areas by restricting federal expenditures and financial assistance, such as flood insurance or home loan guarantees, in these areas.<sup>1</sup> These areas consist of relatively undeveloped coastal lands and associated aquatic habitats along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts; collectively, they are designated the John H. Chafee Coastal Barrier Resources System (CBRS). Coastal barriers are features such as islands or wetlands that serve as the mainland's first line of defense against the impacts of severe coastal storms and also provide important habitat for fish and wildlife. The CBRS consists of 870 distinct units, covering about 3.5 million acres as of September 2020. The CBRA's purposes are to "minimize the loss of human life, wasteful expenditure of federal revenues, and the damage to fish, wildlife, and other natural resources" in the CBRS.<sup>2</sup> While the act prohibits most new federal expenditures and assistance in the CBRS, private landowners or state or local governments may develop these areas at their own cost. CBRA also contains exceptions to allow some federal expenditures within the CBRS, such as for repairing certain roads, maintaining existing navigation channels for boats, and providing certain types of disaster assistance.<sup>3</sup>

Under CBRA, no single federal agency has overall responsibility for administering activities in the CBRS; instead, all federal agencies affected by the act's restrictions on federal expenditures or financial assistance

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<sup>1</sup>Pub. L. No. 97-348, 96 Stat. 1653 (1982) (*codified as amended at* 16 U.S.C. §§ 3501-3510).

<sup>2</sup>16 U.S.C. § 3501(b).

<sup>3</sup>We previously reported on CBRA in 1992 and 2007. See GAO, *Coastal Barriers: Development Occurring Despite Prohibitions Against Federal Assistance*, [GAO/RCED-92-115](#) (Washington, D.C.: July 17, 1992); and *Coastal Barrier Resources System: Status of Development That Has Occurred and Financial Assistance Provided by Federal Agencies*, [GAO-07-356](#) (Washington, D.C.: Mar. 19, 2007).

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must comply with the act. The act gives the Secretary of the Interior responsibility for maintaining and updating maps of the CBRS, which was delegated to the U.S. Fish and Wildlife Service (FWS). Federal agencies, property owners, and others can use these maps to determine whether individual properties are in the CBRS. The act requires federal agencies to consult with the Secretary of the Interior before making expenditures or providing financial assistance in the CBRS, to determine whether the expenditures or assistance are allowable under one of the act's exceptions. The act also requires Interior to provide consultation when requested, and the Secretary has delegated this responsibility to FWS. As outlined in FWS guidance, the consultation process consists of agencies providing information to FWS on the intended expenditure or assistance and requesting FWS's opinion on whether the activity or project qualifies for an exception under CBRA. One of the agencies making expenditures for projects in the CBRS is the U.S. Army Corps of Engineers, located within the Department of Defense. Among other activities, the Corps oversees the planning, construction, and maintenance of coastal flood risk management and navigation channel projects in conjunction with nonfederal sponsors such as state and local governments.

You asked us to review FWS and Corps activities under CBRA. This report examines (1) FWS's consultation process and the number and outcome of consultations conducted by selected FWS field offices in fiscal years 2018 and 2019 under CBRA, (2) FWS's processes for updating CBRS maps, and (3) the number of Corps projects within the CBRS and the process the Corps uses to comply with CBRA.

To address the first objective, we reviewed CBRA to identify relevant provisions regarding agency consultations with FWS and reviewed FWS's policy and guidance on CBRA. We assessed FWS's implementation of CBRA by examining documents on consultations conducted by selected field offices in fiscal years 2018 and 2019, the most recently completed 2-year period for which documents were available. We also interviewed agency officials at headquarters and selected regional and field offices about the consultation process. Of the 26 field offices located in the four FWS regions containing CBRS units, we selected a nongeneralizable sample of eight field offices from which we interviewed officials and collected documents on consultations conducted.<sup>4</sup> These eight field

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<sup>4</sup>In August 2018, the Department of the Interior completed the reorganization of its bureaus' 49 individual regions into 12 department-wide unified regions. In this report, we refer to the FWS regions in place prior to the creation of these department-wide unified regions because our review includes consultations conducted before that time.

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offices included at least one in each of the four FWS regions with CBRS units and generally covered states with substantial acreage in the CBRS.

To address the second objective, we reviewed CBRA to identify relevant provisions regarding FWS's statutory mapping responsibilities. We also reviewed information on CBRS map updates, including information FWS published in the Federal Register and on its website, as well as reports it provided to Congress on its mapping efforts. We reviewed FWS maps and visited FWS headquarters in March 2020 to learn about the process for updating and maintaining maps and interviewed FWS officials regarding their plans for ongoing map updates. We compared this information with the framework of leading practices in federal strategic planning contained in the GPRA Modernization Act of 2010. We also interviewed FWS officials on their efforts to examine the implications of expanding the CBRS to the Pacific Coast, including the development of maps of Pacific coastal barriers.

To address the third objective, we reviewed Corps guidance on CBRA. We interviewed officials from Corps headquarters and selected Corps district offices to determine their processes for complying with CBRA. We selected a nongeneralizable sample of seven of the Corps' 14 district offices that oversee areas with CBRS units. We selected district offices located in different geographic areas and in states with substantial CBRS acreage. We requested information from these offices on active projects in the CBRS, as of August 2020. We then reviewed documents from selected projects to determine steps the Corps took to document its compliance with CBRA. We selected these projects to have at least two projects from each of the seven districts and to ensure we examined projects that were in different stages of development (planning, construction, or maintenance). Appendix I describes our scope and methodology in more detail.

We conducted this performance audit from December 2019 to February 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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## Background

Enacted in 1982, CBRA restricts new federal expenditures and financial assistance in the CBRS. The purposes of the act are to minimize the loss of human life; wasteful expenditures of federal revenues; and damage to



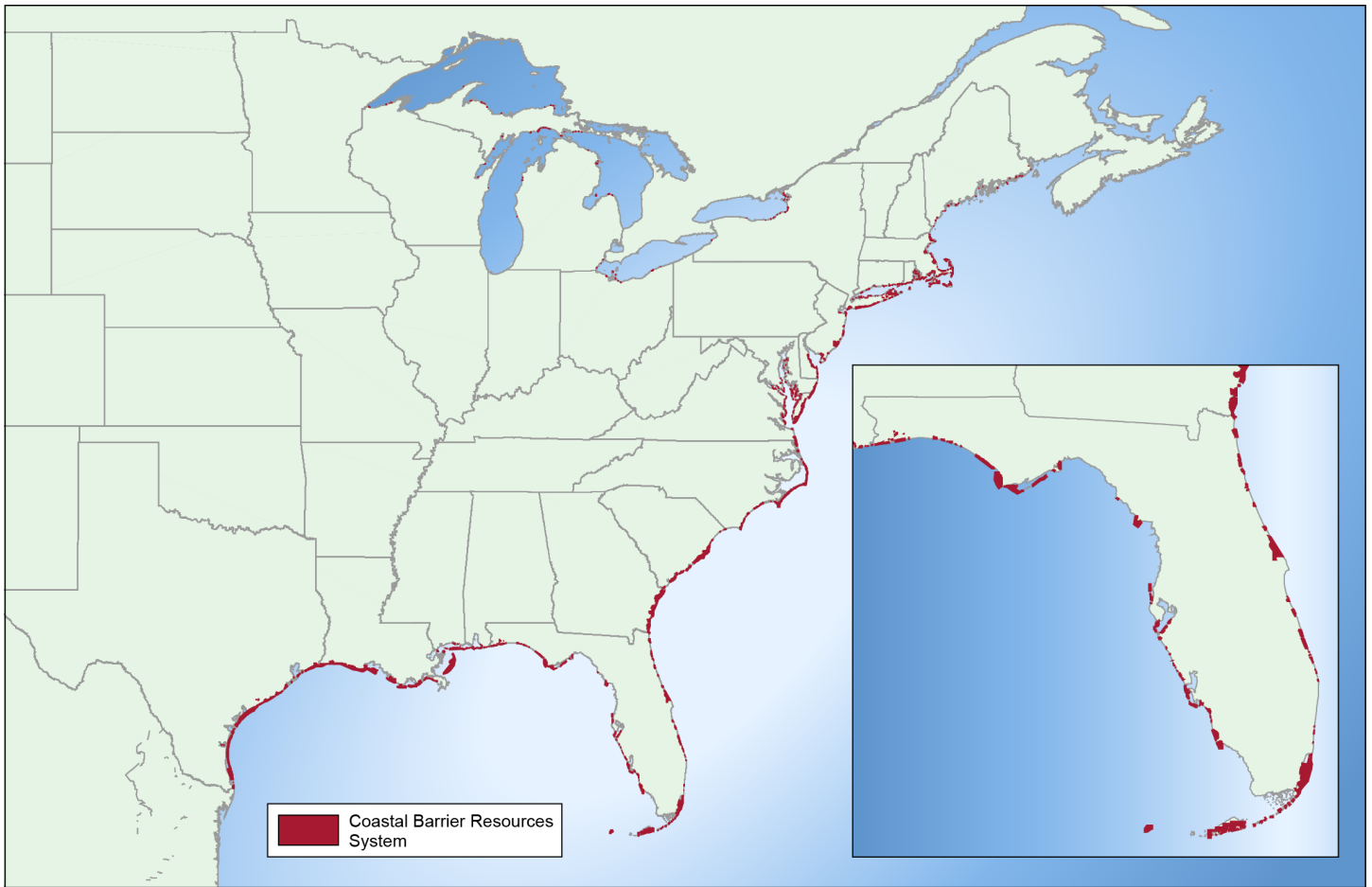
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fish, wildlife and other natural resources. The CBRS consists of two types of units, System Units and Otherwise Protected Areas (OPA). System Units, first designated in 1982, are generally privately owned areas, while OPAs, first designated in 1990 amendments to CBRA, are generally protected areas such as state parks, wildlife refuges, or private conservation areas.<sup>5</sup> As of September 2020, 870 units make up the CBRS, covering about 3.5 million acres. Of the 870 units, 588 System Units cover about 1.4 million acres, and 282 OPAs cover about 2.1 million acres. Figure 1 shows the locations of CBRS units along the Atlantic, Gulf of Mexico, and Great Lakes coasts. (See app. II for the number of System Units, OPAs, and associated acreage by state and territory.)

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<sup>5</sup>Specifically, OPAs are areas established under federal, state, or local law, or held by a qualified organization, for primarily wildlife refuge, sanctuary, recreational, or natural resource conservation purposes.

**Figure 1: Location of Coastal Barrier Resources System Units Along the Atlantic, Gulf of Mexico, and Great Lakes Coasts**



Source: GAO presentation of U.S. Fish and Wildlife Service data. | GAO-21-258

Note: The Coastal Barrier Resources Act established the John H. Chafee Coastal Barrier Resources System, which consists of relatively undeveloped coastal lands and associated aquatic habitats along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts. See 16 U.S.C. § 3503(a). Coastal Barrier Resources System units along the Puerto Rico and U.S. Virgin Islands coasts are not shown.

Under CBRA, most new federal expenditures and financial assistance are prohibited within the CBRS. For example, federal expenditures generally cannot be used to construct new structures, roads, or bridges or to issue flood insurance to properties that have been constructed or substantially improved since the area became a system unit. In OPAs, the only prohibition on federal expenditures or assistance is for flood insurance policies for structures; however, there is an exception for new construction or substantial improvements of structures “used in a manner

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consistent with the purpose for which the area is protected.”<sup>6</sup> CBRA does not impose any restrictions on activities in System Units or OPAs carried out with state, local, or private funding.

CBRA includes several exceptions to the general prohibition on expenditures or assistance in the CBRS. These exceptions allow a range of activities, including

- maintenance or improvement of existing federal navigation channels and related structures;
- projects for the study, management, protection, and enhancement of fish and wildlife resources and habitats if the project is consistent with CBRA’s purposes; and
- nonstructural projects for shoreline stabilization, such as pumping sand onto beaches that have been eroded, that are designed to mimic, enhance, or restore a natural stabilization system, if the project is consistent with CBRA’s purposes.<sup>7</sup>

For a complete list of CBRA exceptions, see appendix III.

FWS, with eight regions and 103 field offices, is responsible for overseeing the National Wildlife Refuge System and consulting with agencies on various laws, including CBRA. Under CBRA, FWS is required to provide consultation to federal agencies that request a consultation regarding potential expenditures or financial assistance in the CBRS. FWS also conducts property determinations, which are requests to determine whether a specific property falls within the CBRS. For example, property owners may submit such requests to FWS when they are trying to determine whether they are eligible for federal flood insurance.

The Corps, with eight regional divisions and 38 local district offices, conducts civil works projects that include dredging navigation channels and implementing beach nourishment projects, which entail depositing

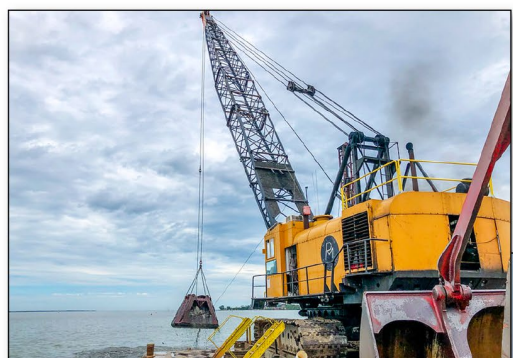
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<sup>6</sup>42 U.S.C. § 4028(b). For example, federal flood insurance could be issued for a visitor center at a state park in an OPA but could not be issued for a private residence in an OPA.

<sup>7</sup>The exceptions are contained in 16 U.S.C. § 3505(a).

sand onto eroded beaches or building dunes.<sup>8</sup> In some instances, the Corps uses sand dredged from a navigation channel to nourish a beach, as shown in figure 2. Many of these projects are long-term in nature; for example, some beach nourishment projects may last decades and involve renourishing beaches every few years as they erode. Civil works projects can be located in the CBRS if they meet an exception under CBRA.

**Figure 2: Process for Dredging Navigation Channels and Using Sand to Nourish Beaches**



**Step 1:** Sand is dredged from navigation channel to make the channel deeper.



**Step 2:** Sand is pumped onto shore through a pipe.



**Step 3:** Sand is deposited on the shore to replace sand that has been eroded or to build dunes on the beaches.

Source: GAO summary of U.S. Army Corps of Engineers photographs. | GAO-21-258

<sup>8</sup>The Corps has both military and civilian responsibilities. In this report, we focus on its civilian responsibilities.

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## FWS Has Developed a Process for Responding to Consultation Requests under CBRA but Declined to Provide an Opinion in Response to Some Requests, as Required

FWS has developed a process for responding to consultation requests it receives from agencies, including guidance for staff. Under this process, agencies are responsible for initiating the CBRA consultation process. To do so, agencies may fill out a template that FWS developed in 2018 and submit it to the FWS field office overseeing the area where the CBRS unit with the proposed project is located. This template asks for information on the project, including location, description, and any applicable CBRA exception(s). Agencies may also provide maps or photographs of the project site. Under FWS guidance, FWS field office staff are to review this information and provide a response to the requesting agency. The consultation template includes response options for FWS staff to indicate if the project meets an exception. Regardless of FWS's response to the consultation request, the requesting agency is responsible for making the determination as to whether the proposed project is consistent with CBRA.

As part of its consultation process, FWS has developed guidance for its staff and requesting agencies. Specifically:

- In 1983, FWS published a “general statement of policy and advisory guidelines” in the *Federal Register* stating that FWS’s “responsibility is to respond to a consultation request by providing technical information and comments on the question of consistency with CBRA.”<sup>9</sup>
- In 1991, FWS issued guidance stating that its field offices were to investigate and respond to consultation requests in a “responsible, timely, and lucid manner.”<sup>10</sup>
- In 2018, FWS developed a flowchart to help explain the consultation process to federal agencies.<sup>11</sup>
- FWS’s website states that, in response to consultation requests, FWS “should provide technical information and an opinion as to whether the activity is allowed under CBRA’s exceptions.”<sup>12</sup>

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<sup>9</sup>48 Fed. Reg. 45664, 45667 (Oct. 6, 1983).

<sup>10</sup>FWS Director’s Memo, *Guidance for Coastal Barrier Resources Act Consultation with Federal Agencies* (Washington, D.C.: Oct. 2, 1991).

<sup>11</sup>This flowchart and other consultation guidance are available on FWS’s website at <https://www.fws.gov/cbra/Consultations.html>, last accessed November 25, 2020.

<sup>12</sup><https://www.fws.gov/cbra/Limitations-and-Exceptions.html>, last accessed November 25, 2020.

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In analyzing consultations conducted under this process, we collected information on 31 consultation requests that the eight FWS offices in our review received in fiscal years 2018 and 2019.<sup>13</sup> The Federal Emergency Management Agency (FEMA) or the Corps requested most of these consultations. Agencies most frequently consulted with FWS on CBRA exceptions for maintenance and repair of roads; projects for the study, management, protection, and enhancement of fish and wildlife habitats; and maintenance of navigation channels. (For a list of the consultations we reviewed, see app. IV.) As shown in table 1, of the 31 consultation requests, FWS's response to the requesting agency for 18 requests stated that FWS declined to provide an opinion because of competing priorities. Three of these 18 consultation requests were from the Corps, which has implemented two of the projects and plans to implement the third after completing additional environmental study.<sup>14</sup> A Corps planning official said the additional environmental study is being conducted in part because FWS did not provide an opinion on the project. For another 12 requests, FWS responded that the project met an exception under CBRA. For the remaining request, FWS responded that the project did not meet an exception.

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<sup>13</sup>We requested information from individual field offices because FWS officials told us the agency does not have complete or reliable data on CBRA consultations. FWS relies on a data system called the Tracking and Integrated Logging System to track its various consultations with other agencies. However, the system does not capture complete information on CBRA consultations. FWS officials said they are developing a new data system to address this, which they expect to be operational in summer 2021.

<sup>14</sup>The remaining 15 consultation requests for which FWS declined to provide an opinion were from FEMA, which was outside the scope of our review.

**Table 1: Coastal Barrier Resources Act Consultations Conducted by Eight U.S. Fish and Wildlife Service (FWS) Field Offices in Fiscal Years 2018 and 2019**

FWS Region <sup>a</sup>	Field office	Area covered by field office	Number of consultations requested	Declined to provide an opinion <sup>b</sup>	Project meets an exception	Project does not meet an exception
Midwest	Michigan	Michigan	0	N/A	N/A	N/A
Northeast	Long Island, New York	Long Island, New York City, Rockland County, Westchester County	6	6	0	0
	New England	Connecticut, Massachusetts, New Hampshire, Rhode Island, Vermont	4	4	0	0
	New Jersey	New Jersey	1	0	1	0
Southeast	Louisiana	Louisiana	3	2	1	0
	Panama City, Florida	15 counties in the Florida panhandle	2	1	0	1
	Raleigh, North Carolina	Eastern and central North Carolina	5	5	0	0
Southwest	Texas Coastal	68 counties along the Texas coast	10	0	10	0
<b>Total</b>			<b>31</b>	<b>18</b>	<b>12</b>	<b>1</b>

Legend:

N/A = not applicable

Source: GAO analysis of FWS consultation documents. | GAO-21-258

Note: The Coastal Barrier Resources Act, enacted in 1982, restricts federal expenditures and financial assistance, such as flood insurance or home loan guarantees, in certain coastal areas. Pub. L. No. 97-348, 96 Stat. 1653 (1982) (codified as amended at 16 U.S.C. §§ 3501-3510).

<sup>a</sup>In August 2018, the Department of the Interior completed the reorganization of its bureaus' 49 individual regions into 12 department-wide unified regions. In this report, we refer to the FWS regions in place prior to the creation of these department-wide unified regions because our review includes consultations conducted before that time.

<sup>b</sup>In these instances, FWS responded to the requesting agency that it was unable to provide an opinion because of competing priorities.

In January and February 2018, FWS's Northeast and Southeast regional offices issued guidance stating that, because of the large workload in these offices, field office staff were to focus on other priorities and not spend time responding to CBRA consultation requests. Six field offices in these regions were included in our review, and we found that these offices responded by declining to provide an opinion on most of the requests we reviewed (see table 1). In doing so, these field offices selected an option in FWS's consultation template stating they declined to provide an opinion due to "many competing priorities." FWS headquarters officials noted that the regional guidance is not consistent with agency-

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wide guidance that had been issued previously but stated that CBRA does not prescribe the manner in which FWS is to respond to agency consultation requests. However, neither the regional guidance nor the template option to decline to provide an opinion appear consistent with the CBRA requirement for FWS to provide consultation when requested or FWS's guidance citing its responsibility to provide technical information and comments when an agency requests a consultation. By ensuring that FWS guidance at all levels directs staff to provide consultation when requested, FWS could help ensure that it is consistent with CBRA's consultation requirement and agency-wide guidance and could provide requesting agencies with the benefit of FWS's perspective when they seek to determine whether their projects are allowable under CBRA.

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## FWS Uses Two Processes to Update CBRS Maps but Has Not Met the CBRA Requirement for Map Reviews and Does Not Have a Strategy to Guide Its Future Efforts

FWS has updated the majority of CBRS maps using two processes, which FWS refers to as the administrative and comprehensive processes. Under the administrative process, FWS makes minor technical corrections to CBRS maps, while under the comprehensive process, FWS can make more substantive changes. However, FWS has not reviewed the CBRS maps at least once every 5 years as required by CBRA and has not developed a strategy to guide its mapping review efforts in the future. FWS also created maps of undeveloped Pacific coastal barriers in the 1990s and studied the implication of expanding the CBRS as part of a study conducted in response to the Coastal Barrier Improvement Act of 1990.

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## Through Its Administrative Mapping Process, FWS Updated Maps Covering 92 Percent of CBRS Acreage, but Has Not Met the Required Time Frame for Map Reviews

Under CBRA, FWS is required to review the CBRS maps at least once every 5 years and make—in consultation with state, local and federal officials—minor and technical modifications to the boundaries of CBRS units, as necessary, solely to reflect changes that have occurred as a result of natural forces.<sup>15</sup> Such natural forces include erosion or accretion, according to FWS officials.<sup>16</sup> As part of this process, according to officials, FWS examines aerial images to determine whether any natural changes that have occurred in CBRS units warrant changing the unit boundaries. FWS then prepares draft revised maps to reflect the changes. Before the revised maps become effective, FWS publishes a notice of availability of

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<sup>15</sup>16 U.S.C. § 3503(c).

<sup>16</sup>Accretion in coastal areas is the deposition of sediment, such as sand, which causes beaches to become wider.



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draft maps in the *Federal Register* to open a stakeholder review period for federal, state, and local officials to provide input to FWS on the maps. After considering any comments received, FWS publishes a final notice of availability for the final maps in the *Federal Register*, at which time the maps become effective.<sup>17</sup>

Under the most recent effort, which started in 2011, FWS used its administrative process to modify and digitize nearly all CBRS maps. This involved transitioning maps from paper to an electronic geographic information system format accessible on FWS's website. According to our review of FWS information and interviews with agency officials, FWS began updating maps in 2011, with the first maps under this effort becoming effective in 2014 and the last maps in 2016. These maps represent 414 System Units covering about 1.2 million acres and 205 OPAs covering about 2 million acres—about 92 percent of the total CBRS acreage. The remaining 8 percent of CBRS acreage has not been updated, but FWS officials said they plan to do so in 2021 as part of their review and update of maps of CBRS units affected by Hurricane Sandy, discussed below.

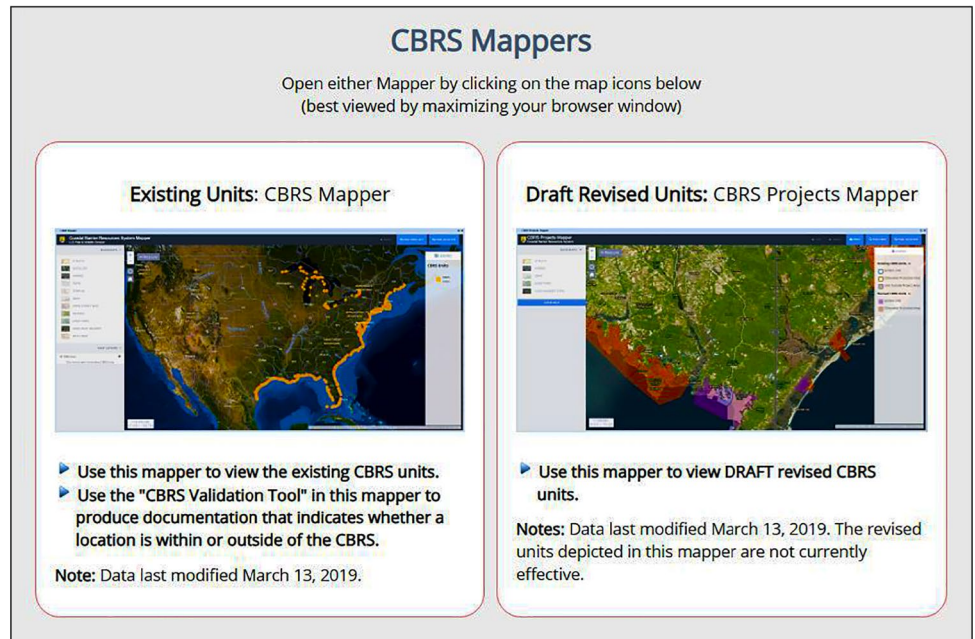
FWS used the digital versions of CBRS maps to create tools and information to assist stakeholders such as federal agencies and landowners. For example, FWS's website contains two CBRS Mapper tools, including a validation tool property owners can use to determine if their property is within a particular unit.<sup>18</sup> See figure 3 for an image of the CBRS Mapper tools found on FWS's website.

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<sup>17</sup>The administrative mapping process can also involve incorporating voluntary additions of land or excess federal property into the CBRS, but FWS officials told us this is rare.

<sup>18</sup><https://www.fws.gov/cbra/maps/mapper.html>, accessed September 17, 2020

**Figure 3: U.S. Fish and Wildlife Service Coastal Barrier Resources System (CBRS) Mapper Tools, as of October 2020**



Source: U.S. Fish and Wildlife Service (<https://www.fws.gov/cbra/maps/Mapper.html> accessed 9/17/2020). | GAO-21-258

Note: The Coastal Barrier Resources Act established the CBRS, which consists of relatively undeveloped coastal lands and associated aquatic habitats along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts. See 16 U.S.C. § 3503(a). The CBRS Mapper allows users to determine whether a property is in the CBRS by entering location information into the validation tool.

Digitizing the CBRS maps has provided FWS and others with greater accuracy in identifying the boundaries of CBRS units, according to FWS officials. In the past, staff at FWS and other agencies relied on paper maps to make such determinations. FWS officials stated that these maps were difficult to interpret, leading to errors when trying to determine whether a property was located in a CBRS unit. For example, FWS officials told us there were instances in which homeowners with property in the CBRS were issued federal flood insurance policies contrary to the CBRA prohibition because without accurate maps, the properties were mistakenly thought to be outside the CBRS. Some of these homeowners filed claims for flood damage that were denied because the properties were in the CBRS, according to officials.

As noted, CBRA requires FWS to review and, as needed, update CBRS maps at least once every 5 years. However, since the CBRS was

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established in 1982, FWS has reviewed and updated CBRS maps twice using the administrative process, once beginning in 1997 and again beginning in 2011 (described above). FWS officials told us that they did not previously review and update the maps every 5 years because they did not have sufficient staff or funding to do so and because the agency had other priorities. They told us they had one to two full-time staff responsible for updating maps in the past but in 2015 received an increase in program funding and now have four full-time staff and one part-time contractor working on this effort. With additional staff, FWS officials said they are planning to review and update the maps every 5 years in the future. These officials also said that future 5-year review efforts will be less resource intensive than the one initiated in 2011 because the maps have already been converted from paper to a digital format.

However, as of 2020, FWS had not reviewed the maps that it updated in 2014—thereby not complying with the act’s 5-year time frame for reviewing and, as necessary, updating the maps. FWS officials told us they did not know how soon these maps would be reviewed and updated, stating that several factors—such as the amount of hurricane activity in a given area or the availability of aerial imagery for use in mapping—would affect mapping priorities. Further, FWS has not developed a strategy to take into account such factors and guide its mapping review efforts, including a mechanism for prioritizing maps to review, a schedule for reviewing them, and an assessment of the resources needed to meet the 5-year review requirement. As we have previously found, leading practices in federal strategic planning and characteristics of good performance measures include defining strategies and identifying resources needed to achieve a program’s goals and developing time frames and using performance measures to track progress in achieving them and inform management decision-making.<sup>19</sup> Developing a strategy for meeting the 5-year review requirement could help FWS comply with the statutory time frame for reviewing maps.

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<sup>19</sup>See, for example, GAO, *Recreational Fisheries Management: The National Marine Fisheries Service Should Develop a Comprehensive Strategy to Guide Its Data Collection Efforts*, [GAO-16-131](#) (Washington, D.C.: Dec. 8, 2015).

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Through Its Comprehensive Mapping Process, FWS Has Updated Maps for About 30 Percent of CBRS Acreage and Has Additional Work Under Way

Under the comprehensive mapping process, FWS may make more substantial changes to CBRS maps than under the administrative process, with the resulting maps requiring approval by statute. In contrast to the administrative process, there is no CBRA requirement for periodically reviewing or updating maps under the comprehensive process. FWS officials told us the agency uses this process to correct map errors and consider adding eligible undeveloped areas to the CBRS. For example, some landowners and Members of Congress have asked FWS to review the original boundaries of particular CBRS units because they believed certain areas were incorrectly designated as part of the CBRS. During the comprehensive process, FWS also can consider whether there are undeveloped areas adjacent to existing units that could be added to the units. After considering these issues, FWS drafts revised boundaries and publishes a notice of availability in the Federal Register. After a public comment period, FWS prepares final recommended maps and submits them to Congress for review and determination as to whether to enact legislation to approve the revised maps. (App. V shows examples of maps of areas FWS proposed adding to or removing from the CBRS.)

FWS has used the comprehensive process to carry out three main efforts:

- **Hurricane Sandy mapping project.** In 2014, FWS began to review and update maps of CBRS units in the nine states most affected by Hurricane Sandy. Collectively, the changes being proposed under this effort could affect 368 existing units and add 90 new units to the CBRS, according to two Federal Register notices on these proposed changes. FWS published notices reflecting these changes in the *Federal Register* for two separate groups of states.<sup>20</sup> At the time of our review, FWS was preparing summaries of, and responses to, the public comments received on the draft maps. FWS officials said the agency intends to submit final recommended maps to Congress in 2021 for its consideration. See table 2 for a summary of the proposed changes to the CBRS by state.

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<sup>20</sup>The first group, which was available for comment from March 12, 2018, to July 10, 2018, included draft changes for units in Delaware, Massachusetts, New Hampshire, and New Jersey. The second group, which was available for comment from December 18, 2018, to April 17, 2019, included draft changes for units in Connecticut, Maryland, New York, Rhode Island, and Virginia.

**Table 2: Summary of Proposed Changes to the Coastal Barrier Resources System (CBRS) Under the Hurricane Sandy Mapping Project**

State	Number of existing CBRS units with proposed changes <sup>a</sup>	Number of proposed new CBRS units
Connecticut	32	3
Delaware	8	3
Maryland	49	11
Massachusetts	86	23
New Hampshire	N/A <sup>b</sup>	1
New Jersey	18	9
New York	80	22
Rhode Island	31	4
Virginia	64	14
<b>Total</b>	<b>368</b>	<b>90</b>

Legend:

N/A = not applicable

Source: GAO analysis of U.S. Fish and Wildlife Service data. | GAO-21-258

Notes: The Coastal Barrier Resources Act established the CBRS, which consists of relatively undeveloped coastal lands and associated aquatic habitats along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts. See 16 U.S.C. § 3503(a).

Proposed changes include those developed by the U.S. Fish and Wildlife Service as of November 2020. Final recommended changes are expected to be submitted to Congress in 2021.

<sup>a</sup>The proposed changes include both System Units and Otherwise Protected Areas.

<sup>b</sup>New Hampshire currently has no CBRS units.

In total, the proposed changes for the Hurricane Sandy project would add 277,340 new acres to the CBRS and remove 1,344 existing acres, for a net increase of 275,996 acres—or an 8 percent increase over the current CBRS acreage.<sup>21</sup>

- **Digital mapping pilot project.** In 2016, FWS submitted revised maps for 65 CBRS units to Congress, of which maps for 57 units were approved by statute in 2018.<sup>22</sup> These maps were prepared in response to a statutory requirement for the Secretary of the Interior to

<sup>21</sup>The changes would also add 295 structures to the CBRS and remove 914, for a net reduction of 619 structures.

<sup>22</sup>Strengthening Coastal Communities Act of 2018, Pub. L. No. 115-358, 132 Stat. 5078.

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create and submit digital maps as part of a pilot project.<sup>23</sup> The maps for the remaining eight units are under review by Congress, according to FWS officials.

- **Technical corrections.** FWS receives requests from Congress or landowners to review and correct mapping errors, to which FWS responds on a case-by-case basis. According to FWS officials, FWS has received requests to review maps of 67 CBRS units since 2002. As of September 2020, 55 of these had been addressed or were being reviewed. FWS plans to address the remaining requests starting in 2021 if funding is available, according to agency officials, while also considering any additional requests the agency may receive.

According to FWS officials, under these three efforts, FWS has prepared draft revised maps covering about 30 percent of the total CBRS acreage as of September 2020 and was working on preparing draft revised maps for another 10 percent of the total CBRS acreage. Of this combined 40 percent of total acreage,

- maps covering 9 percent had been adopted by statute,
- maps covering 5 percent had been submitted to Congress for consideration but had not been adopted by statute,
- maps covering 16 percent are part of the Hurricane Sandy mapping project and have not been submitted to Congress because FWS was considering public comments on them, and
- maps covering 10 percent are part of the technical correction process and have not been released for public review because FWS is still working on them.

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<sup>23</sup>The Coastal Barrier Resources Reauthorization Act of 2000 required the Secretary of the Interior to carry out a pilot project to produce draft digital maps of 50 to 75 CBRS units. See Pub. L. No. 106-514, § 6(a), 114 Stat. 2394, 2396. The Coastal Barrier Resources Reauthorization Act of 2005 required the Secretary to, among other things, submit final recommended digital maps created under the pilot project and recommendations for their adoption to specified congressional committees. See Pub. L. No. 109-226, § 3(c), 120 Stat. 381, 381-382 (2006).

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## FWS Prepared Maps of Coastal Barriers on the Pacific Coast and Studied the Implications of Expanding the CBRS

In the 1990s, FWS developed maps of coastal barriers along the Pacific Coast and examined the implications of protecting additional undeveloped coastal barriers by expanding the CBRS to include the Pacific Coast. FWS undertook these efforts in response to a requirement in the Coastal Barrier Improvement Act of 1990.<sup>24</sup> After providing interim reports to Congress in 1993 and 1996, FWS issued a final report to Congress in 2000.<sup>25</sup>

In its final report, FWS recommended not expanding the CBRS to the Pacific Coast because of the significant geological and climatic differences between the Atlantic, Gulf of Mexico, and Pacific coasts. For example, with respect to climatic hazards, the report noted that on the Atlantic and Gulf coasts, the biggest threats to human life and property are typically natural disasters such as tropical storms and hurricanes, the effects of which coastal barriers can help reduce. In contrast, the biggest threats to human life and property on the Pacific Coast are typically erosion, seismic activity, and coastal flooding. Given these differences and because there are few barrier islands on the Pacific Coast and hurricanes are uncommon, FWS concluded that expanding the CBRS to include the Pacific Coast would produce limited benefits for the federal government in terms of protecting life, valuable fish and wildlife habitat, property, and federal tax dollars. FWS also noted that, in order for the Pacific Coast to be included in the CBRS, Congress would need to revise the CBRA definition of areas eligible for inclusion in the CBRS. According to FWS officials, the agency has not conducted additional work on this issue because Congress has not requested additional studies of the Pacific Coast.

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<sup>24</sup>Pub. L. No. 101-591, § 6, 104 Stat. 2931, 2936-2937. The law required the Secretary of the Interior to submit by May 16, 1991 a study examining the need for protecting undeveloped coastal barriers along the Pacific Coast through inclusion in the CBRS, and to submit the maps identifying boundaries of undeveloped coastal barriers bordering the Pacific Ocean that are appropriate for inclusion in the CBRS by November 16, 1991.

<sup>25</sup>FWS, *Coastal Barrier Improvement Act: Report to Congress on the Inclusion of the Pacific Coastal Barriers in the National Coastal Barrier Resources System* (Washington, D.C.: May 2000).

## The Corps Has Many Projects in the CBRS and a Process to Consider Compliance with CBRA

As of August 2020, the seven Corps districts included in our review reported 51 active projects in the CBRS, with the most common projects being for beach nourishment. Under Corps guidance, when planning a project, district staff are to consider and document whether the project complies with relevant environmental laws, including CBRA. Some Corps projects may be affected by a 2019 legal opinion from the Solicitor of the Interior reversing Interior's position on whether certain beach nourishment projects meet an exception under CBRA.

## The Corps Districts in Our Review Reported 51 Projects in the CBRS, Generally for Beach Nourishment or Navigation Channel Dredging

The seven Corps district offices in our review reported 51 active projects in the CBRS as of August 2020, as shown in table 3. These projects were generally for beach nourishment, dredging federal navigation channels, or a combination of both. Beach nourishment projects involve moving sand onto beaches that have eroded and can also include building dunes. In some instances, sand is taken from the dredging site and used to nourish the beaches. Corps officials said that beach nourishment projects and efforts to dredge existing navigation channels within the CBRS are among the activities allowed under the exceptions in CBRA.

**Table 3: Number and Type of Projects in the Coastal Barrier Resources System (CBRS) for Selected U.S. Army Corps of Engineers District Offices, as of August 2020**

Corps district name	States covered by district	Number of projects in the CBRS	Number of beach nourishment projects	Number of dredging of federal navigation channel projects	Number of federal navigation channel projects with beneficial use of material <sup>a</sup>	Number of other projects <sup>b</sup>
Detroit	All of Michigan; parts of Indiana, Minnesota, and Wisconsin	4	1	1	0	2
Galveston	Texas coast and part of Louisiana	13	0	10	1	2
Jacksonville	Most of Florida and part of Georgia	12	9	1	2	0
New England	All of Connecticut, Maine, New Hampshire, and Rhode Island; most of Massachusetts; some of Vermont	4	1	1	1	1
New Orleans	Most of Louisiana coast	3	2 <sup>c</sup>	1	0	0
New York	Parts of New Jersey, New York, and Vermont	4	2	0	1	1



Corps district name	States covered by district	Number of projects in the CBRS	Number of beach nourishment projects	Number of dredging of federal navigation channel projects	Number of federal navigation channel projects with beneficial use of material <sup>a</sup>	Number of other projects <sup>b</sup>
Wilmington	Most of North Carolina and part of Virginia	11	4	0	7	0
<b>Total</b>		<b>51</b>	<b>19</b>	<b>14</b>	<b>12</b>	<b>6</b>

Source: GAO analysis of U.S. Army Corps of Engineers information. | GAO-21-258

Note: The Coastal Barrier Resources Act established the CBRS, which consists of relatively undeveloped coastal lands and associated aquatic habitats along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts. See 16 U.S.C. § 3503(a).

<sup>a</sup>Beneficial use of material can include putting dredged material onto beaches as part of beach nourishment projects.

<sup>b</sup>Other projects include ecosystem restoration projects and installing flood barriers.

<sup>c</sup>One of the New Orleans district projects was for beach nourishment and ecosystem restoration.

## The Corps Considers Compliance with CBRA as Part of Its Project Planning Process

The Corps uses its project planning process to consider compliance with environmental laws, including CBRA. As part of the planning process, the Corps is to conduct a feasibility study for each project to identify the condition to be addressed and consider various options to address it. Corps guidance states that the feasibility study is to include the results of the Corps' work to comply with the National Environmental Policy Act of 1969 (NEPA), including either an environmental assessment or a more detailed environmental impact statement evaluating the likely environmental effects of the project.<sup>26</sup> The guidance also lists CBRA as one of many environmental laws that should be considered as part of the NEPA process.<sup>27</sup>

According to Corps officials, Corps district offices are to make the initial determination on whether a proposed project in the CBRS meets an exception under CBRA when preparing feasibility studies. The draft

<sup>26</sup>Pub. L. No. 91-190 (1970), *codified* at 42 U.S.C. §§ 4321-4347. Under NEPA, agencies evaluate the likely environmental effects of their proposed projects by using an environmental assessment, or if the projects likely would significantly affect the environment, a more detailed environmental impact statement.

<sup>27</sup>U.S. Army Corps of Engineers, *Planning Guidance Notebook, Regulation 1105-2-100*, (Washington, D.C.: April 22, 2000). Appendix G of the Notebook contains guidance on preparing planning reports, including feasibility studies. The Corps is updating appendix C of the Notebook, and the draft update directs staff to coordinate with FWS to determine if a project is in the CBRS, and if it is, to document in the feasibility study that the project complies with CBRA. The draft appendix C is dated April 1, 2019. Corps officials said the draft guidance is in the process of being reviewed.

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feasibility study is then to be reviewed by Corps district office attorneys and, in some cases, the division office. Once these reviews are completed, the Corps is to request a consultation with FWS before proceeding with the project. Corps headquarters officials said that in instances in which FWS does not provide an opinion in response to a consultation request, the Corps will implement projects if it believes they meet an exception under CBRA. According to Corps officials, the consultation applies for the duration of the project, but if the project undergoes substantial changes during its implementation, a new consultation with FWS may be required. Corps officials said the Civil Works program is developing guidance on procedures staff should follow to comply with CBRA, which was undergoing departmental review at the time of our report. Agency officials did not have an estimate for when the guidance would be finalized. These officials told us that the guidance is intended to help provide consistency in project-level analysis and documentation needed with respect to CBRA.

In our review of documents for 17 selected Corps projects in the CBRS, we found that the Corps documented its compliance with CBRA for 13 projects. For these 13 projects, we found the Corps generally included a discussion of CBRA in the NEPA documents prepared for the project and identified the exception under CBRA that the Corps believed the project met. For the remaining four projects, we did not find mention of CBRA in the documents we were provided, for various reasons. One project predated CBRA and therefore the project documentation did not include reference to it. Another project consisted of maintenance and repair of a structure that was authorized prior to the enactment of CBRA, and project officials said they did not believe they needed to document compliance with CBRA. For the remaining two projects, officials told us they believed the Corps had consulted with FWS as required by CBRA, but that the staff who worked on those projects had retired, and the officials were unable to locate supporting documentation.

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### Certain Corps Projects Could Be Affected by a 2019 Legal Opinion from Interior on Beach Nourishment

In October 2019, the Solicitor of the Interior issued a legal opinion regarding a certain CBRA exception, which may affect Corps projects involving beach nourishment. The opinion concluded that CBRA allows for the removal of sand from CBRS units to nourish beaches outside the

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CBRS.<sup>28</sup> This reversed a 1994 Interior Solicitor's opinion, which found that sand could not be removed from CBRS units for beach nourishment projects outside the CBRS.<sup>29</sup>

In April 2020, FWS issued a memorandum to the Corps informing it of the Interior Solicitor's 2019 opinion. The FWS memorandum said that this change does not guarantee that sand within the CBRS may be used for beach nourishment outside of the CBRS but makes such projects "eligible for consideration by federal agencies through the CBRA consultation process." Officials in the Corps' Office of Chief Counsel told us they will defer to the Interior Solicitor's opinion and follow FWS guidance when considering whether Corps projects meet the CBRA exception for shoreline stabilization projects and said they have advised division and district office staff accordingly. FWS officials told us that, at the time of our review, they had conducted two consultations on beach nourishment projects using this new opinion as guidance. Specifically, FWS had reviewed beach nourishment projects at Wrightsville and Carolina beaches in North Carolina and found that these projects qualified for the exception under CBRA for shoreline stabilization projects, provided the Corps takes other specified actions. Prior to the 2019 revised opinion, FWS had found that these projects did not meet this exception.

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## Conclusions

FWS plays a key role in implementing CBRA by consulting with agencies considering expenditures in the CBRS and by working to keep CBRS maps current and available to agencies and the public. However, some

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<sup>28</sup>Specifically, the opinion concluded that the CBRA exception for nonstructural projects for shoreline stabilization allowed removal of sand from CBRS units to nourish beaches outside of the CBRS because the statutory language for this exception did not contain the phrase "within the System" in connection with the location of the shoreline stabilization projects. This CBRA exception is at 16 U.S.C. § 3505(a)(6)(G), which says notwithstanding the general statutory prohibition, the appropriate federal officer, after consultation with the Secretary, may make federal expenditures and financial assistance available within the System for nonstructural projects for shoreline stabilization that are designed to mimic, enhance, or restore a natural stabilization system if the project is consistent with the CBRA's purposes. In addition, to use this exception, the legal opinion says the FWS and agency proposing the project must determine whether the project is consistent with the purposes of CBRA. In July 2020, the National Audubon Society filed a lawsuit against the Secretary of the Interior challenging this opinion as arbitrary and capricious on the grounds that it does not explain or justify its conclusions or adequately explain the basis for reversing the 1994 opinion, among other grounds. As of February 11, 2021, the lawsuit was still pending.

<sup>29</sup>Prior to the 1994 opinion, however, FWS had concurred during a consultation on a Corps project that sand taken from a CBRS unit could be used to renourish a beach outside of the CBRS under the 16 U.S.C. § 3505(a)(6)(G) exception, according to Corps documents.

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FWS field offices declined to provide an opinion on the majority of consultation requests we reviewed, which is not consistent with CBRA consultation requirements or FWS guidance. By ensuring that FWS guidance at all levels directs staff to provide consultation when requested, FWS could help ensure that it is consistent with CBRA's consultation requirement and its own agency-wide guidance and could also provide requesting agencies with the benefit of FWS's perspective when they seek to determine whether their projects are allowable under CBRA. Further, FWS has not reviewed and updated CBRS maps every 5 years, as required by law. In addition, FWS has not developed a strategy to guide its mapping review efforts, including information on the factors that may affect agency mapping priorities as well as needed resources and planned time frames. Developing a strategy for meeting the 5-year review requirement could help FWS comply with CBRA's required time frame to review maps.

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## Recommendations for Executive Action

We are making the following two recommendations to FWS:

The Director of FWS should ensure that agency guidance at all levels directs FWS field offices to consistently provide opinions in response to CBRA consultation requests, including revising FWS's consultation template as needed. (Recommendation 1)

The Director of FWS should develop a strategy to guide FWS's efforts to review and, as necessary, update CBRS maps at least once every 5 years, as required by CBRA, including an assessment of needed resources and planned time frames. (Recommendation 2)

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## Agency Comments and Our Evaluation

We provided a draft of this report to the Department of Defense and the Department of the Interior for review and comment. The Department of Defense provided technical comments, which we incorporated as appropriate. In its written comments, reproduced in appendix VI, the Department of the Interior concurred with our recommendations and described actions it plans to take to address them. These actions include completing an electronic system to streamline and standardize the consultation process, delivering consultation training to FWS field office staff, and developing a strategy assessing resource needs and goals to guide FWS's mapping efforts. Interior also provide technical comments, which we incorporated as appropriate.

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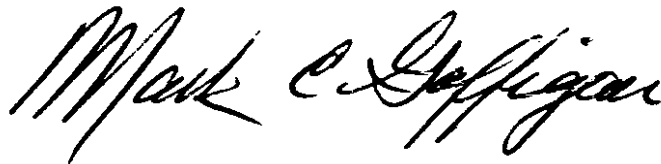
As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to the

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appropriate congressional committees, the Secretary of Defense, the Acting Secretary of the Interior, and other interested parties. In addition, the report is available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions on this report, please contact me at (202) 512-3841 or [gaffiganm@gao.gov](mailto:gaffiganm@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix VII.

Sincerely yours,

A handwritten signature in black ink that reads "Mark C. Gaffigan". The signature is written in a cursive, flowing style.

Mark Gaffigan  
Managing Director, Natural Resources and Environment

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# Appendix I: Objectives, Scope, and Methodology

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We examined (1) the U.S. Fish and Wildlife Service's (FWS) consultation process and the number and outcome of consultations conducted by selected FWS field offices in fiscal years 2018 and 2019 under the Coastal Barrier Resources Act (CBRA), (2) FWS's processes for updating Coastal Barrier Resources System (CBRS) maps, and (3) the number of U.S. Army Corps of Engineers (Corps) projects within the CBRS and the process the Corps uses to comply with CBRA.

To address our first objective, we reviewed CBRA to identify relevant provisions regarding agency consultations with FWS. We reviewed FWS policy and guidance on CBRA, including a 1983 Federal Register notice issuing a general statement of policy and advisory guidelines for implementing CBRA, a 1991 FWS Director's Memo on CBRA, a flowchart that describes the consultation process, and the template that federal agencies submit to FWS during the consultation process. We also interviewed agency officials at headquarters and selected regional and field offices about the consultation process. Specifically, we interviewed officials from the Northeast, Southeast, Texas, and Great Lakes regional offices, selecting these offices because they oversee the Atlantic, Gulf, and Great Lakes coastal areas where CBRS units are located.<sup>1</sup> Of the 26 field offices located in these four FWS regions, we selected a nongeneralizable sample of eight field offices to include in our review. We selected at least one field office in each of these four regions and included offices that generally covered states with substantial acreage in the CBRS. Table 4 provides a list of the regions and field offices included in our review.

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<sup>1</sup>In August 2018, the Department of the Interior completed the reorganization of its bureaus' 49 individual regions into 12 department-wide unified regions. In this report, we refer to the FWS regions in place prior to the creation of these department-wide unified regions because our review includes consultations conducted before that time.

**Appendix I: Objectives, Scope, and Methodology**

**Table 4: U.S. Fish and Wildlife Service (FWS) Regions and Field Offices Included in Our Review**

Region <sup>a</sup>	Field office	Area covered by field office
Midwest	Michigan	Michigan
Northeast	Long Island, New York	Long Island, New York City, Westchester County
	New England	Connecticut, Massachusetts, New Hampshire, Rhode Island, Vermont
	New Jersey	New Jersey
Southeast	Louisiana	Louisiana
	Panama City, Florida	15 counties in the Florida panhandle
	Raleigh, North Carolina	Eastern and central North Carolina
Southwest	Texas Coastal	68 counties along the Texas coast

Source: GAO summary of FWS information. | GAO-21-258

<sup>a</sup>In August 2018, the Department of the completed the reorganization of its bureaus' 49 individual regions into 12 department-wide unified regions. In this report, we refer to the FWS regions in place prior to the creation of these department-wide unified regions because our review includes consultations conducted before that time.

To identify available information on FWS's CBRA consultations, we reviewed information about the Tracking and Integrated Logging System (TAILS), which FWS uses to track consultations with other agencies, including CBRA consultations. We found that TAILS does not capture the full range of potential FWS responses to CBRA consultation requests and that entering information on consultations in TAILS is optional for field office staff. As a result, we determined that TAILS data on CBRA consultations were not sufficiently reliable for our purposes. Given the limitations of TAILS, we requested information from the eight field offices included in our review regarding consultations they had conducted in fiscal years 2018 and 2019, the most recent 2-year period for which documents were available. We examined documents for 31 consultation requests that these offices received during this time. For each consultation request, we reviewed the documents to identify the agency requesting the consultation, details on the work to be conducted under the project, and FWS's response to the consultation request.

In addition, for this objective, we determined that the control activities component and the information and communication component of federal standards for internal control were significant to this objective, along with the underlying principles that management should (1) implement control activities through policies and (2) externally communicate the necessary

quality information to achieve the entity's objectives.<sup>2</sup> During our review, we assessed the extent to which FWS implemented these principles as part of its consultation activities.

To address our second objective, we reviewed CBRA to identify relevant provisions regarding FWS's mapping responsibilities and reviewed information on CBRS map updates, including information FWS published in the *Federal Register* and on its website, as well as reports the agency provided to Congress on its mapping efforts. Specifically, we reviewed *Federal Register* notices issued from 2014 through 2016 that announced the availability of final maps issued by FWS using its administrative process, under which FWS can make minor and technical modifications to the boundaries of CBRS units to reflect changes that have occurred as a result of natural forces such as erosion and accretion in the CBRS. We also reviewed statutes that enacted new maps for the CBRS as well as *Federal Register* notices soliciting public comment on proposed boundary changes made available in 2018 and 2019. We also reviewed two reports that FWS provided to Congress on a pilot project to convert maps from a paper to digital format,<sup>3</sup> as well as FWS documents on the status of its mapping efforts.

We visited FWS headquarters in March 2020 to learn about the process for updating and maintaining maps. At this meeting, officials demonstrated the process for accessing digital maps on FWS's website and showed us paper CBRS maps that were used previously. We interviewed FWS headquarters officials about past efforts to update CBRS maps, as well as agency plans for future updates and their role in the mapping process. To assess FWS's efforts to plan for future updates, we compared this information with the framework of leading practices in federal strategic planning contained in the GPRA Modernization Act of 2010. We also interviewed FWS officials on their efforts to examine the implications of expanding the CBRS to the Pacific Coast, including the

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<sup>2</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

<sup>3</sup>*U.S. Department of the Interior, Report to Congress: John H. Chafee Coastal Barrier Resources System Digital Mapping Pilot Project* (Washington, D.C.: 2008); and *U.S. Fish and Wildlife Service, Final Report to Congress: John H. Chafee Coastal Barrier Resources System Digital Mapping Pilot Project* (Washington, D.C.: 2016).



development of maps of Pacific coastal barriers, and reviewed FWS's 2000 report on this topic.<sup>4</sup>

To address our third objective, we reviewed Corps guidance on CBRA contained in its Planning Guidance Notebook. Specifically, we examined appendix G, which contains guidance on preparing project planning reports, including feasibility studies. We also interviewed officials from Corps headquarters and selected Corps district offices to understand their processes for complying with CBRA. We selected a nongeneralizable sample of seven district offices to include in our review, out of the 14 district offices that oversee areas with CBRS units. These offices are located in different geographic areas and are generally in states with a large number of acres in the CBRS. Specifically, we interviewed officials from the following district offices:

- Detroit
- Galveston
- Jacksonville
- New England
- New Orleans
- New York
- Wilmington (NC)

We asked each of these seven district offices to provide us a list of their active projects in the CBRS, as of August 2020. Officials identified a total of 51 active projects, for which we reviewed documents to identify project location, project purpose, and CBRA exception(s) under which the project was being conducted. We also reviewed documents on a portion of these projects to identify steps the Corps took to document its compliance with CBRA. We selected a nongeneralizable sample of 17 Corps projects, ensuring that we had at least two projects from each of the seven districts and examined projects that were in different stages of development (planning, construction, or maintenance). Because Corps officials told us the Corps documents compliance with CBRA as part of its work to comply with the National Environmental Policy Act of 1969 (NEPA), we requested NEPA documents for each of the 17 selected projects, including environmental assessments and environmental impact statements

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<sup>4</sup>FWS, *Coastal Barrier Improvement Act: Report to Congress on Inclusion of Pacific Coastal Barriers in the National Coastal Barrier Resources System* (Washington, D.C.: 2000).

prepared as part of the project planning process. We reviewed these documents to identify project details and steps the Corps took to help ensure the project's compliance with CBRA. We also reviewed a 2019 legal opinion that the Solicitor of the Interior issued about a specific type of beach nourishment project as well as subsequent FWS guidance on the opinion, and interviewed FWS and Corps officials about the opinion.

We conducted this performance audit from December 2019 to February 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

# Appendix II: Data on the Coastal Barrier Resources System

Table 5 provides data on the number of System Units and Otherwise Protected Areas and associated acreage in the Coastal Barrier Resources System by state or territory.

**Table 5: Number of System Units and Otherwise Protected Areas (OPA) and Associated Acreage in the Coastal Barrier Resources System (CBRS), by State or Territory, as of May 2020**

State or territory	Number of System Units	Number of OPAs	Total units	Acreage in System Units	Acreage in OPAs	Total acreage
Alabama	4	6	10	13,890	10,226	24,116
Connecticut	25	7	32	7,682	1,700	9,382
Delaware	5	6	11	12,052	29,497	41,549
Florida	70	67	137	315,254	465,174	780,428
Georgia	6	7	13	68,679	193,771	262,450
Louisiana	17	4	21	335,786	304,658	640,444
Maine	26	8	34	4,303	1,465	5,768
Maryland	36	13	49	6,278	49,537	55,815
Massachusetts	61	25	86	66,624	39,514	106,138
Michigan	46	0	46	17,083	0	17,083
Minnesota	1	0	1	952	0	952
Mississippi	6	1	7	4,763	30,582	35,345
New Jersey	9	15	24	10,291	77,185	87,476
New York	80	21	101	68,875	39,416	108,291
North Carolina	9	8	17	54,695	98,915	153,610
Ohio	10	0	10	4,891	0	4,891
Puerto Rico	41	29	70	20,111	30,541	50,652
Rhode Island	21	14	35	11,195	2,401	13,596
South Carolina	16	7	23	105,316	115,191	220,507
Texas	17	18	35	202,322	500,557	702,879
U.S. Virgin Islands	24	13	37	2,812	1,004	3,816
Virginia	51	13	64	43,166	120,423	163,589
Wisconsin	7	0	7	2,032	0	2,032
<b>Total</b>	<b>588</b>	<b>282</b>	<b>870</b>	<b>1,379,052</b>	<b>2,111,757</b>	<b>3,490,809</b>

Source: GAO analysis of U.S. Fish and Wildlife Service documents. | GAO-21-258

Note: The Coastal Barrier Resources Act established the CBRS, which consists of relatively undeveloped coastal lands and associated aquatic habitats along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts. See 16 U.S.C. § 3503(a). The CBRS consists of two types of units, System Units and OPAs. System Units, first designated in 1982, are generally privately owned areas, while OPAs, first designated in 1990 amendments to CBRA, are areas established under federal, state, or local law or held by a qualified organization, primarily for wildlife refuge, sanctuary, recreational, or natural resource conservation purposes, such as state parks, wildlife refuges, or private conservation areas.

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# Appendix III: Statutory Exceptions to the Prohibition on Federal Expenditures and Financial Assistance in the Coastal Barrier Resources System

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The Coastal Barrier Resources Act (CBRA) generally prohibits new federal expenditures and financial assistance in the Coastal Barrier Resources System (CBRS).<sup>1</sup> However, it includes 12 exceptions to this prohibition, which allow agencies to make certain expenditures and assistance available after consulting with the Secretary of the Interior.<sup>2</sup> These 12 exceptions, which are codified at 16 U.S.C. § 3505(a), are listed below.

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## CBRA Exceptions Allowing New Federal Expenditures and Financial Assistance in the CBRS

- (1) Any use or facility necessary for the exploration, extraction, or transportation of energy resources which can be carried out only on, in, or adjacent to a coastal water area because the use or facility requires access to the coastal water body.
- (2) The maintenance or construction of improvements of existing federal navigation channels (including the Intracoastal Waterway) and related structures (such as jetties), including the disposal of dredge materials related to such maintenance or construction.
- (3) The maintenance, replacement, reconstruction, or repair, but not the expansion, of publicly owned or publicly operated roads, structures, or facilities that are essential links in a larger network or system.
- (4) Military activities essential to national security.
- (5) The construction, operation, maintenance, and rehabilitation of Coast Guard facilities and access thereto.
- (6) Any of the following actions or projects, if a particular expenditure or the making available of particular assistance for the action or project is consistent with the purposes of CBRA.<sup>3</sup>
  - (A) Projects for the study, management, protection, and enhancement of fish and wildlife resources and habitats, including acquisition of fish

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<sup>1</sup>16 U.S.C. § 3504.

<sup>2</sup>16 U.S.C. § 3505(a).

<sup>3</sup>The three purposes of CBRA are to minimize the loss of human life, wasteful expenditure of federal revenues, and damage to fish, wildlife, and other natural resources in the CBRS.

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**Appendix III: Statutory Exceptions to the Prohibition on Federal Expenditures and Financial Assistance in the Coastal Barrier Resources System**

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and wildlife habitats and related lands, stabilization projects for fish and wildlife habitats, and recreational projects.

(B) Establishment, operation, and maintenance of air and water navigation aids and devices, and for access thereto.

(C) Projects under the Land and Water Conservation Fund<sup>4</sup> and the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.).<sup>5</sup>

(D) Scientific research, including aeronautical, atmospheric, space, geologic, marine, fish and wildlife, and other research, development, and applications.

(E) Assistance for emergency actions essential to the saving of lives and the protection of property and the public health and safety, if such actions are performed pursuant to certain sections of the Robert T. Stafford Disaster Relief and Emergency Assistance Act as amended<sup>6</sup> and are limited to actions that are necessary to alleviate the emergency.

(F) Maintenance, replacement, reconstruction, or repair, but not the expansion (except with respect to United States Route 1 in the Florida Keys), of publicly owned or publicly operated roads, structures, and facilities.

(G) Nonstructural projects for shoreline stabilization that are designed to mimic, enhance, or restore a natural stabilization system.

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<sup>4</sup>The Land and Water Conservation Fund is a U.S. Treasury fund used by four federal land management agencies (including the U.S. Fish and Wildlife Service) for several purposes, including conserving natural resources and enhancing outdoor recreation opportunities on federal, state, and private lands.

<sup>5</sup>Through the National Coastal Management Program established under the Coastal Zone Management Act of 1972, the National Oceanic and Atmospheric Administration (NOAA) provides funding and technical assistance to support administrative and project-specific costs for state coastal management programs. NOAA approves these state programs if they meet statutory requirements, and approved programs are eligible to receive funding from NOAA to support the implementation and management of their programs. The program represents a unique federal-state partnership for protecting, restoring, and responsibly developing the nation's coastal communities and resources.

<sup>6</sup>The specific sections are those authorizing general federal assistance, essential assistance, and federal emergency assistance.

# Appendix IV: Information on Selected Coastal Barrier Resources Act Consultations, Fiscal Years 2018 and 2019

From the eight U.S. Fish and Wildlife Service field offices included in our review, we requested documents for consultations they conducted in fiscal years 2018 and 2019. They provided information on a total of 31 consultation requests they had received. Table 6 provides information on these consultation requests.

**Table 6: Information on Coastal Barrier Resources Act (CBRA) Consultation Requests Received by Eight U.S. Fish and Wildlife Service (FWS) Field Offices in Fiscal Years 2018 and 2019**

FWS field office	Location of project and Coastal Barrier Resources System unit number	Project purpose	Agency requesting consultation	CBRA exception cited <sup>a</sup>	FWS response <sup>b</sup>
Long Island	15 counties of New York (multiple units)	Deploy law enforcement and environmental conservation personnel during blizzard.	Federal Emergency Management Agency (FEMA)	16 U.S.C. § 3505(a)(6)(E)	Declined to provide an opinion.
	Asharoken, NY (unit F02)	Deploy law enforcement during blizzard and snow removal activities.	FEMA	16 U.S.C. § 3505(a)(6)(E), (a)(6)(F)	Declined to provide an opinion.
	Suffolk County, NY (unit NY-59)	Dredge sand from inlet and use it to nourish beach.	U.S. Army Corps of Engineers (Corps)	16 U.S.C. § 3505(a)(2), (a)(6)(G)	Declined to provide an opinion.
	East Hampton, NY (unit F08B)	Repair road.	FEMA	16 U.S.C. § 3505(a)(6)(F)	Declined to provide an opinion.
	Suffolk County, NY (multiple units)	Staff police operations center during storm event.	FEMA	16 U.S.C. § 3505(a)(6)(E)	Declined to provide an opinion.
	Suffolk County, NY (units NY-59, NY-59P, F12, F13, F13P)	Dredge navigation channel and use material to nourish beach.	Corps	16 U.S.C. § 3505(a)(2), (a)(6)(A), (a)(6)(G)	Declined to provide an opinion.

**Appendix IV: Information on Selected Coastal  
Barrier Resources Act Consultations, Fiscal  
Years 2018 and 2019**

<b>FWS field office</b>	<b>Location of project and Coastal Barrier Resources System unit number</b>	<b>Project purpose</b>	<b>Agency requesting consultation</b>	<b>CBRA exception cited<sup>a</sup></b>	<b>FWS response<sup>b</sup></b>
Louisiana	Cameron, LA (unit S11)	Repair road.	FEMA	16 U.S.C. § 3505(a)(6)(F)	Declined to provide an opinion.
	Various locations in Louisiana (multiple units)	Restore natural resources affected by oil spill.	Fish and Wildlife Service <sup>c</sup>	16 U.S.C. § 3505(a)(6)(A)	Some activities are not located in a System Unit of the Coastal Barrier Resources System and CBRA does not apply. Some activities meet an exception under CBRA.
	Port Fourchon, LA (units S03 and S04)	Dredge channel and reuse dredged material to create marsh.	Corps	16 U.S.C. § 3505(a)(2), (a)(6)(A)	Declined to provide an opinion.
Michigan	No consultations requested in fiscal years 2018 and 2019.				
New England	Gloucester, MA (unit C01A)	Restore dune.	FEMA	16 U.S.C. § 3505(a)(6)(G)	Declined to provide an opinion.
	Barnstable, MA (unit C09)	Restore dune.	FEMA	16 U.S.C. § 3505(a)(6)(G)	Declined to provide an opinion.
	Swampscott, MA (unit MA-06)	Repair stormwater pipe.	FEMA	16 U.S.C. § 3505(a)(3)	Declined to provide an opinion.
	Plymouth, MA (unit C04)	Repair retaining wall and sidewalk.	FEMA	16 U.S.C. § 3505(a)(6)(F)	Declined to provide an opinion.
New Jersey	North Wildwood, NJ (unit NJ-09)	Repair sea wall.	Corps	16 U.S.C. § 3505(a)(6)(F)	Meets CBRA exception.
Panama City, Florida	Navarre, FL (unit FL-97)	Nourish beach.	FEMA	None cited.	Project does not meet an exception under CBRA.
	Santa Rosa County, FL (unit FL-97)	Nourish beach.	FEMA	16 U.S.C. § 3505(a)(6)(A)	Declined to provide an opinion.

**Appendix IV: Information on Selected Coastal  
Barrier Resources Act Consultations, Fiscal  
Years 2018 and 2019**

<b>FWS field office</b>	<b>Location of project and Coastal Barrier Resources System unit number</b>	<b>Project purpose</b>	<b>Agency requesting consultation</b>	<b>CBRA exception cited<sup>a</sup></b>	<b>FWS response<sup>b</sup></b>
Raleigh, North Carolina	Onslow County, NC (unit L06)	Repair boardwalks that cross dunes.	FEMA	16 U.S.C. § 3505(a)(6)(A), (a)(6)(F)	Declined to provide an opinion.
	Onslow County, NC (unit L06)	Repair signs at beach.	FEMA	16 U.S.C. § 3505(a)(6)(A), (a)(6)(F)	Declined to provide an opinion.
	Onslow County, NC (unit L06)	Repair road.	FEMA	None cited.	Declined to provide an opinion.
	North Topsail Beach, NC (unit L06)	Repair fire station.	FEMA	16 U.S.C. § 3505(a)(6)(F)	Declined to provide an opinion.
	North Topsail Beach, NC (unit L06)	Repair various amenities in municipal park.	FEMA	16 U.S.C. § 3505(a)(6)(F)	Declined to provide an opinion.
Texas Coastal	Galveston County, TX (unit T02A)	Repair road.	Texas Department of Transportation	16 U.S.C. § 3505(a)(3)	Meets CBRA exception.
	Chambers and Jefferson Counties, TX (unit T02A)	Land acquisition.	Fish and Wildlife Service <sup>c</sup>	16 U.S.C. § 3505(a)(6)(A)	Meets CBRA exception.
	Brazoria, TX (unit T05)	Repair road.	FEMA	16 U.S.C. § 3505(a)(3), (a)(6)(F)	Meets CBRA exception.
	Brazoria, TX (unit T05)	Replace portable toilets.	FEMA	16 U.S.C. § 3505(a)(6)(A)	Meets CBRA exception.
	McFaddin National Wildlife Refuge (units TX-02P, T02A)	Beach and dune restoration.	U.S. Dept. of Treasury, Office of Gulf Coast Restoration	16 U.S.C. § 3505(a)(6)(A), (a)(6)(G)	Meets CBRA exception.
	Freeport, TX (unit T05)	Repair road.	FEMA	16 U.S.C. § 3505(a)(3), (a)(6)(F)	Meets CBRA exception.
	Port Lavaca, TX (units T07, T07P)	Dredge navigation channel.	Corps	16 U.S.C. § 3505(a)(2)	Meets CBRA exception.



**Appendix IV: Information on Selected Coastal  
Barrier Resources Act Consultations, Fiscal  
Years 2018 and 2019**

<b>FWS field office</b>	<b>Location of project and Coastal Barrier Resources System unit number</b>	<b>Project purpose</b>	<b>Agency requesting consultation</b>	<b>CBRA exception cited<sup>a</sup></b>	<b>FWS response<sup>b</sup></b>
	Galveston County, TX (unit T03A)	Dredge navigation channel and use dredged material to create marsh.	Corps	16 U.S.C. § 3505(a)(2)	Meets CBRA exception.
	Matagorda County, TX (unit T07)	Repair bathroom facilities.	FEMA	16 U.S.C. § 3505(a)(3)	Meets CBRA exception.
	Brazoria County, TX (units T05, T05P, T06P)	Dredge river and use material to nourish beach.	U.S. Dept. of Treasury, Office of Gulf Coast Restoration	16 U.S.C. § 3505(a)(2)	Meets CBRA exception.

Source: GAO analysis of FWS consultation documents. | GAO-21-258

Note: The Coastal Barrier Resources Act established the Coastal Barrier Resources System, which consists of relatively undeveloped coastal lands and associated aquatic habitat along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts. See 16 U.S.C. § 3503(a).

<sup>a</sup>Cited exceptions under CBRA are as follows:

16 U.S.C. § 3505(a)(2) The maintenance or construction of improvements of existing federal navigation channels (including the Intracoastal Waterway) and related structures (such as jetties), including the disposal of dredge materials related to such maintenance or construction.

16 U.S.C. § 3505(a)(3) The maintenance, replacement, reconstruction, or repair, but not the expansion, of publicly owned or publicly operated roads, structures, or facilities that are essential links in a larger network or system.

16 U.S.C. § 3505(a)(6)(A) Projects for the study, management, protection, and enhancement of fish and wildlife resources and habitats, including acquisition of fish and wildlife habitats and related lands, stabilization projects for fish and wildlife habitats, and recreational projects, if consistent with the purposes of CBRA.

16 U.S.C. § 3505(a)(6)(E) Assistance for emergency actions essential to the saving of lives and the protection of property and the public health and safety, if such actions are performed pursuant to certain sections of the Robert T. Stafford Disaster Relief and Emergency Assistance Act as amended (42 U.S.C. § 5170a authorizing general federal assistance, 42 U.S.C. § 5170b authorizing essential assistance, and 42 U.S.C. § 5192 authorizing federal emergency assistance) and are limited to actions that are necessary to alleviate the emergency, if consistent with the purposes of CBRA.

16 U.S.C. § 3505(a)(6)(F) Maintenance, replacement, reconstruction, or repair, but not the expansion (except with respect to United States Route 1 in the Florida Keys), of publicly owned or publicly operated roads, structures, and facilities, if consistent with the purposes of CBRA.

16 U.S.C. § 3505(a)(6)(G) Nonstructural projects for shoreline stabilization that are designed to mimic, enhance, or restore a natural stabilization system, if consistent with the purposes of CBRA.

<sup>b</sup>Of the 18 consultation requests where FWS did not provide an opinion, three were from the Corps, which has implemented two of the projects and plans to implement the third after completing additional environmental study. A Corps planning official said the additional environmental study is being conducted in part because FWS did not provide an opinion on the project. The remaining 15 consultation requests were from FEMA, which was outside the scope of our review.

<sup>c</sup>FWS, like all federal agencies, is subject to CBRA's general prohibition on new expenditures in the Coastal Barrier Resources System and must request a consultation before making an expenditure for a project under a CBRA exception.

# Appendix V: Two Examples of Maps Showing Proposed Areas to Add to or Remove from the Coastal Barrier Resources System

Through its comprehensive mapping process, the U.S. Fish and Wildlife Service (FWS) can propose adding or removing areas from the Coastal Barrier Resources System (CBRS), as shown in figure 4. One map shows areas that are proposed for removal from a system unit in New York. The other shows an area that FWS is proposing to add to the CBRS as a new unit in New York.

**Figure 4: Sample Maps of Coastal Barrier Resources System (CBRS) Units**



System Unit NY-34, located in South Jamesport, NY. The shaded areas represent the existing unit. The areas outlined in pink are proposed for removal from the unit.



Proposed new System Unit NY-94, located on Shelter Island, NY. This area is not currently part of the Coastal Barrier Resources System.

Source: GAO adaptation of U.S. Fish and Wildlife Service maps. | GAO-21-258

Note: The Coastal Barrier Resources Act established the CBRS, which consists of relatively undeveloped coastal lands and associated aquatic habitats along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts. See 16 U.S.C. § 3503(a).

# Appendix VI: Comments from the Department of the Interior



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Washington D.C. 20240



Mr. Mark Gaffigan  
Managing Director, Natural Resources and Environment  
U.S. Government Accountability Office  
441 G Street, N.W.  
Washington, D.C. 20548

Dear Mr. Gaffigan:

Thank you for providing the Department of the Interior (Department) the opportunity to review and comment on the draft Government Accountability Office (GAO) report titled, *COASTAL BARRIER RESOURCES ACT: Fish and Wildlife Service Should Better Ensure It Carries Out Required Consultation and Mapping Activities* (GAO-21-258). We appreciate GAO's evaluation of the Coastal Barrier Resources Act (CBRA).

In general, the Department concurs with the report's findings and the following two recommendations that pertain to the U.S. Fish and Wildlife Service (Service, FWS).

**Recommendation 1:** The Director of FWS should ensure that agency guidance at all levels directs FWS field offices to consistently provide opinions in response to CBRA consultation requests, including revising FWS's consultation template as needed.

**Recommendation 2:** The Director of FWS should develop a strategy to guide FWS's efforts to review and, as necessary, update the Coastal Barrier Resources System (CBRS) maps at least once every 5 years as required by CBRA, including an assessment of needed resources and planned time frames.

The Service acknowledges its responsibility to administer the CBRA and respond to requests for consultation from other Federal agencies. Regarding Recommendation 1, the Service accepts the recommendation in principle and, contingent on available resources, the Service will take the following actions:

Complete the CBRA portion of the Service's new ECOSphere system to help streamline the CBRA consultations process, support consistency across field offices, standardize responses (to the degree practicable), and collect more reliable data on consultations.

**Target Date:** October 31, 2022

**Responsible Official:** Assistant Director for Ecological Services

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**Appendix VI: Comments from the Department  
of the Interior**

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Administer training for Service field and regional staff responsible for CBRA consultations to help improve understanding of the law and support consistent implementation across field offices.

**Target Date:** Development of training material by January 30, 2022; implementation of training by September 15, 2022

**Responsible Official:** Assistant Director for Ecological Services

The Service has made great strides over the past two decades to modernize the maps of the John H. Chafee Coastal Barrier Resources System (CBRS) as required by law. In recent years, the CBRA Program has prioritized its limited mapping resources to address two large scale comprehensive remapping projects as well as numerous technical correction requests from property owners and other interested parties. Due to limited resources, the Service partnered with the Federal Emergency Management Agency to complete a digital conversion and 5-year review for most of the CBRS maps between 2014 and 2016. With regard to Recommendation 2, the Service acknowledges the value in reviewing the CBRS and making administrative updates to the maps at least once every 5 years to account for natural changes in these highly dynamic coastal areas. Assuming stable funding and capacity, we intend to re-establish the 5-year review cycle in FY 2022.

To address Recommendation 2, the Service will take the following actions:

Develop a strategy to assess resource needs and identify goals, priorities, milestones, and performance measures to guide CBRS 5-year review and comprehensive remapping efforts.

**Target Date:** Complete mapping strategy by January 15, 2022

**Responsible Official:** Assistant Director for Ecological Services

The attached enclosure contains technical comments for your consideration. We hope these comments will assist you in preparing the final report.

Sincerely,

**BRYAN  
ARROYO**  
Deputy Director

Digitally signed by  
BRYAN ARROYO  
Date: 2021.01.28  
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Enclosure

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# Appendix VII: GAO Contact and Staff Acknowledgments

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## GAO Contact

Mark Gaffigan, (202) 512-3841 or [gaffiganm@gao.gov](mailto:gaffiganm@gao.gov)

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## Staff Acknowledgments

In addition to the individual named above, Anne-Marie Fennell (Director), Steve Gaty (Assistant Director), Scott Heacock (Analyst in Charge), and Sulayman Njie made key contributions to this report. Breanne Cave, Tom McCabe, John Mingus, Donna Morgan, Anne Rhodes-Kline, Dan Royer, Jeanette Soares, and Sheryl Stein made additional contributions.

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