

Coastal Barrier Resources System

Hurricane Sandy Remapping Project

Overview of the Coastal Barrier Resources System

Certain actions and programs of the Federal Government have historically subsidized and encouraged development on coastal barriers, resulting in the loss of natural resources; threats to human life, health, and property; and the expenditure of millions of tax dollars each year. To remove the federal incentive to develop these biologically important, highly dynamic, and storm-prone areas, Congress enacted the Coastal Barrier Resources Act (CBRA) in 1982. CBRA and its amendments designated relatively undeveloped coastal barriers along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts as part of the John H. Chafee Coastal Barrier Resources System (CBRS), and made these areas ineligible for most new federal expenditures and financial assistance. CBRA does not prohibit development and it imposes no restrictions on development conducted with nonfederal funds. The CBRS is currently comprised of 870 geographic units totaling 3.5 million acres. The Secretary of the Interior, through the U.S. Fish and Wildlife Service (Service), is responsible for maintaining and updating the maps; however, only Congress has the authority to modify the boundaries of the CBRS by adopting new maps through legislation (there are minor exceptions).

Project Authority and Summary

Most of the maps that depict the CBRS were last comprehensively updated in 1990 using what are now outdated base maps and cartographic techniques. Some of the maps contain errors that negatively affect property owners and project proponents. Congress recognized the deficiencies associated with the outdated maps and, through the 2006 reauthorization of CBRA, directed the Secretary of the Interior to modernize the entire set of maps and recommend additions to the CBRS. Following Hurricane Sandy in 2012, the Department of the Interior funded the [Hurricane Sandy Remapping Project](#) to modernize the official maps of the CBRS along the North Atlantic coast.



Greg Thompson/USFWS

Flood-damaged homes along the New Jersey Coast.

The affected states are Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, New York (Long Island), Rhode Island, and Virginia. The project comprises 42% of the total existing CBRS units and 16% of the total existing acreage within the CBRS. Comprehensively revising the maps will help enhance coastal resiliency and sustainability following Hurricane Sandy by improving compliance with CBRA and by adding other vulnerable coastal areas to the CBRS. This effort will also correct mapping errors affecting property owners and provide more accurate and accessible CBRS data for planning coastal infrastructure projects, habitat conservation efforts, and flood risk mitigation measures.

Project Stakeholders

The project involved coordination with other federal agencies; state natural resource agencies; local planning and land use departments; conservation and recreation organizations; and other entities. Some of these stakeholders provided data during the research phase of the project, and all interested parties had the opportunity to provide input on the proposed changes to the CBRS during a public comment period.

Public Review and Comments

The Service conducted public review for this project in two separate batches. A [comment period](#) was held from March 12, 2018, through July 10, 2018, for the first batch of states which included: Delaware, Massachusetts, New Hampshire, and New Jersey. A [comment period](#) was held from December 18, 2018, through April 17, 2019, for the second batch of states which included: Connecticut, Maryland, New York (Long Island), Rhode Island, and Virginia. The Service received 192 comments relating to this project. An additional 2,224 individuals signed on to a comment letter submitted by the National Audubon Society, for a total of 2,416 comments. For a summary of the comments received and the Service's responses, see [chapter 3](#) and [appendix C](#) of the *2022 Report to Congress: John H. Chafee Coastal Barrier Resources System Hurricane Sandy Remapping Project*.

Project Results

The Service assessed the comments received during the public comment periods and made appropriate adjustments to the draft revised boundaries based on statutory criteria, objective mapping protocols, and the best available data. The Service also updated the underlying aerial imagery for all of the units and reconfigured map panels for certain areas to help improve the usability of the maps. The

Service’s final recommended maps for this project resulted in 438 units that cover a total of 846,918 acres. The final recommended maps for the project would remove 1,361 acres from the CBRS (969 acres of fastland and 392 acres of associated aquatic habitat) and add 277,950 acres to the CBRS (11,102 acres of fastland and 266,848 acres of associated aquatic habitat). The final recommended boundaries would remove 910 structures (mostly private

residential) from the CBRS and add 274 structures (mostly park-related) to the CBRS. Metrics on the recommended changes to the CBRS are shown in Table 1 below. The final recommended changes (including acreage and structure changes) for each unit are documented in the summaries of change in appendixes D-K of the 2022 *Report to Congress: John H. Chafee Coastal Barrier Resources System Hurricane Sandy Remapping Project*.

	Fastland Acres ¹		Associated Aquatic Habitat Acres ²		Total Acres		Total Structures ³	
	System Unit	OPAs	System Unit	OPAs	System Unit	OPAs	System Unit	OPAs
Added to CBRS	3,096	8,006	57,810	209,038	60,906	217,044	64	210
	Total: 11,102		Total: 266,848		Total: 277,950		Total: 274	
Removed from the CBRS	542	427	264	128	806	555	666	244
	Total: 969		Total: 392		Total: 1,361		Total: 910	
Net Reclassified⁴	(7,955)	7,955	(21,001)	21,001	(28,956)	28,956		
Net Change	Total: 10,133		Total: 266,456		Total: 276,589		Total: (636)	

Table 1. Summary of Final Recommended Acreage and Structure Change Metrics

¹ Land above mean high tide

² Associated aquatic habitat includes wetlands, marshes, estuaries, inlets, and open water landward of the coastal barrier; but does not include open water seaward of the shoreline. This information is derived from National Wetlands Inventory data.

³ Approximate structure count derived from base map imagery. Gas and liquid storage tanks, structures without walls and a roof (e.g., picnic shelters), structures with fewer than 200 square feet, structures that are not affixed to a permanent site (e.g., recreational vehicles), and structures that are not located principally above ground are not included in this structure count because they do not meet the statutory definition of a “structure” (16 U.S.C. 3503(g)(2)).

⁴ Reclassified areas are areas currently within the CBRS that are recommended for reclassification from System Unit to OPA or vice versa.

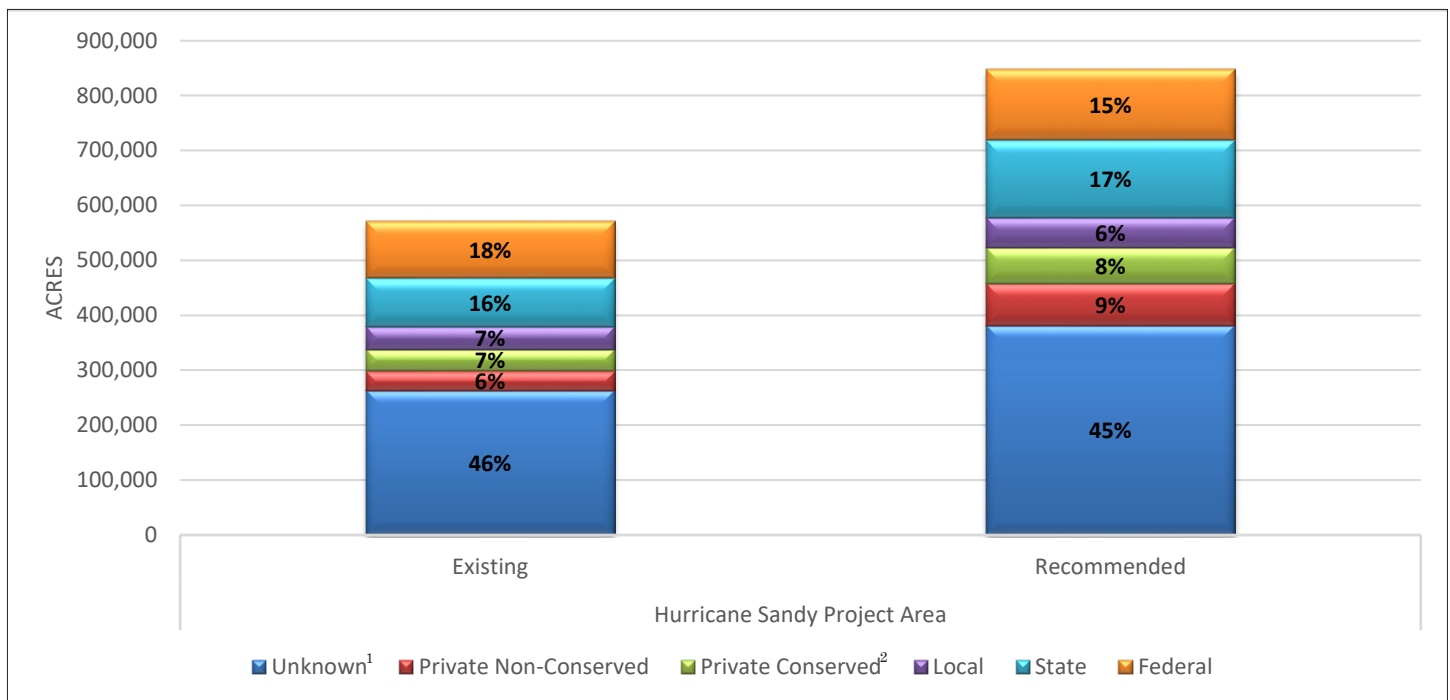


Figure 1. Breakdown of ownership type of the existing and final recommended project areas

¹ The Service relied on publicly available state and local GIS data, which did not contain ownership information for certain areas (mostly large swaths of wetlands and open water) that are within the project area; and therefore such areas are categorized as “unknown”.

² “Private conserved” indicates areas that are owned by private individuals or organizations (e.g., The Nature Conservancy, Audubon Society, etc.) and held specifically for conservation and/or recreation purposes, including privately owned areas that are subject to conservation easements.



U.S. Fish and Wildlife Service

Effects of storm surge, Chincoteague National Wildlife Refuge (Virginia)

Next Steps

The Service recommends that Congress adopt the final recommended maps produced through the Hurricane Sandy Remapping Project. The final recommended maps remove areas that were inappropriately included within the CBRS decades ago, while also adding undeveloped lands and associated aquatic habitat that meet the criteria for inclusion within the CBRS. The Service's final recommended maps will become effective only if adopted by Congress through legislation.

Additional Information

For more information about this project, visit <https://www.fws.gov/project/hurricane-sandy-remapping-project>.

U.S. Fish & Wildlife Service
Ecological Services
5275 Leesburg Pike
Falls Church, VA 22041
703-358-2171
cbra@fws.gov
<https://www.fws.gov/cbra>

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