

Report to Congress: John H. Chafee Coastal Barrier Resources System Hurricane Sandy Remapping Project

APPENDIX I: Summaries of Change, Technical Correction Assessments, and Maps for Delaware



Cover photo credit: Breach at Prime Hook NWR, Delaware, post-Hurricane Sandy. Lia McLaughlin, USFWS.



APPENDIX I:

Summaries of Change, Technical Correction Assessments, and Maps for Delaware

Section 4(a) of the 2006 Coastal Barrier Resources Reauthorization Act (CBRRA) specifies that the Secretary of the Interior shall create digital versions of all of the CBRS maps that were not included in the Digital Mapping Pilot Project. Section 4(c)(3)(A) of the 2006 CBRRA requires a report that describes the extent to which the boundary lines on the digital maps differ from the boundary lines on the original maps. Section 4(c)(3)(D) of the 2006 CBRRA requires a report that contains recommendations for expansion of the John H. Chafee Coastal Barrier Resources System (CBRS).

This appendix contains the following for Delaware: (1) statewide reference map and statewide summary of final recommended changes; (2) summaries of recommended changes for each of the units; (3) technical correction assessments; and (4) final recommended CBRS maps.

Statewide Reference Map and Statewide Summary of Final Recommended Changes

The statewide reference map in this appendix is for reference purposes and depicts the recommended CBRS units in Delaware. The statewide summary of final recommended changes in this appendix contains the following information: the number and type of units, overview of public review and comments received, changes between proposed and recommended, recommended acreage and structure changes, recommended changes by land ownership type, and a list of units within the state

Unit Summaries

The unit summaries in this appendix describe the final recommended changes to the unit boundaries, the associated acreage and shoreline mile changes, and the number of structures recommended for addition to, removal from, and reclassification within the CBRS.

Marsh restoration project at Prime Hook National Wildlife Refuge in Delaware. The restoration effort will improve the resilience of refuge wetlands against future storms and sea-level rise, protecting nearby communities and providing valuable habitat for birds and other wildlife. Photograph taken by Tami Heilemann/DOI.

For existing CBRS units, the unit summaries in this appendix contain the following information:

- **Type of Unit:** Indicates whether the CBRS unit is a System Unit or an Otherwise Protected Area (OPA).
- **County:** Provides the counties that the CBRS unit is located within.
- **Congressional District:** Provides the congressional districts that the CBRS unit is located within.
- **Existing Map(s):** Provides the map number(s) and date(s) of the existing map(s) for the CBRS unit.
- **Final Recommended Map(s):** Provides the map number(s) and date(s) of the final recommended map(s) for the CBRS unit. All of the final recommended maps produced through the Hurricane Sandy Remapping Project are dated December 18, 2020.
- **Base Map Imagery Source and Date:** Provides the source and date of the underlying aerial imagery used as the base map for the CBRS unit.
- **Establishment of Unit:** Provides the public law number that first established the CBRS unit and the date on which that law was enacted.
- **Historical Changes:** Provides a history of changes (if any) affecting the map(s) for the CBRS unit.
- **Public Comments:** Provides information regarding the public comment period and where to find a summary of the comments received and the Service's responses (if applicable).
- **Changes between Proposed and Final Recommended Boundaries:** Describes the changes between the proposed CBRS unit boundaries that were released for public review and the final recommended boundaries depicted on the maps included in this appendix.
- **Final Recommended Changes:** Describes the recommended removals, additions, reclassifications, and/or other modifications to the CBRS unit.
- **Technical Correction Assessment:** Provides information about where to find a technical correction assessment (if applicable). This section only appears for units where the

Service has received a request for an assessment of whether a mapping error exists.

- **Acreage, Shoreline, and Structures Information:** Provides in table format acreage and shoreline mile changes, and the number of structures recommended for addition to, removal from, and reclassification within the CBRS.

For recommended new CBRS units, the unit summaries in this appendix contain the following information:

- **Type of Unit:** Indicates whether the recommended new CBRS unit is a System Unit or an OPA.
- **County:** Provides the counties that the recommended new CBRS unit is located within.
- **Congressional District:** Provides the congressional districts that the recommended new CBRS unit is located within.
- **Final Recommended Map(s):** Provides the map number(s) and date(s) of the final recommended map(s) for the recommended new CBRS unit. All of the final recommended maps produced through the Hurricane Sandy Remapping Project are dated December 18, 2020.
- **Base Map Imagery Source and Date:** Provides the source and date of the underlying aerial imagery used as the base map for the CBRS unit.
- **Public Comments:** Provides information regarding the public comment period and where to find a summary of the comments received and the Service's responses (if applicable).
- **Changes between Proposed and Final Recommended Boundaries:** Describes the changes between the proposed new CBRS unit boundaries that were released for public review and the final recommended boundaries depicted on the maps included in this appendix.
- **Recommended New Unit:** Provides information about the area's current CBRS status (i.e., whether any part of the recommended new unit is already within the CBRS) and a description of the areas recommended for inclusion within the new unit.

- **Acreage, Shoreline, and Structures Information:** Provides in table format acreage and shoreline mile information, and the number of structures recommended for inclusion within the new CBRS unit.

Technical Correction Assessments

The technical correction assessments that were completed through the Hurricane Sandy Remapping Project for units in Delaware are included in this appendix. Technical correction assessments were only prepared in cases where an interested party specifically requested an assessment for a particular property or area to determine whether a technical mapping error exists (and/or submitted comments requesting removal of a specific area from the CBRS). For such cases, the Service carefully assessed all of the information provided by the interested party as well as other materials. The technical correction assessments in this appendix include the following information: (1) an overview of the technical correction process and the area in question; (2) the Service's findings as to whether or not the area is appropriate for removal from the CBRS; and (3) the development status and other factors the Service considered when determining whether a mapping error exists for that particular area (i.e., was the area undeveloped at the time it was included within the CBRS and do the CBRS boundary lines on the maps precisely follow the underlying features they were intended to follow on the ground).

Final Recommended Maps

The maps contained in this appendix are reduced versions of the final recommended maps. Because the maps presented in this report are reduced in size by approximately 70 percent, the legibility of the maps is significantly reduced. The final recommended maps can be accessed and downloaded from the Service's website: <http://www.fws.gov/cbra>. Final recommended boundaries can also be viewed and compared to the existing boundaries in the Service's CBRS Projects Mapper: <https://www.fws.gov/cbra/maps-and-data>.

Hurricane Sandy Remapping Project

Interested parties who are unable to access the recommended boundaries or other information online may contact the Service at cbra@fws.gov and reasonable accommodations will be made.

Each full-sized final recommended map (25" by 32") is produced at a

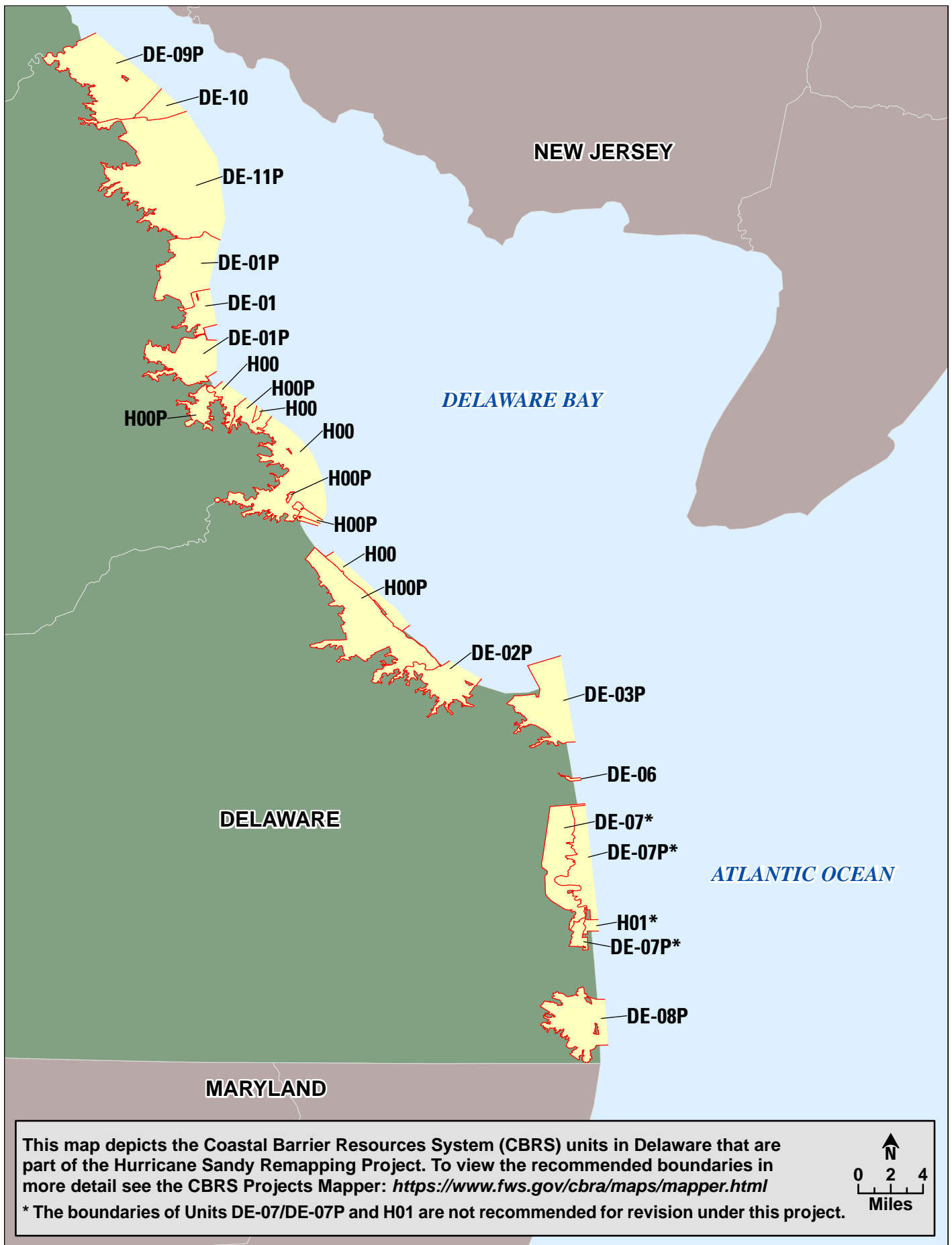
scale of 1 to 24,000. The maps are referenced to the North American Datum of 1983 and use the Universal Transverse Mercator projection, zones 18N. The projection and coordinate system as well as the base map source citation are available below the legend on each map.

The final recommended boundaries are delineated on the maps as a solid purple line for System Units and a dashed black and purple line for OPAs. Where the solid boundary of a System Unit and the dashed boundary of an OPA are coincident, only the System Unit boundary is shown on the map.

Table 12. Page Number(s) of Each Unit Summary, Technical Correction Assessment, and Final Recommended Map(s) in Appendix I

<i>Unit</i>	<i>County</i>	<i>Unit Summary Page Number(s)</i>	<i>Technical Correction Assessment Page Number(s)</i>	<i>Final Recommended Map(s) Page Number(s)</i>
DE-09P*	Kent, New Castle	I-10	N/A	I-34
DE-10*	Ken	I-11	N/A	I-34
DE-11P*	Kent	I-12	N/A	I-34, I-35
DE-01P	Kent	I-13, I-14	N/A	I-35, I-36
DE-01	Kent	I-15, I-16	I-17, I-18	I-36
H00	Kent, Sussex	I-19, I-20	I-23, I-24	I-36, I-37, I-38, I-39
H00P	Kent, Sussex	I-21, I-22	I-23, I-24	I-36, I-37, I-38, I-39
DE-02P	Sussex	I-25, I-26	N/A	I-39
DE-03P	Sussex	I-27, I-28	N/A	I-40
DE-06	Sussex	I-29	N/A	I-40
DE-08P	Sussex	I-30	I-32, I-33	I-41

*Recommended new unit



Coastal Barrier Resources System Hurricane Sandy Remapping Project

Summary of Final Recommended Changes for Delaware

In 2014, the U.S. Fish and Wildlife Service (Service) initiated the Hurricane Sandy Remapping Project to comprehensively modernize the maps for the John H. Chafee Coastal Barrier Resources (CBRS) units in the nine states most affected by Hurricane Sandy: Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, New York (Long Island), Rhode Island, and Virginia. This fact sheet summarizes the final recommended changes to the CBRS units in Delaware resulting from this project. The revised maps produced through this project will only become effective once they are adopted by Congress through legislation. For additional information on the Coastal Barrier Resources Act and the Hurricane Sandy Remapping Project, please visit: <https://www.fws.gov/project/hurricane-sandy-remapping-project>.

Number of Units in Project

Total Recommended Delaware Units: 11

System Units: 4

Otherwise Protected Areas (OPAs): 7

The Service has prepared comprehensively revised final recommended maps for 8 of the 11 existing CBRS units in Delaware. The map for the remaining three Delaware units (Units DE-07/DE-07P and H01) was comprehensively reviewed and revised by the Service and adopted by Congress in 2018. One existing unit in Delaware has no recommended changes. The Service identified three recommended new units in Delaware, which are comprised entirely of areas that are not currently contained within the CBRS. There are 11 total recommended units in Delaware (not including the 3 that were remapped and adopted by Congress in 2018).

Public Review and Comments

The Service held a 120-day public review and comment period on the proposed boundaries in Delaware from March 12 through July 10, 2018 ([83 FR 10739](#)). The Service received six comments affecting four units in Delaware. 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*.

Changes between Proposed and Final Recommended Boundaries

The aerial imagery initially used to prepare the proposed boundaries for the Delaware units in this project was dated 2015. When preparing the final recommended boundaries, the Service reviewed the proposed boundaries against the updated imagery and made necessary adjustments to better follow the intended features visible on the updated imagery. The imagery used for the final recommended maps is dated 2018. The Service also made changes to one unit in response to comments received during the public comment period. The changes made between the proposed and final recommended boundaries for each Delaware unit are summarized in [appendix I](#) of the 2022 *Report to Congress: John H. Chafee Coastal Barrier Resources System Hurricane Sandy Remapping Project*.

Final Recommended Acreage and Structure Changes

The final recommended maps for the Delaware units would remove 118 acres from the CBRS (84 acres of fastland and 34 acres of associated aquatic habitat) and add 31,266 acres to the CBRS (987 acres of fastland and 30,279 acres of associated aquatic habitat). The final recommended maps for the Delaware units would remove

52 acres of privately owned lands not held for conservation/recreation) from the CBRS and add 373 acres of privately owned lands to the CBRS.

The final recommended boundaries would remove 43 structures (mostly private residential) from the CBRS and add 10 structures (more than half of which are park-related) to the CBRS.

Information about the recommended changes for each of the individual Delaware units (including acreage and structure changes) is available in [appendix I](#) of the 2022 *Report to Congress: John H. Chafee Coastal Barrier Resources System Hurricane Sandy Remapping Project* and at: <https://www.fws.gov/cbra/roject/hurricane-sandy-remapping-project>.

Final Recommended Acreage and Structure Changes for Delaware

	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 the CBRS	304	683	1,497	28,782	1,801	29,465	3	7
	Total: 987		Total: 30,279		Total: 31,266		Total: 10	
Removed from the CBRS	0	84	0	34	0	118	2	41
	Total: 84		Total: 34		Total: 118		Total: 43	
Net Reclassified ⁴	0	0	(5)	5	(5)	5		
Net Change	Total: 903		Total: 30,245		Total: 31,148		Total: (33)	

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

Hurricane Sandy Remapping Project

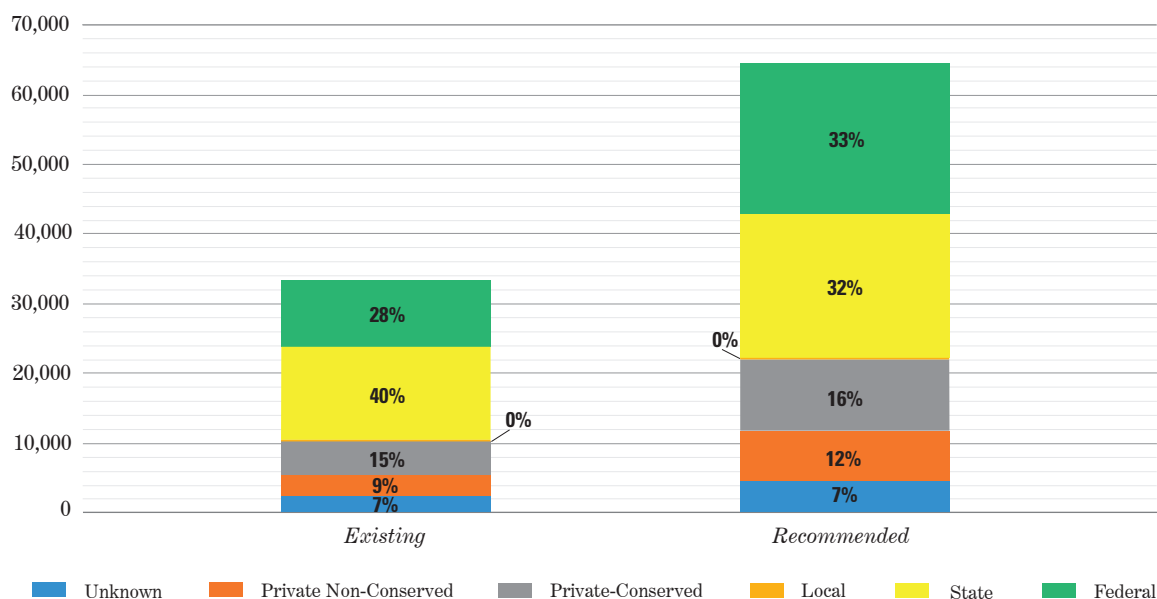
Final Recommended Changes by Land Ownership

The ownership type of the existing and final recommended CBRS units in Delaware is depicted in the graph below. In conducting this project, the Service relied heavily 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.” “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.

Ownership Type and Percent Acreage¹ of Existing and Final Recommended Coastal Barrier Resources System Units for Delaware



¹Ownership data was acquired from local, state, federal, and non-governmental organizations between 2014 and 2017

Delaware Units in Project

County	Congressional District	Unit Number	Unit Name	Unit Status
Kent	At Large	DE-01	Little Creek	Existing Unit
Kent	At Large	DE-01P	Little Creek	Existing Unit
Sussex	At Large	DE-02P	Beach Plum Island	Existing Unit
Sussex	At Large	DE-03P	Cape Henlopen	Existing Unit
Sussex	At Large	DE-06	Silver Lake	Existing Unit
Sussex	At Large	DE-08P	Fenwick Island	Existing Unit
Kent, New Castle	At Large	DE-09P	Woodland Beach	New Unit
Kent	At Large	DE-10	Frand Beach	New Unit
Kent	At Large	DE-11P	Bombay Hook	New Unit
Kent, Sussex	At Large	H00	Broadkill Beach	Existing Unit
Kent, Sussex	At Large	H00P	Broadkill Beach	Existing Unit

**John H. Chafee Coastal Barrier Resources System (CBRS)
Unit DE-09P, Woodland Beach,
Delaware**

Summary of Final Recommended Changes

Type of Unit: Recommended new
Otherwise Protected Area (OPA)

County: Kent, New Castle

Congressional District: At Large

Final Recommended Map: The final recommended CBRS map depicting this unit is:

- Draft map [10-008A](#) dated December 18, 2020

Base Map Imagery Source and

Date: United States Department of Agriculture, National Agriculture Imagery Program, 2018

Public Comments: The U.S. Fish and Wildlife Service (Service) held a 120-day public comment period on the proposed boundaries for this area of the Hurricane Sandy Remapping Project from March 12 through July 10, 2018 (83 FR 10739). 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*. All of the comments received during the comment period are reprinted in appendix L.

No comments specific to Unit DE-09P were received.

Changes between Proposed and Final Recommended Boundaries: There are no changes to Unit DE-09P between proposed and final recommended.

Recommended New Unit: The area recommended for inclusion within new OPA Unit DE-09P is not currently within the CBRS.

Included within new OPA Unit DE-09P are the following area(s):

- A large portion of the Woodland Beach Wildlife Area (owned by Delaware Department of Natural Resources and Environmental Control)
- Associated aquatic habitat and fastland that are privately owned and subject to an agricultural conservation easement (held by the Delaware Department of Agriculture), located southeast of Woodland Beach in the vicinity of Fraland Beach

- A minor portion of Bombay Hook National Wildlife Refuge (owned by the Service), located along Little Neck
- One residential structure and four commercial structures along Delaware Avenue east of Woodland Beach Road
- Undeveloped fastland and associated aquatic habitat that are privately owned and not held for conservation and/or recreation, located in the vicinity of Woodland Beach (both to the north and south of Woodland Beach Road) and in the vicinity of Quarter Gut (southeast of Little Neck)
- A minor area of associated aquatic habitat not held for conservation and/or recreation, located northwest of the intersection of Hay Point Landing Road and Lighthouse Road

For information about the Service's methodology for assessing CBRS boundary modifications through the Hurricane Sandy Remapping Project, visit <https://www.federalregister.gov/d/2018-04889>.

Acreage, Shoreline, and Structure Information for Unit DE-09P, Woodland Beach, Delaware

	<i>Total Acres</i>	<i>Fastland Acres¹</i>	<i>Associated Aquatic Habitat Acres²</i>	<i>Shoreline (Miles)</i>	<i>Structures³</i>
Existing Unit ⁴	0	0	0	0.0	
Added to the CBRS	7,263	285	6,978		5
Removed from the CBRS	0	0	0		0
Reclassified Area ⁵	0	0	0		0
Final Recommended Unit	7,263	285	6,978	5.4	
Net Change	7,263	285	6,978	5.4	5

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 National Wetlands Inventory data and other data sources as necessary.

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 The methodology used to calculate acreage was improved between the proposed and final recommended phases for the first batch of states (DE, MA, NH, and NJ) included in this project. The existing acreage reported for some units has been updated using this new methodology.

⁵ Reclassification means to change either all or a portion of a System Unit to an Otherwise Protected Area, or vice-versa.

John H. Chafee Coastal Barrier Resources System (CBRS) Unit DE-10, Fraland Beach, Delaware

Summary of Final Recommended Changes

Type of Unit: Recommended new System Unit

County: Kent

Congressional District: At Large

Final Recommended Map: The final recommended CBRS map depicting this unit is:

- Draft map [10-008A](#) dated December 18, 2020

Base Map Imagery Source and

Date: United States Department of Agriculture, National Agriculture Imagery Program, 2018

Public Comments: The U.S. Fish and Wildlife Service (Service) held a 120-day public comment period on the proposed boundaries for this area of the Hurricane Sandy Remapping Project from March 12 through July 10, 2018 (83 FR 10739). 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*. All of the comments received during the comment period are reprinted in appendix L.

No comments specific to Unit DE-10 were received.

Changes between Proposed and Final Recommended Boundaries: There are no changes to Unit DE-10 between proposed and final recommended.

Recommended New Unit: The area recommended for inclusion within new System Unit DE-10 is not currently within the CBRS.

Included within new System Unit DE-10 are the following area(s):

- Undeveloped fastland and associated aquatic habitat located between Line Ditch and Sluice Ditch, including Bombay Hook Point and a portion of Fraland Beach

For information about the Service's methodology for assessing CBRS boundary modifications through the Hurricane Sandy Remapping Project, visit <https://www.federalregister.gov/d/2018-04889>.

Acreage, Shoreline, and Structure Information for Unit DE-10, Fraland Beach, Delaware

	<i>Total Acres</i>	<i>Fastland Acres¹</i>	<i>Associated Aquatic Habitat Acres²</i>	<i>Shoreline (Miles)</i>	<i>Structures³</i>
Existing Unit ⁴	0	0	0	0.0	
Added to the CBRS	896	273	623		0
Removed from the CBRS	0	0	0		0
Reclassified Area ⁵	0	0	0		0
Final Recommended Unit	896	273	623	1.7	
Net Change	896	273	623	1.7	0

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 National Wetlands Inventory data and other data sources as necessary.

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 The methodology used to calculate acreage was improved between the proposed and final recommended phases for the first batch of states (DE, MA, NH, and NJ) included in this project. The existing acreage reported for some units has been updated using this new methodology.

⁵ Reclassification means to change either all or a portion of a System Unit to an Otherwise Protected Area, or vice-versa.

**John H. Chafee Coastal Barrier Resources System (CBRS)
Unit DE-11P, Bombay Hook, Delaware**

Summary of Final Recommended Changes

Type of Unit: Recommended new Otherwise Protected Area (OPA)

County: Kent

Congressional District: At Large

Final Recommended Map: The final recommended CBRS map depicting this unit is:

- Draft map [10-008A](#) dated December 18, 2020
- Draft map [10-009A](#) dated December 18, 2020

Base Map Imagery Source and

Date: United States Department of Agriculture, National Agriculture Imagery Program, 2018

Public Comments: The U.S. Fish and Wildlife Service (Service) held a 120-day public comment period on the proposed boundaries for this area of the Hurricane Sandy Remapping Project from March 12 through July 10, 2018 (83 FR 10739). 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*. All of the comments received during the comment period are reprinted in appendix L.

No comments specific to Unit DE-11P were received.

Changes between Proposed and Final Recommended Boundaries: There are no changes to Unit DE-11P between proposed and final recommended.

Recommended New Unit: The area recommended for inclusion within new OPA Unit DE-11P is not currently within the CBRS.

Included within new OPA Unit DE-11P are the following area(s):

- The majority of Bombay Hook National Wildlife Refuge (owned by the Service)
- Portions of Little Creek Wildlife Area (owned by Delaware Department of Natural Resources and Environmental Control)
- Areas of associated aquatic habitat that are privately owned and not held for conservation and/or recreation, located along the landward boundary of the unit between Whitehall Neck Road and Marshtown Road

For information about the Service's methodology for assessing CBRS boundary modifications through the Hurricane Sandy Remapping Project, visit <https://www.federalregister.gov/d/2018-04889>.

Acres, Shoreline, and Structure Information for Unit DE-11P, Bombay Hook, Delaware

	<i>Total Acres</i>	<i>Fastland Acres¹</i>	<i>Associated Aquatic Habitat Acres²</i>	<i>Shoreline (Miles)</i>	<i>Structures³</i>
Existing Unit ⁴	0	0	0	0.0	
Added to the CBRS	15,362	96	15,266		0
Removed from the CBRS	0	0	0		0
Reclassified Area ⁵	0	0	0		0
Final Recommended Unit	15,362	96	15,266	8.5	
Net Change	15,362	96	15,266	8.5	5

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 National Wetlands Inventory data and other data sources as necessary.

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 The methodology used to calculate acreage was improved between the proposed and final recommended phases for the first batch of states (DE, MA, NH, and NJ) included in this project. The existing acreage reported for some units has been updated using this new methodology.

⁵ Reclassification means to change either all or a portion of a System Unit to an Otherwise Protected Area, or vice-versa.

John H. Chafee Coastal Barrier Resources System (CBRS) Unit DE-01P, Little Creek, Delaware

Summary of Final Recommended Changes

Type of Unit: Otherwise Protected Area (OPA)

County: Kent

Congressional District: At Large

Existing Map: The existing CBRS map depicting this unit is:

- Map [10-001A](#) dated December 6, 2013

Final Recommended Maps: The final recommended CBRS maps depicting this unit are:

- Draft map [10-001B](#) dated December 18, 2020
- Draft map [10-009A](#) dated December 18, 2020

Base Map Imagery Source and

Date: United States Department of Agriculture, National Agriculture Imagery Program, 2018

Establishment of Unit: The Coastal Barrier Improvement Act (Pub. L. 101-591), enacted on November 16, 1990 (56 FR 26304), originally established Unit DE-01P.

Historical Changes: The CBRS map for this unit has been modified by the following legislative and/or administrative action:

- Federal Register notice (79 FR 21787) published on April 17, 2014, in accordance with Section 3 of Pub. L. 101-591

For additional information on historical legislative and administrative actions that have affected the CBRS, see: www.fws.gov/cbra/historical-changes-coastal-barrier-resources-system.

Public Comments: The U.S. Fish and Wildlife Service (Service) held a 120-day public comment period on the proposed boundaries for this area of the Hurricane Sandy Remapping Project from March 12 through July 10, 2018 (83 FR 10739). 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*. All of the comments received during the comment period are reprinted in appendix L.

The Service received comments specific to Unit DE-01P.

Changes between Proposed and Final Recommended Boundaries: There are no changes to Unit DE-01P between proposed and final recommended.

Final Recommended Changes: The final recommended changes to Unit DE-01P are described below.

Recommended Removals:

- One structure along Bayside Drive
- One structure and adjacent fastland located along Old Bowers Road

Recommended Additions:

- Portions of Little Creek Wildlife Area, Ted Harvey Wildlife Area, and Port Mahon Access and Fishing Area (owned by the Delaware Department of Natural Resources and Environmental Control (DNREC))
- Undeveloped fastland and associated aquatic habitat that are both publicly and privately owned and not held for conservation and/or recreation in the vicinity of Port Mahon, Little Creek, Kitts Hummock, and Bowers Beach
- Undeveloped portions of the John Dickinson Plantation Historic Site (owned by the Delaware Department of State)

- Portions of the St. Jones Reserve (which is part of the Delaware National Estuarine Research Reserve owned by the DNREC)
- Areas of associated aquatic habitat and minor areas of undeveloped fastland that are privately owned and subject to an agricultural conservation easement (held by the Delaware Department of Agriculture), located to the west of Bowers Beach and along the St. Jones River and Trunk Ditch

Recommended Reclassifications:

- From System Unit DE-01 to OPA Unit DE-01P: Portions of Little Creek Wildlife Area (owned by the DNREC) and minor portions of adjacent privately owned areas not held for conservation and/or recreation

Other Modifications/Information:

- Areas of fastland and associated aquatic habitat not held for conservation and/or recreation, located in the vicinity of the Little River and Kitts Hummock, and to the west of Pickering Beach, are currently within OPA Unit DE-01P. Most of these areas are inholdings (i.e., private land within the exterior boundaries of a conservation and/or recreation area). These areas are not recommended for reclassification to a System Unit.
- Modification of portions of the landward boundary of the unit to better align with the boundary of Little Creek Wildlife Area, which results in some small additions and removals

For information about the Service's methodology for assessing CBRS boundary modifications through the Hurricane Sandy Remapping Project, visit <https://www.federalregister.gov/d/2018-04889>.

Acreage, Shoreline, and Structure Information for Unit DE-01P, Little Creek, Delaware

	<i>Total Acres</i>	<i>Fastland Acres¹</i>	<i>Associated Aquatic Habitat Acres²</i>	<i>Shoreline (Miles)</i>	<i>Structures³</i>
Existing Unit ⁴	6,363	1,086	5,277	5.3	
Added to the CBRS	1,602	55	1,547		0
Removed from the CBRS	18	15	3		3
Reclassified Area ⁵	(6)	0	(6)		0
Final Recommended Unit	7,941	1,126	6,815	6.4	
Net Change	1,578	40	1,538	1.0	(3)

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 National Wetlands Inventory data and other data sources as necessary.

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 The methodology used to calculate acreage was improved between the proposed and final recommended phases for the first batch of states (DE, MA, NH, and NJ) included in this project. The existing acreage reported for some units has been updated using this new methodology.

⁵ Reclassification means to change either all or a portion of a System Unit to an Otherwise Protected Area, or vice-versa.

**John H. Chafee Coastal Barrier Resources System (CBRS)
Unit DE-01, Little Creek,
Delaware**

Summary of Final Recommended Changes

Type of Unit: System Unit

County: Kent

Congressional District: At Large

Existing Map: The existing CBRS map depicting this unit is:

- Map [10-001A](#) dated December 6, 2013

Final Recommended Map: The final recommended CBRS map depicting this unit is:

- Draft map [10-001B](#) dated December 18, 2020

Base Map Imagery Source and Date: United States Department of Agriculture, National Agriculture Imagery Program, 2018

Establishment of Unit: The Coastal Barrier Improvement Act (Pub. L. 101-591), enacted on November 16, 1990 (56 FR 26304), originally established Unit DE-01.

Historical Changes: The CBRS map for this unit has been modified by the following legislative and/or administrative action:

- Federal Register notice (79 FR 21787) published on April 17, 2014, in accordance with Section 3 of Pub. L. 101-591

For additional information on historical legislative and administrative actions that have affected the CBRS, see: www.fws.gov/cbra/historical-changes-coastal-barrier-resources-system.

Public Comments: The U.S. Fish and Wildlife Service (Service) held a 120-day public comment period on the proposed boundaries for this area of the Hurricane Sandy Remapping Project from March 12 through July 10, 2018 (83 FR 10739). 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*. All of the comments received during the comment period are reprinted in appendix L.

The Service received comments specific to Unit DE-01.

Changes between Proposed and Final Recommended Boundaries: There are no changes to Unit DE-01 between proposed and final recommended.

Final Recommended Changes: The final recommended changes to Unit DE-01 are described below.

Recommended Removals:

- One structure along the west side of North Bay Drive

Recommended Additions:

- Undeveloped fastland and associated aquatic habitat along North Bay Drive and associated aquatic habitat along Kitts Hummock Road, located in the vicinity of Kitts Hummock
- Undeveloped fastland located at the northern and southern ends of Pickering Beach and wetlands to the west of Pickering Beach
- Minor portions of areas that are privately owned and subject to an agricultural conservation easement (held by the Delaware Department of Agriculture), located in the vicinity of Kitts Hummock

Recommended Reclassifications:

- From Otherwise Protected Area (OPA) Unit DE-01P to System Unit DE-01: Wetlands that are privately owned and not held for conservation and/or recreation, located west of Pickering Beach
- From System Unit DE-01 to OPA Unit DE-01P: Portions of Little Creek Wildlife Area (owned by the Delaware Department of Natural Resources and Environmental Control) and minor portions of adjacent privately owned areas not held for conservation and/or recreation

Other Modifications/Information:

- UndevelopedH areas that are privately owned but subject to agricultural conservation easements (held by the Delaware Department of Agriculture) are currently located within System Unit DE-01. These areas are not recommended for reclassification to an OPA because the easements were placed on the properties after the areas were first included in 1990 within the CBRS.
- The eastern boundary of the excluded area at Pickering Beach is modified to account for erosion along the shoreline

For information about the Service's methodology for assessing CBRS boundary modifications through the Hurricane Sandy Remapping Project, visit <https://www.federalregister.gov/d/2018-04889>.

Technical Correction Assessment: The Service has completed a Technical Correction Assessment to address requests that were received to determine whether mapping errors exist for specific areas within this unit. The assessment can be found on page I-17 in appendix I of the 2022 *Report to Congress: John H. Chafee Coastal Barrier Resources System Hurricane Sandy Remapping Project*.

Acreage, Shoreline, and Structure Information for Unit DE-01, Little Creek, Delaware

	<i>Total Acres</i>	<i>Fastland Acres¹</i>	<i>Associated Aquatic Habitat Acres²</i>	<i>Shoreline (Miles)</i>	<i>Structures³</i>
Existing Unit ⁴	893	41	852	1.9	
Added to the CBRS	22	6	16		0
Removed from the CBRS	0	0	0		1
Reclassified Area ⁵	6	0	6		0
Final Recommended Unit	921	47	874	1.9	
Net Change	28	6	22	0.0	(1)

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 National Wetlands Inventory data and other data sources as necessary.

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 The methodology used to calculate acreage was improved between the proposed and final recommended phases for the first batch of states (DE, MA, NH, and NJ) included in this project. The existing acreage reported for some units has been updated using this new methodology.

⁵ Reclassification means to change either all or a portion of a System Unit to an Otherwise Protected Area, or vice-versa.

Technical Correction Assessment for Properties on Sandpiper and North Bay Drives in CBRS Unit DE-01

Overview

The John H. Chafee Coastal Barrier Resources System (CBRS) is depicted on a set of maps that is maintained by the U.S. Fish and Wildlife Service (Service). Aside from three minor exceptions,¹ only legislation enacted by Congress can modify the CBRS maps. A “technical correction” is a correction to a CBRS map to fix a legitimate mapping error. The Service receives numerous requests from property owners and other interested parties who seek to remove areas from the CBRS based on an alleged technical mapping error. The Service considers a technical mapping error to be a mistake in the delineation of the CBRS boundaries that was made as a result of incorrect, outdated, or incomplete information (often stemming from inaccuracies on the original base maps).

The Service generally does not recommend removal of areas from the CBRS unless there is clear and compelling evidence that a technical mapping error led to their inclusion within the CBRS. In order to determine whether a technical mapping error exists, the Service conducts a comprehensive review of the history of the CBRS unit in question which generally includes an assessment of the Service’s background records for the unit, the controlling and historical CBRS maps of the area, the historical development status of the area, aerial imagery, and any materials submitted by property owners and other interested parties. When the Service determines that a technical correction to a map is warranted, we prepare a new comprehensively modernized map for the area. The updated map becomes effective only if adopted through legislation enacted by Congress.

The Service was first contacted in 2016 by the owner of a property at the south end of Sandpiper Drive at Pickering Beach in Delaware who sought to remove this property from CBRS Unit DE-01. The owner was not aware that the property was located within the CBRS until the flood insurance policy for the residential structure on the property was cancelled by the National Flood Insurance Program. Following that request, the Service received a request during the public comment period for the Hurricane Sandy Remapping Project from another property owner to remove from the CBRS a property at the north end of North Bay Drive at Kitts Hummock in Delaware. The owners of the properties on Sandpiper and North Bay Drives assert that their properties were included within the CBRS in error.

Service Findings

The Service has carefully assessed all of the information provided by the parties indicated above as well as the materials that are typically reviewed as part of a technical correction assessment. The Service found that the properties on Sandpiper and North Bay Drives that are located within Unit DE-01 are appropriately included within the CBRS. The Coastal Barrier Resources Act (CBRA) development criteria and the Service’s findings related to this technical correction assessment are explained in further detail below. While these particular areas are appropriately included within the CBRS, the Service did identify an area in this unit that is appropriate for removal. The area recommended for removal is listed in the Summary of Final Recommended Changes for Unit DE-01.

CBRA Development Criteria and CBRS Boundary Intent

CBRA requires that the Service consider the following criteria in determining whether a coastal barrier was undeveloped at the time of inclusion within the CBRS: (A) the density of development was less than one structure per five acres of land above mean high tide; and (B) there was existing infrastructure consisting of (i) a road, with a reinforced road bed, to each lot or building site in the area; (ii) a wastewater disposal system sufficient to serve each lot or building site in the area; (iii) electric service for each lot or building site in the area; and (iv) a fresh water supply for each lot or building site in the area.² When assessing whether an area may be appropriate for removal, the Service also considers the location of geomorphic, cultural, and development features on the ground at the time the area was included within the CBRS (i.e., whether the CBRS boundary lines on the maps precisely follow the underlying features they were intended to follow on the ground).



Pickering Beach

EXCLUDED

DE-01

North Bay Drive

Kitts Hummock

Technical Correction Assessment for Properties on Sandpiper and North Bay Drives in CBRS Unit DE-01 (continued)

Sandpiper Drive

Density of Development: The Service's review of the area located at the south end of Sandpiper Drive found that there were no structures on the ground in 1990 when this area was first included within the CBRS. The residential structure on the property in question was built in 1998 according to the property owner, and historical aerial imagery confirms that no structure was present on the ground in this location prior to 1998. CBRA's density of development is not a factor for structures built after designation within the CBRS, and development that occurs after is not grounds for removal.

Level of Infrastructure: The Service did not consider the level of infrastructure that was on the ground in this area because the density threshold was not exceeded and the structure was on a single lot and not part of a larger subdivision. The intent of the infrastructure criterion is to exclude from the CBRS areas where there is intensive private capitalization for development that is underway (e.g., a subdivision funded by a developer that is under construction). Therefore, the Service only conducts infrastructure assessments in cases where the density threshold would have been exceeded had the construction of the associated structures been fully completed (or would constitute a cluster of ten or more structures, which are generally excluded from the CBRS).

Intent of the CBRS Boundary: The Service found that the area at the south end of Sandpiper Drive was not included within the CBRS as a result of an error in the underlying features that the CBRS boundary was intended to follow. The CBRS boundary in this area was accurately placed at the 1990 break in development (i.e., where development ends, either immediately adjacent to the last structure in a cluster of structures or at the property parcel boundary of the last structure).

North Bay Drive

Density of Development: The Service's review of the area located at the north end of North Bay Drive found that there were two structures on the ground in 1990 when this area was first included within the CBRS. These two structures were located more than 300 feet north of a larger cluster of development at Kitts Hummock, with several vacant lots in between. The Service's assessment considered the density of development that existed on the ground when Unit DE-01 was established in 1990. The Service found that Unit DE-01 was comprised of over 40 acres of fastland (i.e., land above mean high tide) and contained only two or three structures in 1990. Therefore, the density of development on the ground was one structure per 13 acres of fastland, well below the statutory density threshold to be considered "undeveloped" under CBRA.

Level of Infrastructure: The Service did not consider the level of infrastructure that was on the ground in this area because the density threshold was not exceeded and the structures were not part of a larger subdivision. The intent of the infrastructure criterion is to exclude from the CBRS areas where there is intensive private capitalization for development that is underway (e.g., a subdivision funded by a developer that is under construction). Therefore, the Service only conducts infrastructure assessments in cases where the density threshold would have been exceeded had the construction of the associated structures been fully completed.

Intent of the CBRS Boundary: Some pre-existing structures were included within the CBRS intentionally because they were located in areas that met CBRA's criteria for an undeveloped coastal barrier (which allows for the designation of areas containing a low-density of scattered structures). The Service found that the CBRS boundary in this area was intended to be located just north of the more densely developed cluster of structures (located about 300 feet to the south of these two structures) at Kitts Hummock. There are several vacant lots located between the two northernmost structures on North Bay Drive and the rest of the development to the south. Therefore, the area was not included within the CBRS as a result of an error in the underlying features that the CBRS boundary was intended to follow. Rather, the boundary should be moved further south to include additional undeveloped lots within the CBRS and better align with the northern end of the densely developed cluster of structures at Kitts Hummock.

¹ The administrative authority of the Service to make changes to the CBRS boundaries is limited to changes made as a result of natural forces (such as erosion and accretion), voluntary additions by property owners, and additions of excess property to the CBRS (16 U.S.C. § 3503).

² *Coastal Barrier Resources*, U.S. Code 16 (2018), § 3503(g)(1).

**John H. Chafee Coastal Barrier Resources System (CBRS)
Unit H00, Broadkill Beach,
Delaware**

Summary of Final Recommended Changes

Type of Unit: System Unit

County: Kent, Sussex

Congressional District: At Large

Existing Maps: The existing CBRS maps depicting this unit are:

- Map [10-002A](#) dated December 6, 2013
- Map [10-003A](#) dated December 6, 2013
- Map [10-004A](#) dated December 6, 2013

Final Recommended Maps: The final recommended CBRS maps depicting this unit are:

- Draft map [10-001B](#) dated December 18, 2020
- Draft map [10-002B](#) dated December 18, 2020
- Draft map [10-003B](#) dated December 18, 2020
- Draft map [10-004B](#) dated December 18, 2020

Base Map Imagery Source and

Date: United States Department of Agriculture, National Agriculture Imagery Program, 2018

Establishment of Unit: The Coastal Barrier Resources Act (Pub. L. 97-348), enacted on October 18, 1982 (47 FR 52388), originally established Unit H00.

Historical Changes: The CBRS maps for this unit have been modified by the following legislative and/or administrative actions:

- Federal Register notice (48 FR 17406) published on April 22, 1983, in accordance with Section 4(c)(1) of Pub. L. 97-348
- Coastal Barrier Improvement Act (Pub. L. 101-591) enacted on November 16, 1990 (56 FR 26304)

- Federal Register notice (79 FR 21787) published on April 17, 2014, in accordance with Section 3 of Pub. L. 101-591

For additional information on historical legislative and administrative actions that have affected the CBRS, see: <https://www.fws.gov/cbra/historical-changes-coastal-barrier-resources-system>.

Public Comments: The U.S. Fish and Wildlife Service (Service) held a 120-day public comment period on the proposed boundaries for this area of the Hurricane Sandy Remapping Project from March 12 through July 10, 2018 (83 FR 10739). 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*. All of the comments received during the comment period are reprinted in appendix L.

The Service received comments specific to Unit H00.

Changes between Proposed and Final Recommended Boundaries:

The changes to Unit H00 between proposed and final recommended are described below:

- The boundary is modified to match the existing boundary along the western side of the excluded area to avoid adding portions of the Milford Neck Preserve (owned by The Nature Conservancy (TNC) and held for conservation and/or recreation) in the vicinity of Big Stone Beach to System Unit H00.
- The lateral boundary located along the southern end of Bay Avenue in Slaughter Beach is modified to avoid adding to the CBRS one privately owned structure (constructed in 2016) that did not appear on the 2015 aerial imagery used to prepare the proposed boundary.
- The boundary located along the northern end of Shore Drive is modified to follow the break-in-development at the northern end of Prime Hook Beach as it existed in 1982. This modification would remove one structure (constructed in 1973) from the CBRS.

Final Recommended Changes: The final recommended changes to Unit H00 are described below.

Recommended Removals:

- One structure along Shore Drive

Recommended Additions:

- Undeveloped fastland and associated aquatic habitat in the vicinity of South Bowers Beach, located along the Murderkill River and along the landward boundary near Brockonbridge Gut
- Undeveloped fastland and associated aquatic habitat in the vicinity of Big Stone Beach
- Associated aquatic habitat along the Mispillion River
- A small area of undeveloped barrier fastland located along the southern end of Bay Avenue in Slaughter Beach
- Fastland and associated aquatic habitat located along Cedar Creek and at Cedar Beach, including one residential structure along Blue Heron Drive, and one residential structure and one garage along Lighthouse Road
- Minor areas of associated aquatic habitat that are privately owned and subject to an agricultural conservation easement (held by the Delaware Department of Agriculture), located along the Mispillion River
- Minor portions of Milford Neck Preserve (owned by Delaware Wild Lands for conservation and/or recreation)

Recommended Reclassifications:

- From Otherwise Protected Area (OPA) Unit H00P to System Unit H00: Areas of fastland and associated aquatic habitat that are not held for conservation and/or recreation, including two residential structures located on the southern side of Slaughter Beach
- From System Unit H00 to OPA Unit H00P: Portions of Lacy E. Nichols Jr. Cedar Creek Boating Access Area (owned by the Delaware Department of Natural Resources and Environmental Control (DNREC))

- From System Unit H00 to OPA Unit H00P: Portions of Prime Hook National Wildlife Refuge (owned by the Service)

Other Modifications/Information:

- Modification of the coincident boundary between OPA Unit H00P and System Unit H00 located in the wetlands south of Rawley Island to better follow the boundary of a parcel of Milford Neck Wildlife Area (owned by the DNREC) that was not held for conservation and/or recreation at the time the area was first included within the CBRS in 1990. This modification results in some small reclassifications from OPA to System Unit and vice versa.
- A boundary segment is added along the shoreline of Prime Hook Beach to close off the excluded area and add nearshore waters to Unit H00
- Portions of Milford Neck Preserve (owned by Delaware Wild Lands) are currently located within System Unit H00. Several of these

areas were held for conservation and/or recreation before the area was included within System Unit H00, but are not recommended for reclassification to an OPA. The Service did not receive a response from Delaware Wild Lands regarding the unit type classification of the areas it owns during either the stakeholder outreach phase of the project or the public comment period. Therefore, these areas are not recommended for reclassification to an OPA.

- Portions of Mispillion Marine Reserve and Milford Neck Wildlife Area (owned by the DNREC) and Milford Neck Preserve (owned by The Nature Conservancy), are currently located within System Unit H00. These areas are not recommended for reclassification to an OPA because they were acquired for conservation and/or recreation after they were first included within the CBRS.

- Areas that are privately owned but subject to agricultural conservation easements (held by the Delaware Department of Agriculture) are currently located within System Unit H00 along Mispillion River. These areas are not recommended for reclassification to an OPA because the easements were placed on the properties after they were first included in 1990 within the CBRS.

For information about the Service's methodology for assessing CBRS boundary modifications through the Hurricane Sandy Remapping Project, visit <https://www.federalregister.gov/d/2018-04889>.

Technical Correction Assessment: The Service has completed a Technical Correction Assessment to address a request that was received to determine whether a mapping error exists for a specific area within this unit. The assessment can be found on page I-23 in appendix I of the 2022 *Report to Congress: John H. Chafee Coastal Barrier Resources System Hurricane Sandy Remapping Project*.

Acreage, Shoreline, and Structure Information for Unit H00, Broadkill Beach, Delaware

	<i>Total Acres</i>	<i>Fastland Acres¹</i>	<i>Associated Aquatic Habitat Acres²</i>	<i>Shoreline (Miles)</i>	<i>Structures³</i>
Existing Unit ⁴	5,571	313	5,258	11.6	
Added to the CBRS	883	25	858		3
Removed from the CBRS	0	0	0		1
Reclassified Area ⁵	(11)	0	(11)		2
Final Recommended Unit	6,443	338	6,105	12.3	
Net Change	872	25	847	0.6	2

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 National Wetlands Inventory data and other data sources as necessary.

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 The methodology used to calculate acreage was improved between the proposed and final recommended phases for the first batch of states (DE, MA, NH, and NJ) included in this project. The existing acreage reported for some units has been updated using this new methodology.

⁵ Reclassification means to change either all or a portion of a System Unit to an Otherwise Protected Area, or vice-versa.

John H. Chafee Coastal Barrier Resources System (CBRS) Unit H00P, Broadkill Beach, Delaware

Summary of Final Recommended Changes

Type of Unit: Otherwise Protected Area (OPA)

County: Kent, Sussex

Congressional District: At Large

Existing Maps: The existing CBRS maps depicting this unit are:

- Map [10-002A](#)
dated December 6, 2013
- Map [10-003A](#)
dated December 6, 2013
- Map [10-004A](#)
dated December 6, 2013

Final Recommended Maps: The final recommended CBRS maps depicting this unit are:

- Draft map [10-001B](#)
dated December 18, 2020
- Draft map [10-002B](#)
dated December 18, 2020
- Draft map [10-003B](#)
dated December 18, 2020
- Draft map [10-004B](#)
dated December 18, 2020

Base Map Imagery Source and

Date: United States Department of Agriculture, National Agriculture Imagery Program, 2018

Establishment of Unit: The Coastal Barrier Improvement Act (Pub. L. 101-591), enacted on November 16, 1990 (56 FR 26304), originally established Unit H00P.

Historical Changes: The CBRS maps for this unit have been modified by the following legislative and/or administrative action:

- Federal Register notice (79 FR 21787) published on April 17, 2014, in accordance with Section 3 of Pub. L. 101-591

For additional information on historical legislative and administrative actions that have affected the CBRS, see: <https://www.fws.gov/cbra/historical-changes-coastal-barrier-resources-system>.

Public Comments: The U.S. Fish and Wildlife Service (Service) held a 120-day public comment period on the proposed boundaries for this area of the Hurricane Sandy Remapping Project from March 12 through July 10, 2018 (83 FR 10739). 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*. All of the comments received during the comment period are reprinted in appendix L.

No comments specific to Unit H00P were received.

Changes between Proposed and Final Recommended Boundaries: There are no changes to Unit H00P between proposed and final recommended.

Final Recommended Changes:

The final recommended changes to Unit H00P are described below.

Recommended Removals:

- One structure and adjacent fastland along Broadkill Road

Recommended Additions:

- Portions of Milford Neck Wildlife Area, Lacy E. Nichols Jr. Cedar Creek Boating Access Area, Waples Pond, and Mispillion Marine Reserve, including the DuPont Nature Center (owned by the Delaware Department of Natural Resources and Environmental Control (DNREC))
- Portions of Prime Hook National Wildlife Refuge (NWR) (owned by the Service)
- Portions of Milford Neck Preserve (owned by Delaware Wild Lands for conservation and/or recreation)
- One structure and a minor area of fastland and wetlands (owned by the Delaware Department of State) located east of Bowers Road

- Areas of associated aquatic habitat that are privately owned and subject to an agricultural conservation easement (held by the Delaware Department of Agriculture), located along the Murderkill River and in the vicinity of Broadkill Neck and White Neck
- Areas of associated aquatic habitat that are privately owned and not held for conservation and/or recreation. These areas are located in the vicinity of South Bowers along Murderkill River, along Brockonbridge Gut, and in the vicinity of Broadkill Neck, Davidson Marsh, and Doty Glade

Recommended Reclassifications:

- From OPA Unit H00P to System Unit H00: Areas of fastland and associated aquatic habitat that are not held for conservation and/or recreation, including two residential structures located on the southern side of Slaughter Beach
- From System Unit H00 to OPA Unit H00P: Portions of Lacy E. Nichols Jr. Cedar Creek Boating Access Area (owned by the DNREC)
- From System Unit H00 to OPA Unit H00P: Portions of Prime Hook NWR (owned by the Service)

Other Modifications/Information:

- Modification of the coincident boundary between OPA Unit H00P and System Unit H00 located in the wetlands south of Rawley Island to better follow the boundary of a parcel of Milford Neck Wildlife Area (owned by the Delaware DNREC) that was not held for conservation and/or recreation at the time the area was first included within the CBRS in 1990. This modification results in some small reclassifications from OPA to System Unit and vice versa.
- Modification of portions of the landward boundary of the unit to better align with the boundary of Prime Hook NWR, which results in some small additions and removals

For information about the Service's methodology for assessing CBRS boundary modifications through the Hurricane Sandy Remapping Project, visit <https://www.federalregister.gov/d/2018-04889>.

Technical Correction Assessment:

The Service has completed a Technical Correction Assessment to address a request that was received to determine whether a mapping error

exists for a specific area within this unit. The assessment can be found on page I-23 in appendix I of the 2022 *Report to Congress: John H. Chafee Coastal Barrier Resources System Hurricane Sandy Remapping Project*.

Acreage, Shoreline, and Structure Information for Unit H00P, Broadkill Beach, Delaware

	<i>Total Acres</i>	<i>Fastland Acres¹</i>	<i>Associated Aquatic Habitat Acres²</i>	<i>Shoreline (Miles)</i>	<i>Structures³</i>
Existing Unit ⁴	10,706	1,905	8,801	3.0	
Added to the CBRS	2,652	97	2,555		2
Removed from the CBRS	73	47	26		1
Reclassified Area ⁵	11	0	11		(2)
Final Recommended Unit	13,296	1,955	11,341	3.1	
Net Change	2,590	50	2,540	0.1	1

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 National Wetlands Inventory data and other data sources as necessary.

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 The methodology used to calculate acreage was improved between the proposed and final recommended phases for the first batch of states (DE, MA, NH, and NJ) included in this project. The existing acreage reported for some units has been updated using this new methodology.

⁵ Reclassification means to change either all or a portion of a System Unit to an Otherwise Protected Area, or vice-versa.

Technical Correction Assessment for Properties on Isaacs Shore Drive in CBRS Units H00 and H00P

Overview

The John H. Chafee Coastal Barrier Resources System (CBRS) is depicted on a set of maps that is maintained by the U.S. Fish and Wildlife Service (Service). Aside from three minor exceptions,¹ only legislation enacted by Congress can modify the CBRS maps. A “technical correction” is a correction to a CBRS map to fix a legitimate mapping error. The Service receives numerous requests from property owners and other interested parties who seek to remove areas from the CBRS based on an alleged technical mapping error. The Service considers a technical mapping error to be a mistake in the delineation of the CBRS boundaries that was made as a result of incorrect, outdated, or incomplete information (often stemming from inaccuracies on the original base maps).

The Service generally does not recommend removal of areas from the CBRS unless there is clear and compelling evidence that a technical mapping error led to their inclusion within the CBRS. In order to determine whether a technical mapping error exists, the Service conducts a comprehensive review of the history of the CBRS unit in question which generally includes an assessment of the Service’s background records for the unit, the controlling and historical CBRS maps of the area, the historical development status of the area, aerial imagery, and any materials submitted by property owners and other interested parties. When the Service determines that a technical correction to a map is warranted, we prepare a new comprehensively modernized map for the area. The updated map becomes effective only if adopted through legislation enacted by Congress.

The Service was first contacted in 2017 by the owner of a property on the western side of Isaacs Shore Drive in the Southern Pointe Shores subdivision whose federal flood insurance was cancelled by the National Flood Insurance Program because the residential structure on the property is within the CBRS. The owner asserts that the property, which is located at the south end of Slaughter Beach, Delaware, was included within the CBRS in error and would like it removed.

Service Findings

The Service has carefully assessed all of the information provided by the party indicated above as well as the other materials that are typically reviewed as part of a technical correction assessment. The Service found that the property in question and the other lots on Isaacs Shore Drive in the Southern Pointe Shores subdivision were appropriately included within the CBRS.

The majority of the properties on the eastern side of the road were first included in 1982 within System Unit H00, and, in the Hurricane Sandy Remapping Project, are recommended to remain within that unit. The properties on the western side of the road (and small portions of the lots on the eastern side of the road) were first included in 1990 within Otherwise Protected Area Unit H00P and are recommended to be reclassified to System Unit H00 in the Hurricane Sandy Remapping Project because these properties are not held for conservation and/or recreation.

The Coastal Barrier Resources Act (CBRA) development criteria and the Service’s findings related to this technical correction assessment are explained in further detail below. While this particular area is appropriately included within the CBRS, the Service did identify another area in this unit that is appropriate for removal. The area recommended for removal is listed in the Summary of Final Recommended Changes for Unit H00P.

CBRA Development Criteria and CBRS Boundary Intent

CBRA requires that the Service consider the following criteria in determining whether a coastal barrier was undeveloped at the time of inclusion within the CBRS: (A) the density of development was less than one structure per five acres of land above mean high tide; and (B) there was existing infrastructure consisting of (i) a road, with a reinforced road bed, to each lot or building site in the area; (ii) a wastewater disposal system sufficient to serve each lot or building site in the area; (iii) electric service for each lot or building site in the area; and (iv) a fresh water supply for each lot or building site in the area.² When assessing whether an area may be appropriate for removal, the Service also considers the location of geomorphic, cultural, and development features on the ground at the time the area was included within the CBRS (i.e., whether the CBRS boundary lines on the maps precisely follow the underlying features they were intended to follow on the ground).

Technical Correction Assessment for Properties on Isaacs Shore Drive in CBRS Units H00 and H00P (continued)

Eastern Side of Isaacs Shore Drive

Density of Development: The Service's review of the properties on the eastern side of Isaacs Shore Drive found that there were no structures on the ground in 1982 when this area was first included within the CBRS. CBRA's density of development is not a factor for structures built after designation within the CBRS.

Level of Infrastructure: The Service's assessment considered the level of infrastructure that was on the ground and available to each lot or building site in 1982 and found that there was not a full complement of infrastructure to each lot or building site. Development that occurs after CBRS designation is not grounds for removal.

Intent of the CBRS Boundary: The Service also found that the area along Isaacs Shore Drive was not included within the CBRS as a result of a mapping error. Therefore, the Service does not recommend the removal of the properties on the eastern side of Isaacs Shore Drive from the CBRS.

Western Side of Isaacs Shore Drive

Density of Development: The Service's review of the properties on the western side of Isaacs Shore Drive found that there were no structures on the ground in 1990 when this area was first included within the CBRS. CBRA's density of development is not a factor for structures built after designation within the CBRS.

Level of Infrastructure: The Service's assessment considered the level of infrastructure that was on the ground and available to each lot or building site in 1990 and found that there was not a full complement of infrastructure to each lot or building site. Development that occurs after CBRS designation is not grounds for removal.

Intent of the CBRS Boundary: The Service also found that the area along Isaacs Shore Drive was not included within the CBRS as a result of a mapping error. Therefore, the Service does not recommend the removal of the properties on the western side of Isaacs Shore Drive from the CBRS.

¹ The administrative authority of the Service to make changes to the CBRS boundaries is limited to changes made as a result of natural forces (such as erosion and accretion), voluntary additions by property owners, and additions of excess property to the CBRS (16 U.S.C. § 3503).

² *Coastal Barrier Resources*, U.S. Code 16 (2018), § 3503(g)(1).

Slaughter Beach

H00P

**John H. Chafee Coastal Barrier Resources System (CBRS)
Unit DE-02P, Beach Plum Island,
Delaware**

**Summary of Final Recommended
Changes**

Type of Unit: Otherwise Protected Area (OPA)

County: Sussex

Congressional District: At Large

Existing Map: The existing CBRS map depicting this unit is:

- Map [10-004A](#) dated December 6, 2013

Final Recommended Map: The final recommended CBRS map depicting this unit is:

- Draft map [10-004B](#) dated December 18, 2020

Base Map Imagery Source and Date: United States Department of Agriculture, National Agriculture Imagery Program, 2018

Establishment of Unit: The Coastal Barrier Improvement Act (Pub. L. 101-591), enacted on November 16, 1990 (56 FR 26304), originally established Unit DE-02P.

Historical Changes: The CBRS map for this unit has been modified by the following legislative and/or administrative action:

- Federal Register notice (79 FR 21787) published on April 17, 2014, in accordance with Section 3 of Pub. L. 101-591

For additional information on historical legislative and administrative actions that have affected the CBRS, see: <https://www.fws.gov/cbra/historical-changes-coastal-barrier-resources-system>.

Public Comments: The U.S. Fish and Wildlife Service (Service) held a 120-day public comment period on the proposed boundaries for this area of the Hurricane Sandy Remapping Project from March 12 through July 10, 2018 (83 FR 10739). 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. All of the comments received during the comment period are reprinted in appendix L.

No comments specific to Unit DE-02P were received.

Changes between Proposed and Final Recommended Boundaries: There are no changes to Unit DE-02P between proposed and final recommended.

Final Recommended Changes: The final recommended changes to Unit DE-02P are described below.

Recommended Removals:

- Two structures located at the southern end of South Bayshore Drive

Recommended Additions:

- Portions of Great Marsh Preserve (owned by the Delaware Department of Natural Resources and Environmental Control)

- Wetlands that are privately owned and subject to a conservation easement (held by The Nature Conservancy), located in the vicinity of the Great Marsh to the north of Fisher Creek
- Wetlands that are privately owned and subject to a conservation easement (held by the City of Lewes), located in the vicinity of the Great Marsh along Canary Creek
- Roosevelt Inlet and wetlands located to the southwest of the Inlet. The wetlands are owned by the University of Delaware. These areas are not held for conservation and/or recreation.
- Areas of associated aquatic habitat that are privately owned and not held for conservation and/or recreation, located along Canary Creek, Black Hog Gut, Old Mill Creek, and Fisher Creek

Other Modifications/Information:

- Areas of associated aquatic habitat not held for conservation and/or recreation, located in the vicinity of Great Marsh, are currently within OPA Unit DE-02P. These areas are not recommended for reclassification to a System Unit.

For information about the Service's methodology for assessing CBRS boundary modifications through the Hurricane Sandy Remapping Project, visit <https://www.federalregister.gov/d/2018-04889>.

Acreage, Shoreline, and Structure Information for Unit DE-02P, Beach Plum Island, Delaware

	<i>Total Acres</i>	<i>Fastland Acres¹</i>	<i>Associated Aquatic Habitat Acres²</i>	<i>Shoreline (Miles)</i>	<i>Structures³</i>
Existing Unit ⁴	2,756	57	2,699	2.0	
Added to the CBRS	434	16	418		0
Removed from the CBRS	1	1	0		2
Reclassified Area ⁵	0	0	0		0
Final Recommended Unit	3,189	72	3,117	2.1	
Net Change	433	15	418	0.1	(2)

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 National Wetlands Inventory data .and other data sources as necessary.

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 The methodology used to calculate acreage was improved between the proposed and final recommended phases for the first batch of states (DE, MA, NH, and NJ) included in this project. The existing acreage reported for some units has been updated using this new methodology.

⁵ Reclassification means to change either all or a portion of a System Unit to an Otherwise Protected Area, or vice-versa.

**John H. Chafee Coastal Barrier Resources System (CBRS)
Unit DE-03P, Cape Henlopen, Delaware**

Summary of Final Recommended Changes

Type of Unit: Otherwise Protected Area (OPA)

County: Sussex

Congressional District: At Large

Existing Map: The existing CBRS map depicting this unit is:

- Map [10-005A](#) dated December 6, 2013

Final Recommended Map: The final recommended CBRS map depicting this unit is:

- Draft map [10-005B](#) dated December 18, 2020

Base Map Imagery Source and

Date: United States Department of Agriculture, National Agriculture Imagery Program, 2018

Establishment of Unit: The Coastal Barrier Improvement Act (Pub. L. 101-591), enacted on November 16, 1990 (56 FR 26304), originally established Unit DE-03P.

Historical Changes: The CBRS map for this unit has been modified by the following legislative and/or administrative actions:

- Pub. L. 106-128 enacted on December 6, 1999 (65 FR 17671)
- Federal Register notice (79 FR 21787) published on April 17, 2014, in accordance with Section 3 of Pub. L. 101-591

For additional information on historical legislative and administrative actions that have affected the CBRS, see: <https://www.fws.gov/cbra/historical-changes-coastal-barrier-resources-system>.

Public Comments: The U.S. Fish and Wildlife Service (Service) held a 120-day public comment period on the proposed boundaries for this area of the Hurricane Sandy Remapping Project from March 12 through July 10, 2018 (83 FR 10739). 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*. All of the comments received during the comment period are reprinted in appendix L.

No comments specific to Unit DE-03P were received.

Changes between Proposed and Final Recommended Boundaries: There are no changes to Unit DE-03P between proposed and final recommended.

Final Recommended Changes: The final recommended changes to Unit DE-03P are described below.

Recommended Removals:

- A minor area of undeveloped privately owned fastland located along Cape Henlopen Drive

Recommended Additions:

- Portions of Cape Henlopen State Park (owned by the Delaware Department of Natural Resources and Environmental Control) located along Cape Henlopen Drive and the Lewes and Rehoboth Canal
- Portions of privately owned wetlands that are subject to Sussex County's Open Space Ordinance, located in the vicinity of Wolfe Glade and Gills Neck
- Areas of associated aquatic habitat that are privately owned and not held for conservation and/or recreation, located along the Lewes and Rehoboth Canal, Wolfe Glade, and Holland Glade

Other Modifications/Information:

- Areas of undeveloped fastland and associated aquatic habitat not held for conservation and/or recreation, located along Cape Henlopen Drive and Lewes and Rehoboth Canal, are currently within OPA Unit DE-03P. These areas are not recommended for reclassification to a System Unit.

For information about the Service's methodology for assessing CBRS boundary modifications through the Hurricane Sandy Remapping Project, visit <https://www.federalregister.gov/d/2018-04889>.

Acreeage, Shoreline, and Structure Information for Unit DE-03P, Cape Henlopen, Delaware

	<i>Total Acres</i>	<i>Fastland Acres¹</i>	<i>Associated Aquatic Habitat Acres²</i>	<i>Shoreline (Miles)</i>	<i>Structures³</i>
Existing Unit ⁴	3,262	1,432	1,830	6.7	
Added to the CBRS	814	70	744		0
Removed from the CBRS	1	1	0		0
Reclassified Area ⁵	0	0	0		0
Final Recommended Unit	4,075	1,501	2,574	6.7	
Net Change	813	69	744	0.0	0

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 National Wetlands Inventory data and other data sources as necessary.

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 The methodology used to calculate acreage was improved between the proposed and final recommended phases for the first batch of states (DE, MA, NH, and NJ) included in this project. The existing acreage reported for some units has been updated using this new methodology.

⁵ Reclassification means to change either all or a portion of a System Unit to an Otherwise Protected Area, or vice-versa.

John H. Chafee Coastal Barrier Resources System (CBRS) Unit DE-06, Silver Lake, Delaware

Summary of Final Recommended Changes

Type of Unit: System Unit

County: Sussex

Congressional District: At Large

Existing Map: The existing CBRS map depicting this unit is:

- Map [10-005A](#) dated December 6, 2013

Final Recommended Map: The final recommended CBRS map depicting this unit is:

- Draft map [10-005B](#) dated December 18, 2020

Base Map Imagery Source and

Date: United States Department of Agriculture, National Agriculture Imagery Program, 2018

Establishment of Unit: The Coastal Barrier Improvement Act (Pub. L. 101-591), enacted on November 16, 1990 (56 FR 26304), originally established Unit DE-06.

Historical Changes: The CBRS map for this unit has been modified by the following legislative and/or administrative actions:

- Federal Register notice (58 FR 60288) published on November 15, 1993, in accordance with Section 4 of Pub. L. 101-591
- Federal Register notice (79 FR 21787) published on April 17, 2014, in accordance with Section 3 of Pub. L. 101-591

For additional information on historical legislative and administrative actions that have affected the CBRS, see: <https://www.fws.gov/cbra/historical-changes-coastal-barrier-resources-system>.

Public Comments: The U.S. Fish and Wildlife Service (Service) held a 120-day public comment period on the proposed boundaries for this area

of the Hurricane Sandy Remapping Project from March 12 through July 10, 2018 (83 FR 10739). 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*. All of the comments received during the comment period are reprinted in appendix L.

No comments specific to Unit DE-06 were received.

Changes between Proposed and Final Recommended Boundaries: There are no changes to Unit DE-06 between proposed and final recommended.

Final Recommended Changes: There are no recommended changes to this unit.

For information about the Service's methodology for assessing CBRS boundary modifications through the Hurricane Sandy Remapping Project, visit <https://www.federalregister.gov/d/2018-04889>.

Acreage, Shoreline, and Structure Information for Unit DE-06, Silver Lake, Delaware

	<i>Total Acres</i>	<i>Fastland Acres¹</i>	<i>Associated Aquatic Habitat Acres²</i>	<i>Shoreline (Miles)</i>	<i>Structures³</i>
Existing Unit ⁴	55	11	44	0.2	
Added to the CBRS	0	0	0		0
Removed from the CBRS	0	0	0		0
Reclassified Area ⁵	0	0	0		0
Final Recommended Unit	55	11	44	0.2	
Net Change	0	0	0	0.0	0

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 National Wetlands Inventory data and other data sources as necessary.

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 The methodology used to calculate acreage was improved between the proposed and final recommended phases for the first batch of states (DE, MA, NH, and NJ) included in this project. The existing acreage reported for some units has been updated using this new methodology.

⁵ Reclassification means to change either all or a portion of a System Unit to an Otherwise Protected Area, or vice-versa.

John H. Chafee Coastal Barrier Resources System (CBRS)
Unit DE-08P, Fenwick Island, Delaware

Summary of Final Recommended Changes

Type of Unit: Otherwise Protected Area (OPA)

County: Sussex

Congressional District: At Large

Existing Map: The existing CBRS map depicting this unit is:

- Map [10-007A](#) dated December 6, 2013

Final Recommended Map: The final recommended CBRS map depicting this unit is:

- Draft map [10-007B](#) dated December 18, 2020

Base Map Imagery Source and Date:

United States Department of Agriculture, National Agriculture Imagery Program, 2018

Establishment of Unit: The Coastal Barrier Improvement Act (Pub. L. 101-591), enacted on November 16, 1990 (56 FR 26304), originally established Unit DE-08P.

Historical Changes: The CBRS map for this unit has been modified by the following legislative and/or administrative action:

- Federal Register notice (79 FR 21787) published on April 17, 2014, in accordance with Section 3 of Pub. L. 101-591

For additional information on historical legislative and administrative actions that have affected the CBRS, see: <https://www.fws.gov/cbra/historical-changes-coastal-barrier-resources-system>.

Public Comments: The U.S. Fish and Wildlife Service (Service) held a 120-day public comment period on the proposed boundaries for this area of the Hurricane Sandy Remapping Project from March 12 through July 10, 2018 (83 FR 10739). 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*. All of the comments received during the comment period are reprinted in appendix L.

The Service received comments specific to Unit DE-08P.

Changes between Proposed and Final Recommended Boundaries: There are no changes to Unit DE-08P between proposed and final recommended.

Final Recommended Changes:

The final recommended changes to Unit DE-08P are described below.

Recommended Removals:

- Fifteen structures in the Seatowne community and two residential structures along Coastal Highway just north of Seatowne
- Ten condominium buildings and two associated structures located in the King's Grant community
- Six structures in The Curves subdivision

Recommended Additions:

- Portions of Assawoman Wildlife Area and Assawoman Canal (both owned by Delaware Department of Natural Resources and Environmental Control (DNREC))
- Most of the Taylor/Cat Hill Wildlife Area (owned by the Town of South Bethany)
- Privately owned wetlands that are subject to Sussex County's Open Space Ordinance, located along Dickerson Creek, Tubbs Cove, the eastern side of Little Assawoman Bay on Fenwick Island, and in the vicinity of Swann Keys

- Undeveloped fastland that is privately owned and not held for conservation and/or recreation, located along Point of Ridge in Little Assawoman Bay
- Associated aquatic habitat that is privately owned and not held for conservation and/or recreation, located along Jefferson Creek, Little Bay, Dickerson Creek, Little Assawoman Bay, Tubbs Cove, and Lighthouse Cove

Other Modifications/Information:

- Areas of fastland and associated aquatic habitat not held for conservation and/or recreation, located in the vicinity of Branch Gut Cove and on Fenwick Island along the eastern side of Little Assawoman Bay, are currently within OPA Unit DE-08P. These areas are not recommended for reclassification to a System Unit.
- Modification of the boundary of the unit in some areas to better align with the boundaries of the Assawoman Wildlife Area and Fenwick Island State Park (owned by Delaware DNREC), which results in minor additions and removals

For information about the Service's methodology for assessing CBRS boundary modifications through the Hurricane Sandy Remapping Project, visit <https://www.federalregister.gov/d/2018-04889>.

Technical Correction Assessment:

The Service has completed a Technical Correction Assessment to address requests that were received to determine whether mapping errors exist for specific areas within this unit. The assessment can be found on page I-34 in appendix I of the 2022 *Report to Congress: John H. Chafee Coastal Barrier Resources System Hurricane Sandy Remapping Project*.

Acreage, Shoreline, and Structure Information for Unit DE-08P, Fenwick Island, Delaware

	<i>Total Acres</i>	<i>Fastland Acres¹</i>	<i>Associated Aquatic Habitat Acres²</i>	<i>Shoreline (Miles)</i>	<i>Structures³</i>
Existing Unit ⁴	3,530	553	2,977	2.8	
Added to the CBRS	1,338	64	1,274		0
Removed from the CBRS	25	20	5		35
Reclassified Area ⁵	0	0	0		0
Final Recommended Unit	4,843	597	4,246	2.8	
Net Change	1,313	44	1,269	0.0	(35)

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 National Wetlands Inventory data and other data sources as necessary.

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 The methodology used to calculate acreage was improved between the proposed and final recommended phases for the first batch of states (DE, MA, NH, and NJ) included in this project. The existing acreage reported for some units has been updated using this new methodology.

⁵ Reclassification means to change either all or a portion of a System Unit to an Otherwise Protected Area, or vice-versa.

**Technical Correction Assessment for Seatowne Community,
Two Properties on Coastal Highway, and King's Grant Condominium
Community in CBRS Unit DE-08P**

Overview

The John H. Chafee Coastal Barrier Resources System (CBRS) is depicted on a set of maps that is maintained by the U.S. Fish and Wildlife Service (Service). Aside from three minor exceptions,¹ only legislation enacted by Congress can modify the CBRS maps. A “technical correction” is a correction to a CBRS map to fix a legitimate mapping error. The Service receives numerous requests from property owners and other interested parties who seek to remove areas from the CBRS based on an alleged technical mapping error. The Service considers a technical mapping error to be a mistake in the delineation of the CBRS boundaries that was made as a result of incorrect, outdated, or incomplete information (often stemming from inaccuracies on the original base maps).

The Service generally does not recommend removal of areas from the CBRS unless there is clear and compelling evidence that a technical mapping error led to their inclusion within the CBRS. In order to determine whether a technical mapping error exists, the Service conducts a comprehensive review of the history of the CBRS unit in question which generally includes an assessment of the Service’s background records for the unit, the controlling and historical CBRS maps of the area, the historical development status of the area, aerial imagery, and any materials submitted by property owners and other interested parties. When the Service determines that a technical correction to a map is warranted, we prepare a new comprehensively modernized map for the area. The updated map becomes effective only if adopted through legislation enacted by Congress.

The Service was first contacted in 2008 by a private property owner who sought to remove from CBRS Unit DE-08P a property on Bayside Drive in the Seatowne community, located on Fenwick Island, Delaware. Following that first request, the Service was contacted by a member of Congress on behalf of the homeowners association of the Seatowne community seeking the removal of the portions of their community located within the CBRS (including properties along both Bayside and Oceanside Drives). In addition, the Service received a request from another property owner to remove from the CBRS a property along Coastal Highway north of the Seatowne community. The owners believe these properties are located within the CBRS in error. In May 2018, the Service received a public comment from the King’s Grant Condominium Association submitted for the Hurricane Sandy Remapping Project, supporting the removal of their community from the CBRS.

Service Findings

The Service has carefully assessed the information provided by the parties indicated above as well as the materials that are typically reviewed as part of a technical correction assessment. The Service found that the following areas are appropriate for removal from the CBRS: the fastland (i.e., land above mean high tide) portions of the Seatowne community located within the CBRS (including 15 structures); 2 structures along Coastal Highway just north of the Seatowne community; and 12 structures in the King’s Grant Condominium community. The Coastal Barrier Resources Act (CBRA) development criteria and the Service’s findings related to this technical correction assessment are explained in further detail below. An additional area recommended for removal from this unit is listed in the Summary of Final Recommended Changes for Unit DE-08P.

CBRA Development Criteria and CBRS Boundary Intent

CBRA requires that the Service consider the following criteria in determining whether a coastal barrier was undeveloped at the time of inclusion within the CBRS: (A) the density of development was less than one structure per five acres of land above mean high tide; and (B) there was existing infrastructure consisting of (i) a road, with a reinforced road bed, to each lot or building site in the area; (ii)



Technical Correction Assessment for Seatowne Community, Two Properties on Coastal Highway, and King's Grant Condominium Community in CBRS Unit DE-08P (continued)

a wastewater disposal system sufficient to serve each lot or building site in the area; (iii) electric service for each lot or building site in the area; and (iv) a fresh water supply for each lot or building site in the area.² When assessing whether an area may be appropriate for removal, the Service also considers the location of geomorphic, cultural, and development features on the ground at the time the area was included within the CBRS (i.e., whether the CBRS boundary lines on the maps precisely follow the underlying features they were intended to follow on the ground).

Seatowne Community

The Service's review of the properties in the Seatowne community that are currently located within the CBRS found that 10 of the 16 lots contained structures (there are now 15 structures) in 1990 when this area was first included within the CBRS. The fastland portions of these lots are appropriate for removal from the CBRS because the boundary in the area where they are located was intended to follow the wetland/fastland interface, and the location of this interface as it existed at the time was not depicted correctly on the 1981 U.S. Geological Survey topographic quadrangle that was used as the base map for the October 24, 1990, CBRS map. Because it was determined that the CBRS boundary did not accurately follow the underlying features it was intended to follow on the ground in this area, a review of density and infrastructure was not needed.

Coastal Highway

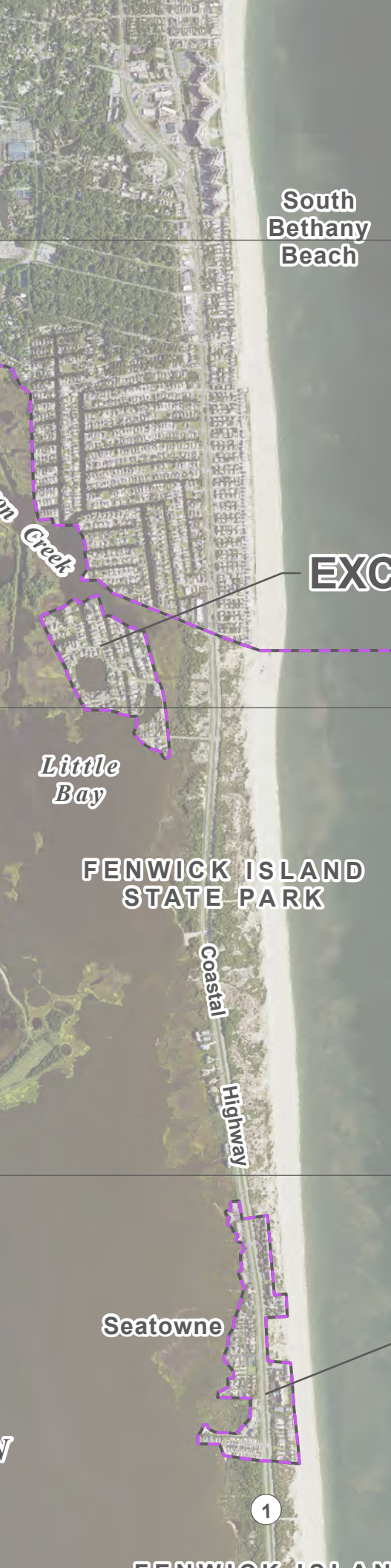
The Service's review of the two properties along Coastal Highway just north of the Seatowne community found that there were no structures on the ground in 1990 when this area was first included within the CBRS. However, the two structures along Coastal Highway are appropriate for removal from the CBRS because the boundary in the area where the structures are located was intended to follow the wetland/fastland interface, and the location of this interface as it existed at the time was not depicted correctly on the 1981 U.S. Geological Survey topographic quadrangle that was used as the base map for the October 24, 1990, CBRS map. Because it was determined that the CBRS boundary did not accurately follow the underlying features it was intended to follow on the ground in this area, a review of density and infrastructure was not needed.

King's Grant Condominium Community

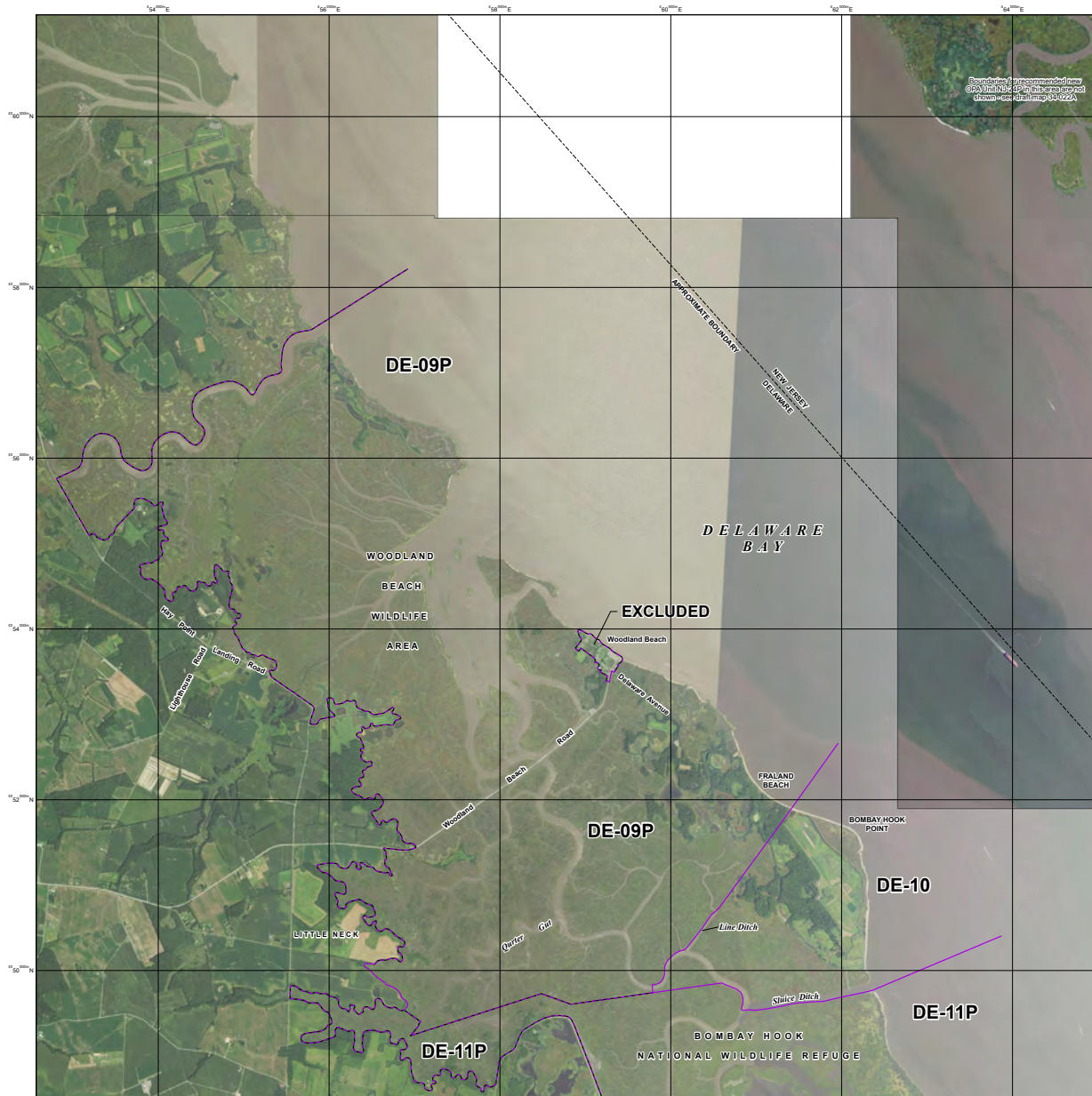
The Service's review of the properties in the King's Grant Condominium community found that at least 8 of the 12 structures were on the ground in 1990 when this area was first included within the CBRS. However, all the condo structures are appropriate for removal from the CBRS because the boundary in the area where the structures are located was generally intended to follow either the wetland/fastland interface on the bayside of the development or the boundary of Fenwick Island State Park on the ocean side of the development. The location of these features as they existed at the time were not depicted correctly on the 1981 U.S. Geological Survey topographic quadrangle that was used as the base map for the October 24, 1990, CBRS map. Because it was determined that the CBRS boundary did not accurately follow the underlying features it was intended to follow on the ground in this area, a review of density and infrastructure was not needed.

¹ The administrative authority of the Service to make changes to the CBRS boundaries is limited to changes made as a result of natural forces (such as erosion and accretion), voluntary additions by property owners, and additions of excess property to the CBRS (16 U.S.C. § 3503).

² Coastal Barrier Resources, U.S. Code 16 (2018), § 3503(g)(1).



Final Recommended



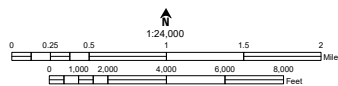
JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

This draft map was produced by the U.S. Fish and Wildlife Service to show final recommended boundary changes to the John H. Chafee Coastal Barrier Resources System (CBRS) as directed by Section 4 of the Coastal Barrier Resources Reauthorization Act of 2005 (Public Law 109-226).

The seaward side of the CBRS unit includes the entire sand-sharing system, including the beach and nearshore area. The sand-sharing system of CBRS units is normally defined by the 30-ft bathymetric contour. In large coastal embayments and the Great Lakes, the sand-sharing system is defined by the 20-ft bathymetric contour or a line approximately one mile seaward of the shoreline, whichever is nearer the coastal barrier.

For additional information about the Coastal Barrier Resources Act or CBRS, please visit www.fws.gov/cbrr.

Woodland Beach Unit DE-09P Fraland Beach Unit DE-10 Bombay Hook Unit DE-11P (1 of 2)



- Final Recommended System Unit Boundary
- Final Recommended Otherwise Protected Area (OPA) Boundary. OPAs are identified on the map by the letter "P" following the unit number
- - - - - Approximate State Boundary
- $25^{\circ}54'00''N$ 2000-meter Universal Transverse Mercator grid values
- Imagery Date(s): 2018
- Imagery Source(s): United States Department of Agriculture
National Agricultural Imagery Program
- Coordinate System: North American Datum 1983
Universal Transverse Mercator Zone 18 North
- Draft Map: 10-008A Map Date: December 18, 2020

Final Recommended



JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

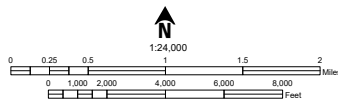
Bombay Hook Unit DE-11P (2 of 2)
Little Creek Unit DE-01P (2 of 2)

This draft map was produced by the U.S. Fish and Wildlife Service to show final recommended boundary changes to the John H. Chafee Coastal Barrier Resources System (CBRS) as directed by Section 4 of the Coastal Barrier Resources Reauthorization Act of 2005 (Public Law 109-226).

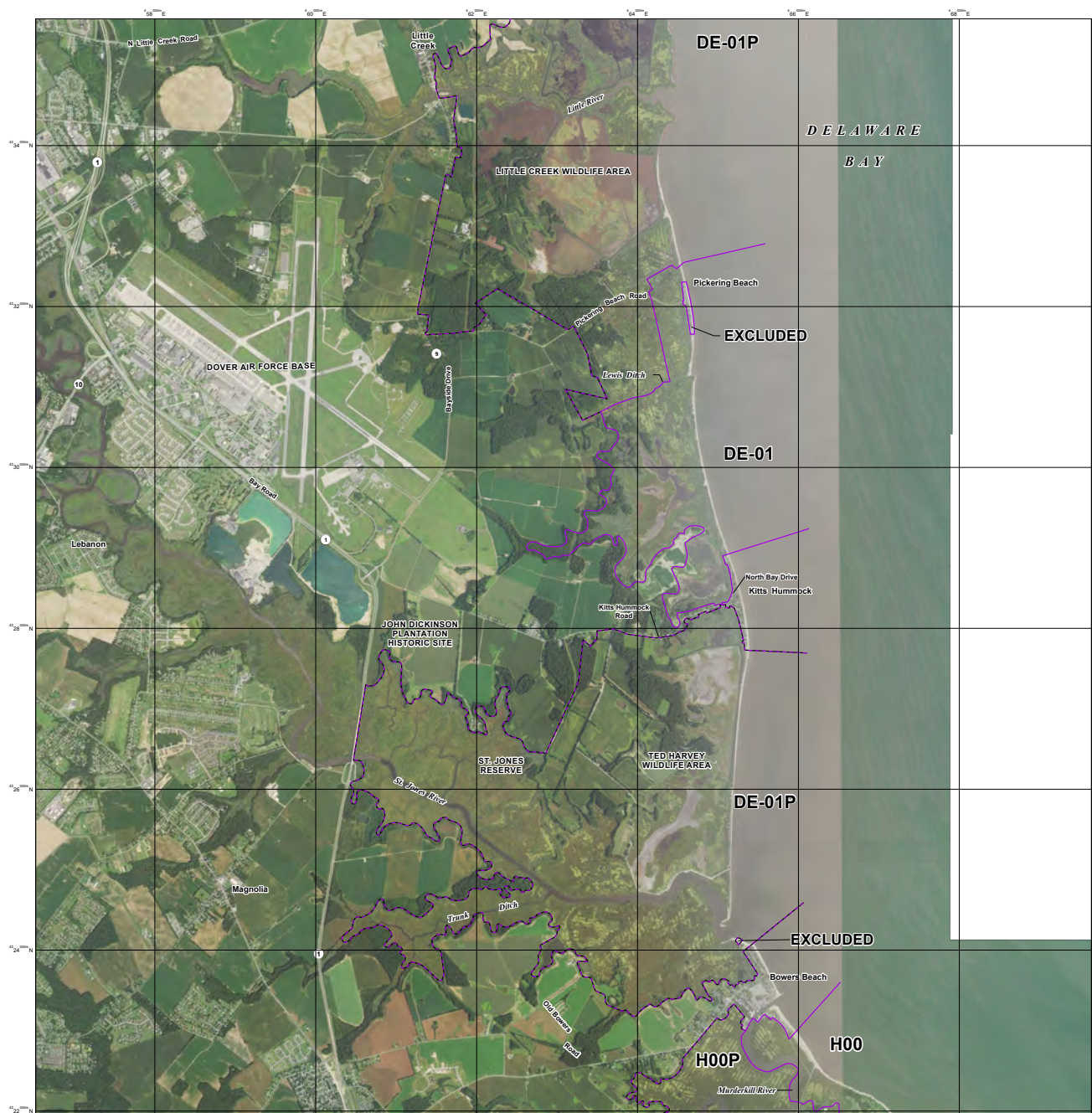
The seaward side of the CBRS unit includes the entire sand-sharing system, including the beach and nearshore area. The sand-sharing system of CBRS units is normally defined by the 30-ft bathymetric contour. In large coastal embayments and the Great Lakes, the sand-sharing system is defined by the 20-ft bathymetric contour or a line approximately one mile seaward of the shoreline, whichever is nearer the coastal barrier.

For additional information about the Coastal Barrier Resources Act or CBRS, please visit www.fws.gov/cbra.

- Final Recommended System Unit Boundary
- Final Recommended Otherwise Protected Area (OPA) Boundary. OPAs are identified on the map by the letter "P" following the unit number
- - - - - Approximate State Boundary
- $36^{\circ}54'00''$ N 2000-meter Universal Transverse Mercator grid values
- Imagery Date(s): 2018
- Imagery Source(s): United States Department of Agriculture National Agricultural Imagery Program
- Coordinate System: North American Datum 1983 Universal Transverse Mercator Zone 18 North
- Draft Map: 10-009A Map Date: December 18, 2020



Final Recommended



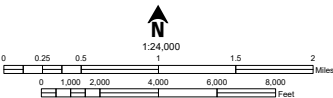
JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

Little Creek Unit DE-01/DE-01P (1 of 2)
Broadkill Beach Unit H00/H00P (1 of 4)

This draft map was produced by the U.S. Fish and Wildlife Service to show final recommended boundary changes to the John H. Chafee Coastal Barrier Resources System (CBRS) as directed by Section 4 of the Coastal Barrier Resources Reauthorization Act of 2005 (Public Law 109-226).

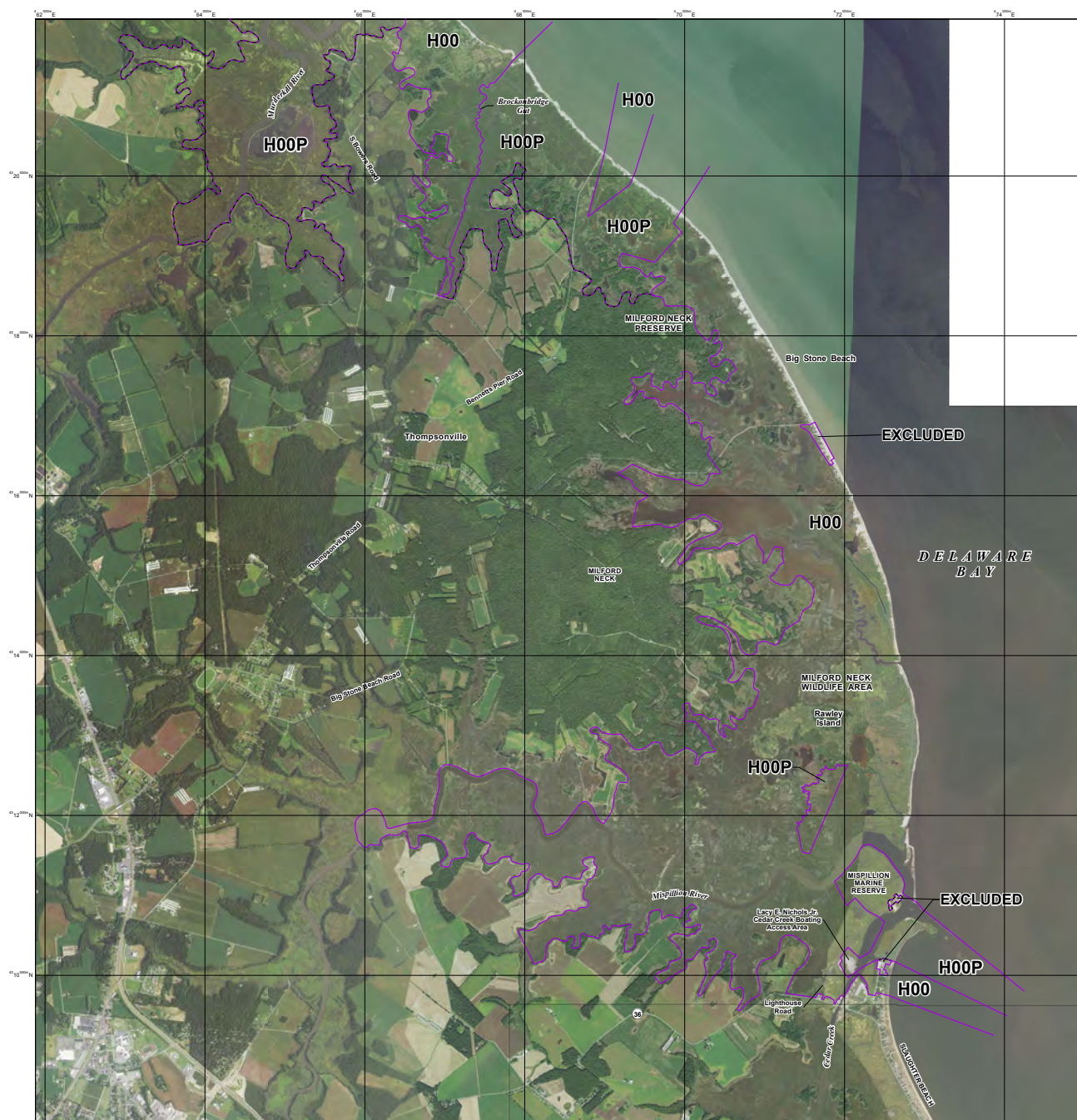
The seaward side of the CBRS unit includes the entire sand-sharing system, including the beach and nearshore area. The sand-sharing system of CBRS units is normally defined by the 30-ft bathymetric contour. In large coastal embayments and the Great Lakes, the sand-sharing system is defined by the 20-ft bathymetric contour or a line approximately one mile seaward of the shoreline, whichever is nearer the coastal barrier.

For additional information about the Coastal Barrier Resources Act or CBRS, please visit www.fws.gov/cbrs.



Final Recommended System Unit Boundary
Final Recommended Otherwise Protected Area (OPA) Boundary; OPAs are identified on the map by the letter "P" following the unit number
Approximate State Boundary
2000-meter Universal Transverse Mercator grid values
Imagery Date(s): 2018
Imagery Source(s): United States Department of Agriculture National Agricultural Imagery Program
Coordinate System: North American Datum 1983 Universal Transverse Mercator Zone 18 North
Draft Map: 10-001B Map Date: December 18, 2020

Final Recommended



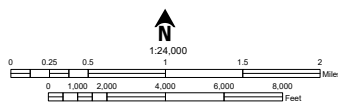
This draft map was produced by the U.S. Fish and Wildlife Service to show final recommended boundary changes to the John H. Chafee Coastal Barrier Resources System (CBRS) as directed by Section 4 of the Coastal Barrier Resources Reauthorization Act of 2005 (Public Law 109-226).

The seaward side of the CBRS unit includes the entire sand-sharing system, including the beach and nearshore area. The sand-sharing system of CBRS units is normally defined by the 30-ft bathymetric contour. In large coastal embayments and the Great Lakes, the sand-sharing system is defined by the 20-ft bathymetric contour or a line approximately one mile seaward of the shoreline, whichever is nearer the coastal barrier.

For additional information about the Coastal Barrier Resources Act or CBRS, please visit www.fws.gov/cbrr.

JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

Broadkill Beach Unit H00/H00P (2 of 4)



- Final Recommended System Unit Boundary
- Final Recommended Otherwise Protected Area (OPA) Boundary. OPAs are identified on the map by the letter "P" following the unit number
- Approximate State Boundary
- 2000-meter Universal Transverse Mercator grid values
- Imagery Date(s): 2018
- Imagery Source(s): United States Department of Agriculture National Agricultural Imagery Program
- Coordinate System: North American Datum 1983 Universal Transverse Mercator Zone 18 North
- Draft Map: 10-002B Map Date: December 18, 2020

Final Recommended



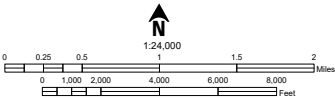
This draft map was produced by the U.S. Fish and Wildlife Service to show final recommended boundary changes to the John H. Chafee Coastal Barrier Resources System (CBRS) as directed by Section 4 of the Coastal Barrier Resources Reauthorization Act of 2005 (Public Law 109-226).

The seaward side of the CBRS unit includes the entire sand-sharing system, including the beach and nearshore area. The sand-sharing system of CBRS units is normally defined by the 30-ft bathymetric contour. In large coastal embayments and the Great Lakes, the sand-sharing system is defined by the 20-ft bathymetric contour or a line approximately one mile seaward of the shoreline, whichever is nearer the coastal barrier.

For additional information about the Coastal Barrier Resources Act or CBRS, please visit www.fws.gov/cbrr.

JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

Broadkill Beach Unit H00/H00P (3 of 4)



- Final Recommended System Unit Boundary
- Final Recommended Otherwise Protected Area (OPA) Boundary. OPAs are identified on the map by the letter "P" following the unit number
- Approximate State Boundary
- 2000-meter Universal Transverse Mercator grid values
- Imagery Date(s): 2018
- Imagery Source(s): United States Department of Agriculture National Agricultural Imagery Program
- Coordinate System: North American Datum 1983 Universal Transverse Mercator Zone 18 North
- Draft Map: 10-003B Map Date: December 18, 2020

Final Recommended



JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

Broadkill Beach Unit H00/H00P (4 of 4)
Beach Plum Island Unit DE-02P

This draft map was produced by the U.S. Fish and Wildlife Service to show final recommended boundary changes to the John H. Chafee Coastal Barrier Resources System (CBRS) as directed by Section 4 of the Coastal Barrier Resources Reauthorization Act of 2005 (Public Law 109-226).

The seaward side of the CBRS unit includes the entire sand-sharing system, including the beach and nearshore area. The sand-sharing system of CBRS units is normally defined by the 30-ft bathymetric contour. In large coastal embayments and the Great Lakes, the sand-sharing system is defined by the 20-ft bathymetric contour or a line approximately one mile seaward of the shoreline, whichever is nearer the coastal barrier.

For additional information about the Coastal Barrier Resources Act or CBRS, please visit www.fws.gov/cbrs.

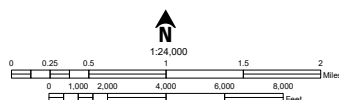
- Final Recommended System Unit Boundary
- Final Recommended Otherwise Protected Area (OPA) Boundary; OPAs are identified on the map by the letter "P" following the unit number
- Approximate State Boundary
- 2000-meter 2000-meter Universal Transverse Mercator grid values

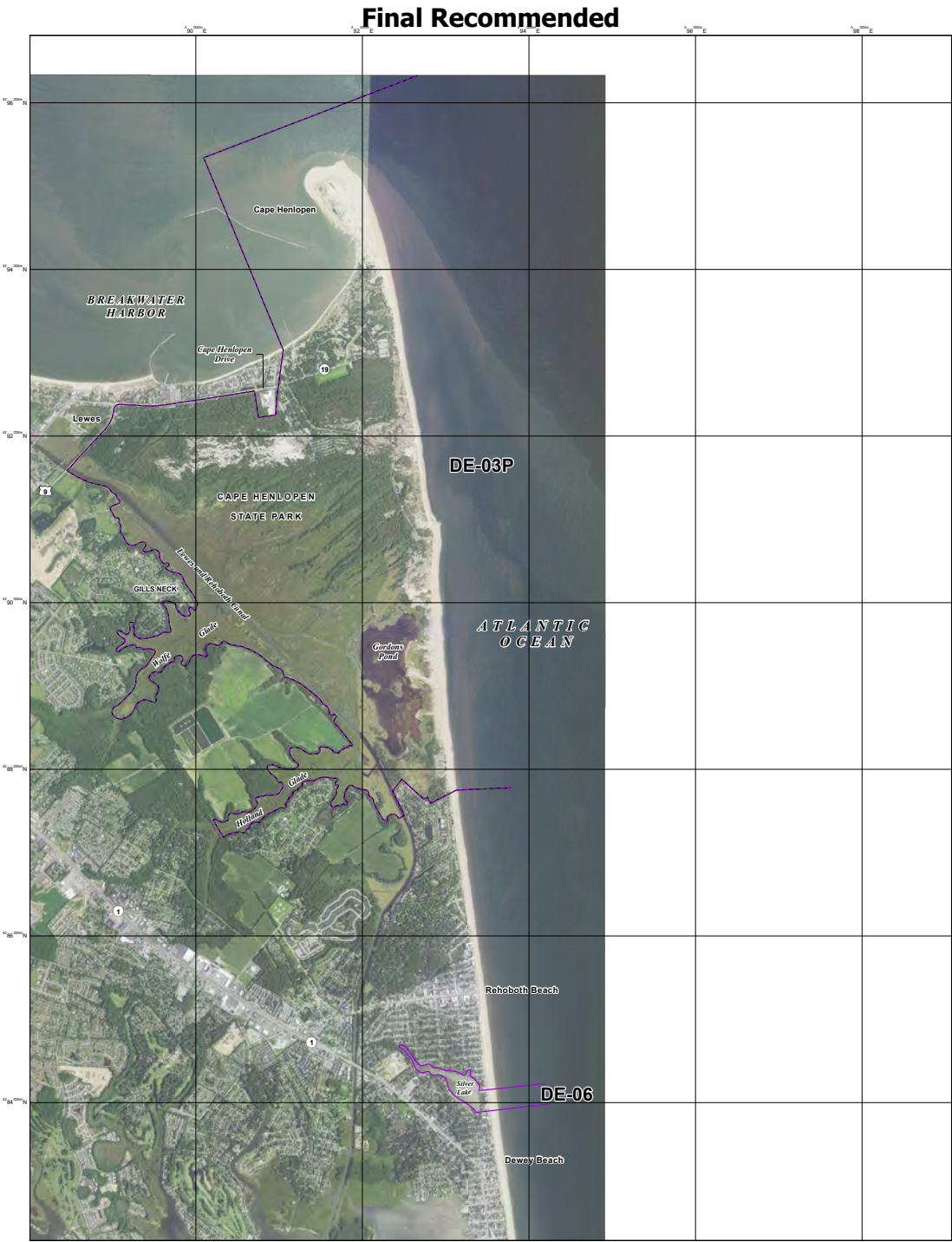
Imagery Date(s): 2018

Imagery Source(s): United States Department of Agriculture
National Agricultural Imagery Program

Coordinate System: North American Datum 1983
Universal Transverse Mercator Zone 18 North

Draft Map: 10-004B Map Date: December 18, 2020





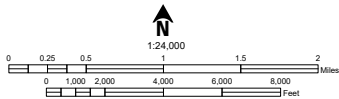
This draft map was produced by the U.S. Fish and Wildlife Service to show final recommended boundary changes to the John H. Chafee Coastal Barrier Resources System (CBRS) as directed by Section 4 of the Coastal Barrier Resources Reauthorization Act of 2005 (Public Law 109-226).

The seaward side of the CBRS unit includes the entire sand-sharing system, including the beach and nearshore area. The sand-sharing system of CBRS units is normally defined by the 30-ft bathymetric contour. In large coastal embayments and the Great Lakes, the sand-sharing system is defined by the 20-ft bathymetric contour or a line approximately one mile seaward of the shoreline, whichever is nearer the coastal barrier.

For additional information about the Coastal Barrier Resources Act or CBRS, please visit www.fws.gov/cbrs.

JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

**Cape Henlopen Unit DE-03P
Silver Lake Unit DE-06**



- Final Recommended System Unit Boundary
- - - - Final Recommended Otherwise Protected Area (OPA) Boundary. OPAs are identified on the map by the letter "P" following the unit number
- - - - Approximate State Boundary
- 25°54'00"N 2000-meter Universal Transverse Mercator grid values
- Imagery Date(s): 2018
- Imagery Source(s): United States Department of Agriculture
National Agricultural Imagery Program
- Coordinate System: North American Datum 1983
Universal Transverse Mercator Zone 18 North
- Draft Map: 10-005B Map Date: December 18, 2020**

Final Recommended



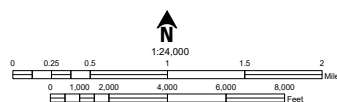
JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

This draft map was produced by the U.S. Fish and Wildlife Service to show final recommended boundary changes to the John H. Chafee Coastal Barrier Resources System (CBRS) as directed by Section 4 of the Coastal Barrier Resources Reauthorization Act of 2005 (Public Law 109-226).

The seaward side of the CBRS unit includes the entire sand-sharing system, including the beach and nearshore area. The sand-sharing system of CBRS units is normally defined by the 30-ft bathymetric contour. In large coastal embayments and the Great Lakes, the sand-sharing system is defined by the 20-ft bathymetric contour or a line approximately one mile seaward of the shoreline, whichever is nearer the coastal barrier.

For additional information about the Coastal Barrier Resources Act or CBRS, please visit www.fws.gov/cbrs.

Fenwick Island Unit DE-08P



- Final Recommended System Unit Boundary
- Final Recommended Otherwise Protected Area (OPA) Boundary; OPAs are identified on the map by the letter "P" following the unit number
- Approximate State Boundary
- 254400N 2000-meter Universal Transverse Mercator grid values
- Imagery Date(s): 2018
- Imagery Source(s): United States Department of Agriculture National Agricultural Imagery Program
- Coordinate System: North American Datum 1983 Universal Transverse Mercator Zone 18 North
- Draft Map: 10-007B Map Date: December 18, 2020

U.S. Department of the Interior
U.S. Fish & Wildlife Service

<http://www.fws.gov>

April 2022

