

**WRITTEN TESTIMONY OF DR. BENJAMIN TUGGLE, CHIEF, DIVISION OF  
FEDERAL PROGRAM ACTIVITIES, U.S. FISH AND WILDLIFE SERVICE,  
DEPARTMENT OF THE INTERIOR, BEFORE THE HOUSE RESOURCES  
COMMITTEE, SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE  
AND OCEANS, REGARDING THE JOHN H. CHAFEE COASTAL BARRIER  
RESOURCES SYSTEM**

**NOVEMBER 20, 2003**

Mr. Chairman and members of the Subcommittee, I thank you for the opportunity to present the Administration's testimony for this oversight hearing on the John H. Chafee Coastal Barrier Resources System (System). I am Dr. Benjamin Tuggle, Chief of the Division of Federal Program Activities, in the U.S. Fish and Wildlife Service (Service).

In your request for testimony from the Administration, you requested that we provide a justification of how changes to System maps are beneficial to the integrity of the System as a whole. My testimony will attempt to do this by describing the Service's role in implementing the Coastal Barrier Resources Act (CBRA), the processes and approaches we have developed to carry out our responsibilities, legislative changes that have been made to the System since its creation, and the future direction we envision for the System.

Mr. Chairman, the Administration strongly supports the intent of CBRA and its free-market approach to conservation. Congress has determined there is a high probability of repetitive storm damage to the Nation's coastal barrier islands and associated areas. It designated undeveloped coastal barrier areas as the Coastal Barrier Resources System and prohibited federal spending for flood insurance, roads, wastewater treatment systems and other types of infrastructure within the System. This minimizes the potential loss of human life and reduces wasteful federal expenditures, but in no way regulates how people can develop their land. Instead, it eliminates federal subsidies and insurance for development within these damage-prone areas, while imposing no restrictions on development done at private expense. Today, areas designated by CBRA and its amendments comprise approximately 3.1 million acres of undeveloped coastal barriers along the Atlantic Ocean, the Gulf of Mexico, the Great Lakes, Puerto Rico, and the Virgin Islands. Individuals who choose to build and invest in these hazard-prone areas will incur the full cost of that risk, instead of passing that cost on to the American taxpayers. It is estimated that by 2010, CBRA will have saved American taxpayers approximately \$1.3 billion.

CBRA has already greatly benefited the Nation, but we believe that it can do even more. CBRA's conservation accomplishments would be furthered if the federal government were to seek and develop partnerships with local and state governments and non-governmental organizations to encourage conservation initiatives that complement the System. But in order to take these forward steps, we must first modernize the maps that delineate CBRA areas, enabling them to be more effectively coupled with other conservation initiatives. This map modernization process must ensure that the boundaries on CBRA maps are accurate. By proactively addressing

the mapping inaccuracies, we will maintain the System's integrity, and will also be able to focus more of our limited resources on promoting partnerships.

## **Map Modernization**

CBRA is a map-driven law that is beginning to be modernized by expanding electronic government, improving customer service, and building upon existing tools used by our partners to conserve the Nation's coasts. Congress recognized this when it last reauthorized CBRA. The Coastal Barrier Resources Reauthorization Act of 2000 directed us to conduct a Digital Mapping Pilot Project that would produce draft digital maps of 75 areas and estimate the cost and feasibility of completing digital maps for all CBRA areas. We are pleased to report that we are making progress on completing the pilot project.

In our efforts to modernize the maps, we must work hand-in-hand with Congress in an open, objective, and consistent process. Currently, this is occurring on a case-by-case basis that is driven by requests from Congressional offices and constituents. We address these individual cases in an unbiased and transparent way by objectively applying standard review criteria and explaining our findings to the interested parties and to the Subcommittee.

In the future, after presenting the results of the pilot project, we hope to move from the current reactive case-by-case process, to a holistic proactive process. Once the modernization and perfecting effort is completed, we will be in a stronger position to further the goals of CBRA.

There are many potential benefits to converting the existing maps to digital format. Ultimately, consistent with the President's E-Government Initiative, CBRA maps could be posted on the Internet for greater public access and incorporated into local government planning databases. The Service will also work with federal agencies involved in mapping, such as the U.S. Geological Survey and others, to work toward reducing redundancies. This would help ensure that people know about CBRA's restrictions on federal spending before they choose to invest in a property affected by the law. Modernizing the maps would give landowners, insurance providers, federal agencies, and state and local planners a more precise and accessible tool for determining boundary locations, making investment decisions, issuing flood insurance policies, and managing coastal areas. Having an accurate baseline of digital maps will allow the Service to be more proactive in the future in recommending additional areas to Congress for inclusion in the System.

Digital maps could also be incorporated into programs administered by our partner agencies, such as the Federal Emergency Management Agency's National Flood Insurance Program. Instead of consulting with the Service, these agencies would be able to conduct an accurate preliminary analysis regarding whether CBRA restrictions apply.

By making CBRA maps easily available in digital format, we could work with our partners to encourage increased bundling of conservation tools to meet CBRA's conservation goals. The Service has observed that CBRA is most effective when our partners complement their conservation approaches with the law's fiscal disincentive. For example, the State of Texas prohibits State-backed windstorm insurance within the System, adding another layer of fiscal

disincentive to build in these locations. In North Carolina, the National Audubon Society has targeted its land acquisition investments in a CBRA area, providing long-term protection to the fish and wildlife habitat.

Modernizing existing maps will take time, but electronic governance is clearly the future for the Act. Our goal is to map the full System units and “otherwise protected areas” accurately and precisely to provide the System and OPAs with lasting integrity. Mr. Chairman, we share your concern of the potential risk to the System from numerous boundary revisions, which could over time make it a victim of “death by a thousand cuts.” Our efforts to perfect the boundaries of CBRA areas through an open and objective process are being undertaken to prevent this from occurring.

### **Legislative Changes to the John H. Chafee Coastal Barrier Resources System**

Mr. Chairman, you asked us to assess the legislative changes that have been made to the System since it was created in 1982. Before doing so, it is important to distinguish between the two different classes of CBRA areas, and to describe how we approach proposed changes to these different types of areas. The different classes of CBRA areas are: (1) the private lands component, or “full System units,” and (2) “otherwise protected areas,” or OPAs. More detailed information about full System units and OPAs, and the processes by which the Service reviews proposed changes to them, can be found in Attachment 1.

Most proposed changes to full System units assert that the development criteria used when the units were created were incorrectly applied. The development criteria were applied to areas at the time they were considered for inclusion in the System, and relate to the density of development and the level of infrastructure (see Attachment 1 for more information). When the Service examines proposed changes to full System units, we look at the level of development that existed when the unit was created. The Service receives numerous requests to remove land from full units of the System, however, after objective review, we generally find that the development criteria were appropriately applied in the past and boundary changes are not warranted. We would like to note that there have been cases in the past where Congress has enacted changes to full System units that were not supported by the Service.

Unlike changes to full System units, the Service often agrees that changes to OPAs are appropriate because almost every one of the OPAs is mapped inaccurately. Full System units generally follow geographic features on the ground that are easily discernable. We believe, however, that Congress intended OPAs to follow protected area boundaries. We regularly uncover cases where OPA boundaries do not coincide with the actual protected area boundaries we believe they are meant to follow. When these cases come to our attention, we work closely with interested land owners, local and state officials, and protected area managers to correctly map the protected area boundaries with the high quality mapping tools now available.

### **Comprehensive Mapping Approach**

If after applying our review process for full System units and OPAs, the Service finds a technical mapping error that warrants a change in one part of a CBRA map, we review all adjacent areas to

ensure the entire map is accurate. This comprehensive approach to map revisions treats all landowners who may be affected equitably, and it also ensures that Congress and the Administration will not have to revisit the map in the future. This approach allows us to improve the integrity of the entire System by looking at boundary revisions in a holistic fashion instead of pursuing incremental fixes for individual areas on a single map.

This comprehensive approach was developed by the Service, in close coordination with the Subcommittee staff, beginning in 1999 with NC-03P, Cape Hatteras National Seashore. Since 1999, there have been seven legislative changes to System units and OPAs. Each of these changes was thoroughly scrutinized by the Service, Congressional members and staff, appropriate state and local officials, and property owners. In all of these cases but one (DE-03P, Cape Henlopen State Park), the comprehensive mapping approach was applied. The comprehensive mapping approach was in each case a lengthy process, sometimes taking over a year to complete. Congress has not adopted any changes that the Service did not support since we have instituted this high-precision and inclusive approach.

Although the comprehensive mapping approach is preferred, we have deviated from it in limited circumstances when it proves impossible or when the equities of a particular situation make a targeted map revision appropriate. We have learned over the years that each new CBRA case can present unforeseen circumstances, and we must be flexible to appropriately address each case.

#### Assessment of Legislative Changes

Between the enactment of CBRA in 1982 and the enactment of CBIA in 1990, there were no changes made to full System units through legislation. The CBIA created OPAs and new full System units, and made changes to numerous existing full System units. The CBIA replaced all the 1982 maps with updated 1990 maps. Our information indicates that since the enactment of the CBIA in 1990, there have been 41 separate changes made to CBRA areas through legislation. Of the 41 legislative changes, 19 were made to OPAs and 22 were made to full System units. Most of the 41 changes made since 1990 removed land from CBRA areas. These legislative changes are listed in Attachment 2.

It is significant to note that since the comprehensive mapping approach was developed in 1999, the frequency of enacted legislative changes has slowed. Between 1999 and 2003, legislative changes were made to seven CBRA areas. By comparison, between 1991 and 1998, legislative changes were made to 34 CBRA areas. It is also significant to note that the comprehensive approach can yield significant increases to OPAs; since 1999, some of the changes added protected lands in addition to removing private lands.

Mr. Chairman, you asked us to account for total acres removed from and added to CBRA areas by these legislative changes. Unfortunately, we don't have that information, and it was not possible for us to conduct the research to compile this information in time for today's hearing. As I just mentioned, the majority of the legislative changes were made before 1999, and were done using the old mapping technology. In order to account for the total acreage change, we would need to compare the original maps with the amended maps. This process is lengthy and

resource intensive, especially for the large number of changes that were made prior to 1999. Consequently, we can provide to you, for the record, acreage changes made since we began implementing our comprehensive mapping approach in 1999.

We recognize the importance of tracking acreage changes to CBRA areas. As we carry out our comprehensive mapping approach to all new changes, we use the digital technology to accurately calculate acreage changes, and ensure that such changes are accurately tracked and recorded.

#### Technical Correction Bills Pending Congressional Action

Mr. Chairman, you also asked us how many additional changes are pending Congressional action. There are technical correction bills for six CBRA areas currently pending Congressional action. The Service testified before this Subcommittee in September in support of H.R. 154, H.R. 2501, and H.R. 3056. The other CBRA areas are addressed by H.R. 3333 and S. 1643; these bills have not yet been reviewed by the Subcommittee, nor has the Administration stated a position on these two bills.

#### **Conclusion**

In closing, Mr. Chairman, we will continue to work with Congress to achieve CBRA's intentions and ensure the System's boundaries are accurately delineated. Our work to correct technical errors is one part of our broader goal to modernize all CBRA maps and provide our partners and customers with better information. We believe this will help achieve all three of CBRA's intentions: saving taxpayers' money, keeping people out of the deadly path of storm surge, and protecting valuable habitat for fish and wildlife.

The Administration strongly supports the intent of CBRA and its free-market approach to coastal protection. Despite the challenges presented by the fact that the controlling CBRA maps were drawn using the imprecise mapping tools of the past, the Administration believes that the intent of CBRA has largely been achieved. We look forward to working with you to enact digitized maps for all CBRA areas that will help us further the goals of the Act.

Mr. Chairman, this concludes my prepared statement. Thank you again for the opportunity to testify at today's hearing. I would be pleased to respond to any questions.

## **John H. Chafee Coastal Barrier Resources System Legislative Changes**

### Full System Units

The private lands component of the System was first delineated in 1982 with the passage of the original CBRA. These original units encompassed approximately 590,000 acres of privately owned, undeveloped coastal barriers along the Atlantic and Gulf coasts. The undeveloped status of System lands was an important underpinning of the law. The Act sought to discourage new construction in these hazard-prone and environmentally sensitive areas that were not yet developed. However, the Act did not seek to apply its disincentives to existing communities where significant investments had already been made.

The Department of the Interior published guidance in the Federal Register that established two criteria to define undeveloped coastal barriers. These criteria, applied to areas at the time they were considered for inclusion in the System, are as follows. (1) The density of development on an undeveloped coastal barrier is less than one structure per five acres of land above mean high tide. (2) An undeveloped coastal barrier does not contain a full complement of infrastructure. A full complement of infrastructure consists of a road, fresh water supply, wastewater disposal system, and electric service to each lot or building site in the area. The purpose of the infrastructure criterion was to exclude subdivisions where a significant amount of private capital had been spent prior to Congressional designation. Congress codified these criteria in the 2000 reauthorization of CBRA.

The boundaries of full System units are drawn on U.S. Geological Survey topographic quadrangle maps, most of which are decades old. In nearly all cases, we have an understanding of the intent of the lines that define full System units. These lines generally follow particular features depicted on the underlying maps, such as wetlands demarcations, roads, streams, and other landscape features. However, as the courts, our attorneys, and Congress have repeatedly told us, the line as drawn on the map is the law, and we must make determinations based on where the line actually falls on the ground, not where the Service believes Congress intended it to fall. Because of the inaccuracies inherent in the depiction of features on the base maps and in the drawing of CBRA lines, most of the 585 full System units contain minor inaccuracies. In most cases, these minor inaccuracies don't affect structures or properties, and therefore are not the focus of proposed legislative changes.

Most proposed changes to full System units assert that the development criteria were incorrectly applied when the units were created. Accordingly, when the Service examines proposed changes to full System units, we look at the level of development that existed when the unit was created. When presented with credible information that indicates that the development criteria were not appropriately applied, we review the administrative record, review any additional information provided by the interested parties, prepare draft revised maps of the area if appropriate, and then present Congress

with the factual findings and draft revised maps. If Congress chooses to adopt the revised maps, it then enacts new maps for the area through legislation. If the Service finds that the development criteria were appropriately applied when a unit was designated, we do not support changes to the unit.

The Service receives numerous requests to remove land from the System, however, after objective reviews, we generally find that the development criteria were appropriately applied in the past and boundary changes are not warranted. Consequently, we have supported very few changes to full System units. Since 1999, we have only supported one change based on the development criteria to remove land from a full System unit (the unit is T07, the subject of H.R. 154). We would like to note that there have been cases in the past where Congress has enacted changes to full System units that were not supported by the Service.

#### Otherwise Protected Areas

OPAs were first delineated in 1990 with the passage of the Coastal Barrier Improvement Act (CBIA). Congress created OPAs to limit federal subsidies in coastal barriers that are protected (that is, areas already held for conservation purposes, such as state parks and national wildlife refuges). Unlike full System units, with their wide array of restrictions on federal spending, only federal flood insurance is prohibited in OPAs. This restriction sought also to discourage development within private in holdings. In total, about 1.8 million acres are within OPAs.

Unlike changes to full System units, the Service often agrees that changes to OPAs are appropriate because almost every one of the 271 OPAs is mapped inaccurately. Full System units generally follow geographic features on the ground that are easily discernable. We believe, however, that Congress intended OPAs to follow protected area boundaries. These are more difficult to ascertain because they are based on property boundaries, not geographic features. When OPAs were first designated more than a decade ago, they were mapped with limited resources and rudimentary mapping tools. As a result, OPAs could not be, and were not, mapped with the highest degree of accuracy.

We regularly uncover cases where OPA boundaries do not coincide with the actual protected area boundaries we believe they were meant to follow. OPAs sometimes include adjacent private lands that are not in holdings. Because of the OPA designation, the owners of these lands cannot obtain federal flood insurance for their homes. We believe that Congress did not intend to include such adjacent private lands within the OPAs. When these cases come to our attention, we work closely with interested land owners, local and state officials, and protected area managers to correctly map the protected area boundaries with the high quality mapping tools now available. All of the changes that have been made to the CBRA areas since 1999 were supported by the Service, and nearly all of these changes were to OPAs.

## John H. Chafee Coastal Barrier Resources System Legislative Changes

- Since the enactment of the Coastal Barrier Resources Act (CBRA) in 1982, several changes have been made to CBRA areas through legislation.
- Between 1982 and 1990, no changes were made.
- The Coastal Barrier Improvement Act (CBIA) of 1990 created otherwise protected areas (OPAs) and new full System units. All 1982 maps were replaced with updated 1990 maps.
- After passage of the CBIA in 1990, standalone changes (i.e., changes that were not a part of a comprehensive reauthorization like the CBIA) to CBRA areas started to be made through legislation.
- A total of 41 separate changes have been made through legislation since the passage of the CBIA.
- No changes were made in 1991.
- Between 1992 and 1998, changes made to 34 CBRA areas as follows:

1992	NC-01P	NC-05P	VA-60P	VA-60	
1994	NY-75	VA-62P	FL-05P	P11A	FL-15
	FL-36P	P17	P17A	P18P	P19P
	FL-72P	P31P	FL-95P	AL-01P	MI-21
1996	NY-59P	SC-01			
1998	P05	P05A	P10	P11	P11A
	P18	P25	P32	P32P	FL-35
	SC-03	M09	FL-35P		

- In 1999, the comprehensive mapping approach was developed
- Between 1999 and 2003, changes were made to seven CBRA areas as follows below. Of these seven, five resulted in removal of developable private land. One of these changes (DE-03P) did not follow the comprehensive approach.

1999	DE-03P	NC-03P	L03
2000	P19	P19P	NC-01
2003	VA60P		