COASTAL BARRIERS

Development Occurring Despite Prohibitions Against Federal Assistance

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554890
The Honorable Quentin N. Burdick  
Chairman, Committee on Environment and Public Works  
United States Senate  

The Honorable John H. Chafee  
Ranking Minority Member, Committee on Environment and Public Works  
United States Senate  

This report responds to your request that we review the implementation and effect of the Coastal Barrier Resources Act of 1982. The report discusses, among other things, how much development has taken place on selected coastal barriers since the law was enacted and whether federal agencies contributed to such development.

Unless you publicly announce its contents earlier, we plan no further distribution of this report for 30 days from the date of this letter. At that time, we will send copies to the Secretaries of the Interior, Defense, and Transportation; the Director, Federal Emergency Management Agency; the Administrator, Environmental Protection Agency; the Director, Office of Management and Budget; and appropriate congressional committees. We will also make copies available to other interested parties on request.

This work was performed under the direction of James Duffus III, Director, Natural Resources Management Issues, who can be reached at (202) 275-7756. Other major contributors to the report are listed in appendix VIII.

J. Dexter Peach  
Assistant Comptroller General
Coastal barriers are islands and similar natural landforms that buffer the U.S. mainland from storms and provide important habitat for fish and wildlife. The geological composition of coastal barriers makes them highly unstable areas on which to build, yet many of these areas have undergone increased development in recent years. Some of this development has been encouraged by the availability of national flood insurance and other types of federal financial assistance. In an effort to discourage development on certain coastal barriers and thereby minimize (1) the loss of human life and property from storms, (2) wasteful federal expenditures, and (3) damage to fish, wildlife, and other natural resources, the Congress passed the Coastal Barrier Resources Act (CBRA) in 1982. The act, while not prohibiting privately financed development, prohibits most new federal financial assistance within a designated Coastal Barrier Resources System (CBRS). The CBRS, originally composed of 186 units, was expanded to 560 units in 1990.

Concerned that not all federal agencies were complying with the prohibitions and other aspects of the act, the Chairman and Ranking Minority Member, Senate Committee on Environment and Public Works, requested that GAO determine the (1) extent of development in certain CBRS units since CBRA was enacted, (2) degree to which new federal financial assistance has been prohibited within the CBRS, (3) effectiveness of the processes requiring federal agencies to annually certify that they are in compliance with the act, and (4) types and impact of federal regulatory activities within the CBRS.

Under CBRA, financial assistance is defined as including loans, grants, guaranties, insurance, payments, rebates, subsidies, or other forms of direct or indirect assistance. All agencies must abide by the act’s prohibitions against providing financial assistance. To ensure compliance with CBRA’s provisions, the 1982 act required federal agencies to certify to the Office of Management and Budget (OMB) that they had not provided new financial assistance in CBRS units. In 1990, amendments to the act removed OMB from the certification process, requiring each federal agency to annually certify compliance directly to two congressional committees and to the Secretary of the Interior.

CBRA’s prohibitions against new federal financial assistance have discouraged development in some CBRS units, and others are not likely to undergo significant development in the foreseeable future because of their...
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inaccessibility and/or lack of developable land. However, significant development has occurred in some attractive and/or accessible CBRS units since 1982, and extensive new development is planned in these units and other units displaying similar characteristics.

Most federal agencies included in GAO's review did not provide new financial assistance in CBRS units. There were, however, two exceptions. First, some property owners erroneously obtained flood insurance underwritten by the Federal Emergency Management Agency (FEMA) for which they were ineligible. Second, the Department of the Air Force granted an easement on land within Eglin Air Force Base in Florida at no cost to a quasi-state agency that wished to construct a bridge from the mainland to a CBRS unit. The granting of the easement for anything less than fair market value constitutes financial assistance.

The certification process required by the 1982 act did not ensure that federal agencies complied with CBRA's prohibitions. The federal agencies GAO contacted submitted fewer than half of the required annual certification statements to OMB. Little has changed under the certification process established by the amendments to CBRA in 1990. None of the agencies had issued regulations to revise their certification process by November 16, 1991, as required by the amendments.

GAO found that permits issued by federal regulatory agencies such as the U.S. Army Corps of Engineers, although not prohibited by CBRA, have allowed development in certain CBRS units. The 1990 amendments to CBRA established an interagency task force to, among other things, study the effects of federal regulatory activities within the CBRS. This task force, however, had not convened as of June 1992 and will not meet its November 16, 1992, reporting date.

Principal Findings

Some Coastal Barrier Units Are Being Developed

Of the 34 CBRS units GAO reviewed, 9 have undergone significant new development since CBRA was enacted, and additional future development in these and other CBRS units that are attractive and/or accessible is planned. For example, the CBRS unit in North Bethany Beach, Delaware, contained only two single-family residences in 1982. From October 1, 1983, to October 1, 1990, the number of such residences that have received...
permits increased to 74. If the development currently planned occurs, the number of residences will eventually increase to 181.

Federal Assistance Has Been Provided Within the CBRS

Two of the 10 federal agencies GAO contacted on the issue of financial assistance provided such assistance within the CBRS contrary to CBRA's prohibitions. On the basis of a sample of residences in five CBRS units, GAO estimates that FEMA underwrote flood insurance coverage for 9 percent of the homeowners in these units. The policies in force in the five units were valued at about $12.2 million. FEMA attributes its noncompliance with CBRA's prohibitions to its inadequate resources for overseeing private insurers who write the flood insurance policies.

The Air Force's noncompliance results from its decision to grant an easement at no cost on 3.7 acres of land within Eglin Air Force Base in Florida. This easement will facilitate construction of a bridge from the mainland to a CBRS unit. GAO believes that CBRA clearly prohibits the transfer of this interest in a federal property at no cost. By granting the easement for less than fair market value, the Air Force has financially enhanced the quasi-state agency by the value of the easement and has aided the construction of a bridge to a CBRS unit, which is likely to encourage development in that unit.

The Certification Process Has Not Ensured Compliance With CBRA's Prohibitions

The certification process established by the 1982 act did not work because federal agencies did not consistently certify to OMB annually that they were in compliance with CBRA's prohibitions. Little has changed under the revised certification process established by the 1990 amendments to the act. None of the 11 federal agencies GAO contacted about certification requirements had issued the revised implementing regulations required by the 1990 act by the November 16, 1991, due date; some agencies were not even aware that the process had been changed. GAO believes that the failure of the federal agencies to annually certify that they are complying with CBRA reflects the low priority the agencies assign to implementing this requirement in the act.

Federal Regulatory Activities Have Allowed Development in Certain CBRS Units

Although CBRA does not prohibit federal regulatory activities in CBRS units, permits issued by federal agencies for activities such as filling wetlands have facilitated development in certain units. For example, the Corps of Engineers issued 12 permits under section 404 of the Clean Water Act to...
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discharge fill material in wetlands. Such discharges would facilitate
development in one CBRS unit GAO reviewed.

The role of federal regulatory agencies within the CBRS increased with the
addition of 374 units in 1990. Nevertheless, the interagency Coastal
Barriers Task Force, established in 1990 to, among other things, study the
effects of federal regulatory activities within the CBRS, had not convened as
of June 1992 and will not meet its November 1992 reporting deadline. The
task force is to be chaired by a designee of the Secretary of the Interior
and include designees from 10 other federal agencies.

Recommendations

GAO is making recommendations (1) to FEMA to ensure that federal flood
insurance policies are not written for properties in CBRS units, (2) to the
Air Force to (a) determine the fair market value of the easement at Eglin
Air Force Base and undertake to obtain that value for it and (b) to prevent
similar situations from occurring elsewhere, and (3) to Interior to ensure
that the Coastal Barriers Task Force convenes and carries out its
responsibilities.

Agency Comments

GAO requested written comments on a draft of this report from the
Departments of the Interior, Defense, and Transportation; FEMA; the
Environmental Protection Agency (EPA); and OMB. Interior, EPA, FEMA, and
OMB provided comments, while Transportation advised GAO that it had no
comments. Defense did not provide comments. However, in a meeting
with GAO, the Department of the Air Force said that it disagreed that the
granting of the easement to Eglin Air Force Base land at no cost to a
quasi-state agency violated CBRA’S prohibitions. In GAO’S view, the transfer
of such an interest in federal land is substantially identical to a grant,
which the act includes within the definition of prohibited financial
assistance. Therefore, GAO believes its recommendations are appropriate.
Interior told GAO that the study that the task force is charged with
undertaking will not be initiated until October 1993, and then only if
funding is appropriated for it. GAO believes that, at the very least, Interior
should have designated a chairperson, as required by the 1990 act, to begin
negotiations with (1) the 10 other agencies named to participate in the task
force and (2) the Congress regarding the timely initiation and completion
of the study. FEMA said that it has given high priority to implementing CBRA,
while acknowledging that some errors would occur. EPA provided
clarifying language, which GAO included in the report. OMB reaffirmed that
it no longer has a role in certifying agencies’ compliance with CBRA.
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Abbreviations

CBRA  Coastal Barrier Resources Act
CBRS  Coastal Barrier Resources System
EPA   Environmental Protection Agency
FEMA  Federal Emergency Management Agency
FWS   Fish and Wildlife Service
GAO   General Accounting Office
OMB   Office of Management and Budget
Coastal barriers and associated aquatic habitats such as adjacent wetlands, estuaries, and inlets provide important habitat for fish and wildlife, including some threatened and endangered species. Coastal barriers also serve as buffers for protecting populated inland areas from hurricanes and other storms. The geological composition of coastal barriers makes them highly unstable areas on which to build. Yet, because of their natural beauty, their proximity to major water bodies, and the dwindling supply of waterfront property, these areas have undergone increased development over the years. With this development has come increased risk to human life and property and reduced fish and wildlife habitat. Some of this development has been encouraged by federal expenditures and financial assistance.

In an effort to slow development on coastal barriers and thereby minimize the (1) loss of human life resulting from natural disasters on coastal barriers, (2) wasteful expenditure of federal revenues, and (3) damage to fish, wildlife, and other natural resources associated with coastal barriers, the Congress, in 1982, passed the Coastal Barrier Resources Act (CBRA), 16 U.S.C. 3501-3510. The act prohibited, with certain exceptions, new federal expenditures or financial assistance that encourage the development of coastal barriers along the portions of the Atlantic and Gulf of Mexico coasts that were designated as a part of the Coastal Barrier Resources System (CBRS). Coastal barriers include islands, spits, tombolos, and bay barriers that are subject to wind, waves, and tides. Coastal barriers included in the CBRS were undeveloped, containing fewer than one roofed and walled structure per 6 fastland acres and lacking structures that would impede geomorphic and ecological processes. The act did not prohibit development in CBRS units by owners willing to develop their properties without the benefit of federal financial assistance.

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1Endangered species are those in danger of extinction throughout all or a significant portion of their range. Threatened species are those likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

2A spit is a narrow point of land or shoal that extends from the shoreline. A tombolo is a sand bar connecting an island to the mainland or another island.

3Fastland is situated above the mean high-tide line, is generally not wetlands, and is referred to as developable land.

4A geomorphic process involves the natural movement, formation, and erosion of geologic features or landforms. An ecological process involves the interrelationship between organisms and their environment.
The Coastal Barrier Resources System

The CBRS, as initially established, included 136 units, comprising about 463,000 acres along 666 miles of shoreline from Maine to Texas. The units range from small, isolated shoals of sand, scarcely above sea level, to chains of islands stretching hundreds of miles, some of which individually exceed a mile in width.

The Coastal Barrier Improvement Act of 1990, among other things, expanded the CBRS to 560 units, comprising almost 1.3 million acres and about 1,200 shoreline miles. The expanded system included 231 additional units along coastal states from Maine to Texas. For the first time, units were also designated along the coasts of the Virgin Islands (23 units), Puerto Rico (41 units), and the Great Lakes (79 units). Almost 50 percent of the added acreage was wetlands and adjacent aquatic habitat.

Coastal Barrier Resources Act
Prohibits Federal Financial Assistance

CBRA prohibits—with certain exceptions—federal agencies from providing new expenditures or financial assistance that would encourage development within the CBRS, regardless of whether other federal laws made such assistance available. Financial assistance is defined as any form of loan, grant, guaranty, insurance, payment, rebate, subsidy, or other form of direct or indirect federal assistance. Specifically prohibited federal financial assistance includes expenditures for:

- construction or purchase of structures, appurtenances, facilities, or related infrastructure;
- construction or purchase of any roads, airports, boat landing facilities, or other facilities on, or bridges or causeways to, any CBRS unit; and
- any project to prevent the erosion of or to otherwise stabilize any inlet, shoreline, or inshore area, with certain exceptions.

Under the act, prohibitions against providing federal flood insurance coverage for properties within the CBRS became effective October 1, 1983.

CBRA's definition of the term federal financial assistance does not include general revenue sharing grants; deposit or account insurance for customers of financial institutions; the purchase of mortgages or loans by federal associations or corporations such as the Federal National Mortgage Association; assistance for environmental studies, planning, and other assessments related to issuance of permits or other authorizations under federal law; and assistance for programs entirely unrelated to development, such as the federal old-age survivors or disability insurance program.
In addition, CBRA allowed certain other expenditures or financial assistance. These expenditures include assistance for (1) facilities necessary for the exploration, extraction, or transportation of energy resources that require access to the coastal water body; (2) the maintenance or improvement of existing federal navigation channels, including the disposal of dredged materials related to such maintenance or improvements; (3) the maintenance, replacement, reconstruction, or repair, but not the expansion, of publicly owned or operated roads, structures, or facilities that are essential links in a larger network or system; (4) military activities essential to national security; and (5) the construction, operation, maintenance, or rehabilitation of U.S. Coast Guard facilities and their access.

Certain other activities are allowed if it can be established that they are consistent with the purposes of CBRA. Among these activities are projects that enhance fish and wildlife resources and habitats, promote certain scientific research and development, provide emergency assistance essential to human health and safety and the protection of property, and provide certain kinds of nonstructural shoreline stabilization.

Roles and Responsibilities of Federal Agencies in Implementing CBRA

No single federal agency was assigned overall responsibility for administering activities within the CBRS, but all federal agencies must abide by the act’s provisions. The 1982 act did, however, designate the Department of the Interior as the lead agency for certain activities. Within Interior, the U.S. Fish and Wildlife Service (FWS) was made the responsible agency for, among other things, developing maps of each CBRS unit; recommending, after consulting with others, modifications to CBRS unit boundaries, as needed; and reviewing CBRS maps at least once every 5 years beginning on November 23, 1988. Also, federal agencies planning expenditures or financial assistance that involve a CBRS unit are required to consult with FWS on whether or not such activities are exempted from CBRA’s provisions. The act did not, however, require the agencies to abide by FWS’ conclusions.

The 1982 act required the Office of Management and Budget (OMB) to certify annually to the Congress that each federal agency had complied with the act’s prohibitions against financial assistance. The Coastal Barrier Improvement Act of 1990 revised the annual certification process, making each federal agency responsible for certifying directly to the (1) House Committee on Merchant Marine and Fisheries, (2) Senate Committee on Environment and Public Works, and (3) Secretary of the Interior that it has
not provided the types of financial assistance prohibited by CBRA. The agencies were also required to promulgate regulations to ensure compliance with the provisions of the act by November 16, 1991.

Federal Regulatory Activities Within the CBRS

CBRA has no provisions regarding the administration of federal regulatory activities within the CBRS. Three federal agencies—the U.S. Army Corps of Engineers, Environmental Protection Agency (EPA), and U.S. Coast Guard—issue permits that regulate, among other things, the discharge of waste materials in navigable waters; the construction of bridges over navigable waters; the placement of dredged or fill material in U.S. waters, including adjacent wetlands; and the obstruction of navigation channels. Over half of the CBRS is wetlands and open water, and activities undertaken in these areas can require a permit from one or more of these regulatory agencies. Laws other than CBRA provide authority for issuing these permits. Among these laws are the Clean Water Act of 1977, the Rivers and Harbors Appropriation Act of 1899, and the Bridge Act of 1906, as amended.

The Coastal Barrier Improvement Act of 1990 requires a Coastal Barriers Task Force, composed of designees from 11 federal agencies and chaired by a designee of the Secretary of the Interior, to analyze the effects of federal regulatory activities on development within the CBRS from 1975 to 1990. The task force is required to report its findings to the Congress on this and other matters by November 16, 1992.

Objectives, Scope, and Methodology

Concerned that federal agencies are not complying with CBRA, the Chairman and Ranking Minority Member, Senate Committee on Environment and Public Works, requested that we evaluate certain aspects of the act’s implementation and effects. As agreed, we determined

- the extent of development in selected CBRS units since CBRA was enacted,
- the degree to which new federal expenditures and financial assistance have been prohibited within the CBRS,
- the effectiveness of the processes requiring federal agencies to annually certify that they are in compliance with the act, and
- the types and impact of federal regulatory activities within the CBRS.

We identified 15 federal agencies that either have or conceivably could have something to do with CBRA and/or the units within the CBRS. For each federal agency, we visited headquarters and/or field offices, where we
reviewed policy direction and guidance regarding CBRA activities and interviewed responsible officials. Appendix I shows the 15 federal agencies included in various analyses in our review and the offices within these agencies, as well as some state offices, that we visited.

We selected for review 34 geographically dispersed units from among the original 186 CBRS units. We included 7 of the 11 most highly developed units identified by FWS. We then selected 27 other units, several of which were located adjacent to or in close proximity to the 7 units, to provide added perspective on the impact CBRA has had on development. Appendix II lists the 34 CBRS units included in our review.

We did not address every objective of our review at each of the 15 agencies or 34 units we reviewed. Furthermore, the results of our work can only be generalized to the units selected for review and not to the entire universe of 560 CBRS units.

To identify the extent of development in the 34 coastal barrier units since CBRA's enactment, we compared aerial photographs of the units taken soon after 1982 with the most recent aerial photographs available. We also visited 12 units to see firsthand the development that had occurred. For the 12 Louisiana units included in our review, we viewed video tapes showing development through 1989. For units where development has taken place, we analyzed county building permits and property appraisal records to confirm the extent of development since the passage of CBRA.

To determine if CBRA's prohibitions of new federal expenditures and financial assistance are being complied with, we analyzed loan, grant, insurance, and other records relating to 17 types of federal financial assistance provided by 10 of the 15 federal agencies included in our review. We selected these 10 federal agencies based on the likelihood that they might have provided financial assistance in the areas we visited. Appendix III describes the types of assistance—some of which are specifically prohibited under CBRA and some of which are permitted under certain circumstances—provided by the federal agencies we reviewed. The appendix also identifies the 10 CBRS units at which we determined if financial assistance had been provided. We categorized the assistance according to whether it was provided to individuals or to state and local governments. To determine if financial assistance was being provided to individuals, we compared county building inspection and property appraisal information with the federal agencies' records to see if any assistance had been provided after enactment of CBRA. To determine if
assistance had been provided to state and local governments for activities such as infrastructure development, we analyzed federal and state records and interviewed agency officials.

We did not review each of the various forms of financial assistance that might be provided by the federal agencies at each of the 10 units. For example, we conducted a random sample of 250 residences in 5 of the 10 CBRS units to determine if the Federal Emergency Management Agency (FEMA) was inappropriately providing federally underwritten flood insurance policies to property owners in these units. Since we used a probability sample of residences in the 5 CBRS units to develop our estimates, each estimate has a measurable precision, or sampling error, which may be expressed as a plus/minus figure. A sampling error indicates how closely we can reproduce from a sample the results that we would obtain if we were to take a complete count of the universe using the same measurement methods. By adding the sampling error to and subtracting it from the estimate, we can develop upper and lower bounds for each estimate. This range is called a confidence level. Sampling errors and confidence intervals are stated at a certain confidence level—in this case, 95 percent. For example, a confidence interval, at the 95-percent confidence level, means that in 95 out of 100 instances, the sampling procedure we used would produce a confidence interval containing the universe value we are estimating.

To determine whether the act's certification requirements ensured compliance with CBRA's limitations on providing financial assistance, we reviewed records of and interviewed responsible officials from OMB and 11 federal agencies. These 11 agencies were responsible for certifying that the 15 agencies in our review were in compliance with CBRA's prohibitions.

To determine the types of regulatory activities occurring within the CBRS, we reviewed various federal agency records and interviewed field officials responsible for activities at five CBRS units, focusing primarily on the permitting activities regulated by the Corps of Engineers, EPA, and the Coast Guard. We reviewed regulatory activities at CBRS units in Mobile Point, Alabama; Cape San Blas and Moreno Point, Florida; and South Padre Island and Boca Chica, Texas.

We also obtained information from seven state and eight county agencies on their policies and procedures for regulating development in CBRS units. Furthermore, we obtained information from 15 developers, 4 realtors, and 8 insurance agencies that conduct business on coastal barriers. Finally, we
reviewed studies and obtained opinions on development of coastal barriers from 16 other organizations that have a special interest in environmental, wildlife, and coastal issues.

We conducted our review between June 1990 and December 1991 in accordance with generally accepted government auditing standards. We requested written comments from the Departments of the Interior, Defense, and Transportation; FEMA; EPA; and OMB. The Department of the Interior, EPA, FEMA, and OMB provided written comments on a draft of this report. These comments are presented and evaluated in chapters 2 through 4 and are reprinted in appendixes IV through VII. The Department of Defense did not provide us with written comments on the draft report. However, the Department of the Air Force related its position to us on matters discussed in the report, and these comments are presented and evaluated in chapter 3. The Department of Transportation advised us that it had no comments on the draft report.
CBRA's prohibitions against new federal expenditures and financial assistance have discouraged development in some CBRS units. Other units in the CBRS are not likely to undergo significant future development because of their inaccessibility and/or lack of developable land. However, despite CBRA's prohibitions, 9 of the 34 CBRS units included in our review have undergone new development since 1982, when they were designated as CBRS units. The majority of this development occurred after October 1, 1983, when CBRA prohibitions became fully effective. At least 1 of the 9 units would no longer meet eligibility requirements under the criteria that justified its inclusion in the CBRS. Other CBRS units may find themselves in this category in the future because additional development in these units and other CBRS units with similar characteristics appears inevitable. The units' accessibility and/or geographical makeup, coupled with the lack of other developable coastal land nearby, make them attractive to private developers and buyers who are willing to assume the risks associated with owning and building in these storm-prone areas.

Development on coastal barriers can interfere with the natural movement of these sandy, unstable land masses and harm fish and wildlife habitat. Development can also destroy the barriers' ability to provide maximum protection to populated inland areas from hurricanes and other storms. As a result, the federal government may ultimately pay millions of dollars to clear away storm debris and provide temporary food and shelter to residents displaced by the storms. The current pace of development occurring in several of the units within the CBRS will likely continue unless the federal government assumes a more active role in their protection. Such a change in approach would not, however, be without cost.

CBRA's Prohibitions Have Discouraged Development in Some CBRS Units

CBRA's prohibitions of new federal expenditures and financial assistance have slowed, delayed, or stopped development in some CBRS units. For example, the principal owner of the CBRS unit at Deer Island, Mississippi, told us that he could not proceed with his development plans without federal flood insurance and other forms of federal assistance. In an effort to proceed with plans to build about 160 condominium vacation cabins, a swimming pool, tennis courts, roads, and a marina, he has been trying to get the unit removed from the CBRS. He wants to develop the unit despite a history of hurricane damage that devastated previous structures on the island.

At the Coconut Point and Hutchinson Island CBRS units in Florida, the Litchfield Beach unit in South Carolina, and the South Padre Island unit in
Texas, development had been slowed because access to federally subsidized water and sewer systems outside the units has been denied to property owners within these units. In these cases, officials from EPA, FWS, the U.S. Department of Agriculture’s Farmers Home Administration, or state governments have determined that allowing such use would violate CBRA’s prohibitions against providing financial assistance for new development.

The Coastal Barrier Improvement Act of 1990, however, exempted the South Padre Island unit from certain prohibitions against receiving federal financial assistance, thus potentially allowing developers access to infrastructure improvements outside the unit that were paid for, in part, with federal funds. If developers comply with all state and local laws regulating development, they may be granted access to the water system of the city of Raymondville, Texas, that was constructed with some federal financial assistance. The developers had proposed constructing a 10,000-unit resort with golf courses, tennis courts, and other recreational and business facilities. Many of these structures would have fallen within the CBRS portion of South Padre Island.

Some CBRS Units Are Not Likely to Be Developed

Some units within the CBRS are not likely to be developed in the foreseeable future because they are remote, not easily accessible, and/or contain little developable land. For example, 12 CBRS units included in our review along the Louisiana coast are islands with no roads or bridges connecting them with the mainland and are composed mostly of marshes, making both access and development difficult. At the time of our review, these 12 units contained only petroleum facilities (which are exempt from CBRA’s prohibitions) and/or temporary fishing camps.

Several CBRS Units Have Undergone Development

The 186 coastal barriers that comprised the original CBRS were included because they were considered undeveloped according to criteria developed by the Secretary of the Interior. However, despite CBRA’s prohibitions against new federal expenditures and financial assistance, 9 of the 34 units included in our review have undergone significant new development since 1982. Table 2.1 shows the limited development that had occurred, according to FWS’ estimates, in the 9 CBRS units included in our review as of October 1982. However, since 1982, about 1,200 residences, including single-family homes, duplex apartments, townhomes, and high-rise condominiums, have been built in these nine CBRS units. We
confirmed that about 800 of these structures were built after October 1983 when all prohibitions in CBRA became effective.

### Table 2.1: Extent of Development in Nine CBRS Units as of October 1982

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<tbody>
<tr>
<td>Mobile Point, Ala.</td>
<td>1,895</td>
<td>10</td>
<td>1</td>
<td>16</td>
<td>.04</td>
</tr>
<tr>
<td>N. Bethany Beach, Del.</td>
<td>141</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>.07</td>
</tr>
<tr>
<td>Vero Beach, Fla.</td>
<td>91</td>
<td>11</td>
<td>12</td>
<td>36</td>
<td>1.96*</td>
</tr>
<tr>
<td>Blue Hole, Fla.</td>
<td>537</td>
<td>16</td>
<td>3</td>
<td>31</td>
<td>.29</td>
</tr>
<tr>
<td>Moreno Point, Fla.</td>
<td>2,695</td>
<td>28</td>
<td>1</td>
<td>39</td>
<td>.07</td>
</tr>
<tr>
<td>Cape San Blas, Fla.</td>
<td>2,486</td>
<td>38</td>
<td>2</td>
<td>93</td>
<td>.19</td>
</tr>
<tr>
<td>Four Mile Village, Fla.</td>
<td>1,129</td>
<td>7</td>
<td>1</td>
<td>8</td>
<td>.04</td>
</tr>
<tr>
<td>Daufuskie Island, S.C.</td>
<td>1,029</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Harbor Island, S.C.</td>
<td>36</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*According to FWS officials, a developed portion of the Vero Beach unit was erroneously included in the CBRS in 1982. The 1990 amendments to CBRA excluded this developed portion of the unit.

Six of the nine units had undergone development on at least 15 percent of their developable land at the time of our review; the other three had undergone less development. The North Bethany Beach, Delaware, unit had undergone so much development that it would no longer qualify for inclusion in the CBRS under the original criteria.

The development that has occurred on several of the nine affected units has been both extensive and varied. For example, North Bethany Beach, Delaware, and Vero Beach, Florida, contain many single-family residences. Condominiums and other multifamily housing units have been built on Daufuskie Island and Harbor Island, South Carolina; Mobile Point, Alabama; and Cape San Blas, Florida. Cape San Blas also includes many types of structures prevalent in other coastal communities, such as shops, convenience stores, and restaurants. The following examples describe the type and extent of development that has occurred since 1982 in certain CBRS units:

- The North Bethany Beach unit contained only two single-family residences in 1982, or one structure for every 71 fastland acres. As of October 1, 1990, the number of single-family residences that received permits in this unit had increased to 74, or about 1 structure for every 2 fastland acres. Each
Chapter 2
Development Is Occurring in Some CBRS Units

of the additional 72 structures was built after October 1, 1983, when all prohibitions in CBRA became effective. According to county building records, planned development will bring the total number of residences to 181. If this development occurs, there will be 1.3 structures for each fastland acre within this CBRS unit.

Figure 2.1: Residences in the CBRS Unit at North Bethany Beach, Delaware

- The Cape San Blas unit in Florida contained 93 structures in 1982, according to FWS. As of October 1, 1990, we estimated that the Cape San Blas unit contained at least 444 residential units, including single-family structures, townhouses, and condominiums. A significant amount of this construction occurred after October 1, 1983. The more recent development consists predominantly of multifamily, high-density units. Related facilities such as convenience stores, shops, cafes, and recreational amenities including tennis courts, fitness centers, chip-and-putt golf facilities, and swimming pools are also present. County records show that developers plan to construct an additional 101 residential units. Although over 1,000 of the 2,486 acres within the Cape San Blas unit are U.S. Air Force and state of Florida land and are therefore considered protected from development, we estimated—on the basis of county records and aerial photographs—that over 366 acres, or almost 25
Development occurring on coastal barriers can displace vital fish and wildlife habitat, including the critical habitat of some threatened or endangered species, and can place people and property at risk. If major destructive coastal storms occur, high costs to the federal government can ensue for storm cleanup and for temporary food and housing assistance to the affected population—expenditures not prohibited by CBRA.

Coastal barriers and their associated wetlands provide vital feeding, spawning, and nesting habitats, which support a variety of fish, shellfish, birds, mammals, and other wildlife. FWS has reported that many activities that accompany coastal construction and development, including alteration of primary dunes, beach stabilization measures, maintenance of navigation channels, and groundwater extraction, can disrupt the barriers' natural processes and ecological functions.
The CBRS unit in Boca Chica, Texas, remained undeveloped at the time of our review. However, considerable development has been proposed for the unit. If such development occurs, it could require the filling of wetlands that currently provide vital habitat for some migratory birds and other wildlife. FWS is also concerned that certain endangered or threatened species, including wildcats (such as the jaguarundi and ocelot) and piping plovers (a shorebird), are present in the area proposed for development and that the proposed development could adversely affect their habitat.

Development Places People and Property at Risk

The land masses that comprise coastal barriers not only shift to absorb ocean energies, but they often also buffer populated mainlands from powerful storms that can be accompanied by waves reaching up to 25 feet and hurricane winds reaching up to 175 miles per hour. When development occurs on coastal barriers, it can reduce their natural elasticity, making them and populated inland areas more susceptible to the full brunt of hurricanes. In September 1989, Hurricane Hugo's 135-mile-per-hour winds and 12- to 20-foot waves hit a developed coastal barrier area in South Carolina, destroying 20 percent of the beachfront structures. Figure 2.3 shows damage from Hurricane Hugo to Pawley's Island, South Carolina. Although not within the CBRS, this barrier island is adjacent to an undeveloped CBRS unit known as Pawley's Inlet.

Figure 2.3: Damage From Hurricane Hugo on Pawley's Island, South Carolina

Source: U.S. Army Engineers Coastal Engineering Research Center.
The threat to residents of some CBRS units increases when accessibility is limited to a narrow highway, a bridge, or a ferry boat. Lead times for predicting where and when hurricanes and other violent storms might strike land may not be sufficient to allow for evacuation of such areas, especially if accidents or other unforeseen events such as high water on highways hamper evacuation. For some developed CBRS units, such as Daufuskie Island, South Carolina, which is generally reached by ferry boat, evacuation in an emergency could be particularly hazardous and time-consuming.

Development Increases Potential Costs to the Federal Government

Although CBRA prohibits most new federal expenditures and financial assistance within the CBRS, thus keeping the government’s investment and liability in these coastal areas to a minimum, the federal government can still incur substantial costs if major destructive storms hit developed coastal barriers. For example, while CBRA prohibits federal loans and grants for restoration of damaged structures within CBRS units, it does allow federal emergency funds to be used for debris removal and for temporary food and housing assistance for victims. Such costs can be significant.

Although no major destructive storms have hit the nine developed CBRS units included in our review since CBRA was enacted, the potential for such an event is high. For example, the Department of the Interior reported that from 1981 to 1985, about 23 percent of presidentially declared disasters involved coastal flooding due to hurricanes. About 49 percent of all federal disaster aid during this period involved coastal damage. Federal disaster relief and National Flood Insurance Program payments to mitigate the ravages of Hurricane Hugo cost over $1 billion, according to the Federal Emergency Management Agency (FEMA)—the focal point within the federal government for emergency planning, preparedness, mitigation, response, and recovery.

In commenting on a draft of this report, FEMA noted that National Flood Insurance Program payments to the insured victims of Hurricane Hugo were at no cost to the United States taxpayer. According to FEMA, the total funding expended in South Carolina alone in that disaster was about $765 million, of which about $410 million was disaster relief paid for by the federal government, while the remaining $355 million of flood insurance payments was funded by National Flood Insurance policyholders through premiums.
Without Stronger Protective Measures, Further Development in Some CBRS Units Is Likely

Additional future development in 9 of the 34 CBRS units included in our review is planned and likely to occur with or without federal financial assistance. Other CBRS units that are accessible and/or suitable for development and investment may undergo similar development. While the availability of accessible coastal land is limited, populations of coastal areas are expected to increase by tens of millions by the year 2010. This population increase will further spur market demand, providing an incentive for developers, owners, and investors to assume the risks associated with owning and building in these storm-prone areas. Stronger protective measures may be needed if further development is to be discouraged.

Each of the nine CBRS units included in our review where development had occurred since 1982 had a very attractive coastal setting, and eight of the units were easily accessible by road or bridge. For example, the North Bethany Beach unit in Delaware borders the Atlantic Ocean and is accessible by highways from major metropolitan areas such as Washington, D.C., and Baltimore, Maryland. Moreover, the attractive settings of some CBRS units may be enough to spur development even without easy access by road or bridge. For example, Daufuskie Island in South Carolina was completely undeveloped in 1982 and cannot be reached by road or bridge; general access to the island is by ferry boat. The island, however, has already undergone considerable development, with extensive future development planned, including three high-density luxury condominium resorts with their own water and waste facilities. Although the developers plan to retain freshwater marsh areas, open spaces, and lakes within the community, they also plan construction of over 370 residences, golf courses, club houses, and a beach club that will eventually envelop most of the 1,029 acres of fastland within the CBRS unit.

To further discourage development in some CBRS units may require alternative measures to protect coastal barriers. Actions to further protect CBRS units from development could include acquiring all rights and interests associated with the land (called fee simple acquisition) or perpetual easements (limited controls over the land that are binding on succeeding owners) through purchase, exchanges, or condemnation. As amended in 1990, CBRA provides limited opportunity to acquire, by purchase or transfer, land within the CBRS for which the federal government has acquired title as a result of bank or savings and loan association failures. The federal government has already acquired land in

1Condemnation is the federal government's right to take private property for public use, without the owner's consent, upon payment of just compensation.
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Development Is Occurring in Some CBRS Units

the Boca Chica unit in Texas and the Mobile Point unit in Alabama as a result of financial institution failures. However, each of these actions could be expensive and would have to be weighed against other federal land acquisition priorities.

Conclusions

CBRA's prohibitions against new federal expenditures and financial assistance have discouraged development in some CBRS units, and other units are not likely to undergo significant development in the foreseeable future because of their inaccessibility and/or lack of developable land. However, development has occurred in other CBRS units since 1982, and development can be expected to continue in these and other units displaying similar characteristics. This development can displace vital fish and wildlife habitat, place people and property at risk, and result in substantial cost to the federal government.

To further discourage development within the CBRS may require the federal government to take stronger actions to protect CBRS units that are under the greatest pressure to be developed. Options to protect such units from further development, including acquisition by outright purchase or perpetual easements, however, would be costly because attractive and accessible CBRS units would be among the most expensive properties within the CBRS.

Agency Comments and Our Evaluation

The Department of the Interior was concerned that our methodology for determining the impact of CBRA on development within the CBRS did not appear to consider that the ban on federal flood insurance did not take effect until October 1, 1983. Consequently, Interior believed that much of the development that we discuss in this report may have legitimately occurred during the 1-year grace period from October 18, 1982, the date CBRA was enacted, to October 1, 1983. However, during our analyses, we considered the effective date of the prohibition against providing federally underwritten flood insurance and the possibility that development could occur during the 1-year grace period. We determined that about two-thirds of the approximately 1,200 residential units that were built in CBRS units we reviewed were constructed after October 1983, when all prohibitions—including those against flood insurance—became effective. Also, we determined that substantial further development of easily accessible and developable CBRS units is likely, notwithstanding the prohibitions against new federal financial assistance.
Federal Agencies Have Not Always Complied With CBRA

For the most part, the 10 federal agencies we reviewed regarding financial assistance had not provided new federal expenditures or financial assistance prohibited by CBRA in the 10 CBRS units where we looked for such assistance. We noted two exceptions. Some property owners erroneously obtained insurance for which they were ineligible that was underwritten by the Federal Emergency Management Agency (FEMA). Also, the Department of the Air Force granted an easement on its land at no cost to a quasi-state agency that wished to build a bridge from the mainland to a CBRS unit. We believe that this transaction constituted financial assistance prohibited under CBRA.

The certification process required by the 1982 act did not ensure that federal agencies complied with CBRA’s prohibitions. The 11 federal agencies we contacted with regard to the certification process had submitted fewer than half of the required annual certification statements to OMB, which, in turn, had never certified to the Congress that federal agencies were complying with CBRA. Moreover, none of the 11 agencies had promulgated the revised regulations addressing the certification process by November 16, 1991, as required by the 1990 amendments to the act, and 4 were still submitting their annual certification statements to OMB, rather than to two congressional committees and the Secretary of the Interior, as required under the revised process.

Federal flood insurance is among the types of federal financial assistance prohibited by CBRA. FWS attributed the lack of development in many CBRS units to the inability of developers and property owners to obtain flood insurance coverage.

FEMA oversees the National Flood Insurance Program, which was authorized by the National Flood Insurance Act of 1968. The program is made up of two components: a direct insurance component currently serviced under a contract with the Computer Sciences Corporation, headquartered in Lanham, Maryland; and a write-your-own component administered through individual private insurance companies. FEMA procedures require the Computer Sciences Corporation and private insurance companies to identify ineligible structures within the CBRS and deny federal flood insurance for them. However, FEMA’s resources are limited and the agency’s oversight of the program includes only limited analyses and a few on-site inspections to determine if companies are prohibited federal flood insurance likely encouraged development within some CBRS units.
erroneously approving flood insurance policies for structures within the CBRS, according to agency headquarters and regional officials.

On the basis of a sample of 250 residences in 5 CBRS units, we estimated that about 9 percent (+/- 3 percent) of the residences had federally underwritten flood insurance policies. Although these 5 units are among those that would likely become developed with or without federal financial assistance, providing such insurance likely helped to encourage development in these units. Although no claims have been made against federal flood insurance policies in the 5 units where these policies were written, we estimated that the policies in force at the time of our review totaled about $12.2 million (+/- $4.1 million). Table 3.1 provides information on the 250 CBRS residences included in our sample.

Table 3.1: Ineligible Federal Flood Insurance on Sampled Residences Within Selected CBRS Units

<table>
<thead>
<tr>
<th>CBRS unit</th>
<th>Number of residences on unit</th>
<th>Residences sampled</th>
<th>Sampled residences federally insured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Point, Ala.</td>
<td>259</td>
<td>50</td>
<td>2</td>
</tr>
<tr>
<td>N. Bethany Beach, Del.</td>
<td>74</td>
<td>74</td>
<td>23</td>
</tr>
<tr>
<td>Cape San Bias, Fla.</td>
<td>332</td>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>Vero Beach, Fla.</td>
<td>26</td>
<td>26</td>
<td>10</td>
</tr>
<tr>
<td>Daufuskie Island, S.C.</td>
<td>261</td>
<td>50</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>952</strong></td>
<td><strong>250</strong></td>
<td><strong>42</strong></td>
</tr>
</tbody>
</table>

Private write-your-own companies had written 36 of the 42 policies and the Computer Sciences Corporation had written the remaining 7. Although these private insurers were generally familiar with FEMA's procedures for identifying and denying coverage for structures within CBRS units, they attributed the issuance of these policies to human oversight in most instances. Two write-your-own insurers said they relied on county records that did not identify CBRS units. Another insurer said that CBRS boundary maps are too imprecise to show if structures located near the boundary lines are within the CBRS and thus ineligible for federal flood insurance.

In commenting on a draft of this report, FEMA said that, on the basis of information we provided on sampled residences that we determined were covered by federally backed flood insurance, it subsequently confirmed—through a review of its records and documentation submitted by insurers and their agents—that 16 policies had been underwritten on property ineligible for coverage. FEMA cancelled these policies. FEMA also determined that an additional seven policies on properties that were
probably within the CBRS had lapsed before we found them ineligible. Eighteen of the policies covered properties not located within the CBRS. Other policies were cancelled by insurers before our finding. According to FEMA, its analysis disclosed that 16 properties, or 6.4 percent of the 250 sampled, had ineligible federal flood insurance policies in effect at the time of our review. However, because FEMA did not provide us with detailed information on the results of its review, we could not verify the results.

In its comments, FEMA said that agents and insurers might tend to “err” on the side of eligibility for federal flood insurance to avoid costly errors and liability based on suits brought by property owners who were incorrectly denied coverage. FEMA believed that the 18 policies that were determined not to be within the CBRS might give rise to such a situation.

FEMA also advised us that it has given high priority to implementing CBRA and has made every reasonable effort to ensure its success. In its comments, FEMA detailed an extensive array of educational and other training efforts to ensure that National Flood Insurance Program participants adhere to CBRA’s requirements. FEMA acknowledged, however, that it cannot inspect every risk situation that is submitted to the agency. FEMA is investigating an alternative to resolve the problem of conducting on-site visits to properties that may be within the CBRS and, therefore, ineligible for federally underwritten flood insurance. This approach, which uses advanced mapping techniques to determine the location of properties in CBRS units, could, if determined to be reasonably cost-effective, reduce the number of properties needing to be visited and surveyed.

FEMA officials also told us that even if ineligible policies are underwritten by private insurers, claims by such policyholders would be denied during the post claim underwriting process. Because no such claims and denials had occurred for the five CBRS units included in our review, the validity of this assertion could not be verified. If FEMA chooses to follow this procedure, however, we believe that the federal government could find itself—following a major, destructive storm—facing severe adverse public reaction and ultimately financial costs if property owners, who purchased their federal flood insurance in good faith, were advised that (1) they were not eligible for such insurance, (2) their premiums were being returned, and (3) the damages they sustained were therefore not covered.
During our review, we learned that the Air Force had granted a perpetual easement on about 3.7 acres of land at Eglin Air Force Base, Florida. The easement was granted at no cost to a quasi-state agency that wished to construct a bridge from this land to the Moreno Point, Florida, CBRS unit. The bridge will cost about $32 million (all privately funded) and will greatly facilitate access to the CBRS unit, thus likely encouraging its further development. Work on the bridge began in May 1991.

Whether the Air Force's granting of the easement constitutes federal assistance prohibited by CBRA has been debated within the Air Force for several years. The Air Force Assistant General Counsel concluded in an October 6, 1988, opinion that CBRA's prohibitions of a federal agency's new expenditures or new financial assistance to barrier island development projects do not apply to the granting of a real estate easement at fair market value. The opinion was unclear as to whether CBRA prohibited the gift of an easement.

Subsequent to this opinion, the Air Force's Office of the Staff Judge Advocate concluded on February 8, 1989, that the easement could be granted at no cost. This conclusion was based on a review of the legislative history leading to the enactment of CBRA and Air Force regulations that allow grants of easements at no cost to states or local governments when the grants are primarily for the benefit of the government. According to this opinion, under the authority of Florida law, the quasi-state agency responsible for the management of the bridge's construction—the Mid-Bay Bridge Authority—would qualify for easements at no cost under these regulations.

Based on our review of the legal issues surrounding this case, the language of CBRA clearly prohibits federal expenditures and financial assistance that effectively aid or encourage development in CBRS units. The form of the benefit conferred on the beneficiary—in this case, an easement—is irrelevant; rather, the question is whether the federal government is providing assistance of financial value that furthers a prohibited purpose.

Regarding the Eglin Air Force Base easement, we believe that the granting of the easement for anything less than fair market value constitutes prohibited financial assistance. By granting the easement for less than fair market value, the Air Force has financially enhanced the Mid-Bay Bridge Authority by the value of the easement. It has also aided the construction of a bridge into a CBRS unit, which is likely to encourage development in that unit.
Certification Process Is Not Working as Intended

The certification process established by the 1982 act did not work as the Congress intended in that federal agencies did not consistently certify to OMB that they were in compliance with CBRA's prohibitions. Therefore, OMB could not certify to the Congress that these federal agencies were complying with the act. Little has changed under the revised certification process established by the Coastal Barrier Improvement Act of 1990. No federal agency we contacted in December 1991 had issued the required implementing regulations by the November 16, 1991, due date. Several were not even aware that the certification process had been changed.

Before passage of the Coastal Barrier Improvement Act of 1990, OMB was required to annually certify to the Congress that federal agencies had properly prohibited federal expenditures and financial assistance within the CBRS. OMB was to base this certification on annual statements from all federal agencies potentially affected by CBRA, certifying that they had not obligated funds contrary to the act's provisions. We contacted 11 federal agencies that conduct activities or administer programs that might include CBRS units. During fiscal years 1983 through 1990, these agencies submitted fewer than half of the required certification statements to OMB. Some agencies submitted the required certification statements sporadically, some not at all. For example, EPA did not submit statements for fiscal years 1987 through 1990. In contrast, the U.S. Department of Agriculture submitted statements each year for fiscal years 1984 through 1990.

OMB's coastal barriers staff specialist told us that OMB budget examiners were responsible for ensuring that agencies whose budgets they reviewed submitted the required certification statement. He told us, however, that the certification statement required by CBRA was not included in OMB's list of annual reporting requirements; therefore, the examiners never pressured the agencies to meet the requirement. Because the staff specialist was new in the position, he was unable to explain this oversight.

Agency officials, on the other hand, were not always aware that some of their activities or programs were subject to CBRA's prohibitions. For example, officials of the Department of Veterans Affairs told us that they were not aware that the agency's guaranteed housing loans were subject to CBRA and, as a result, had only certified that the agency's construction program was in compliance. Departmental guidance dated February 3, 1983, however, specifically stated that all financial assistance, including loan guarantees, was to be discontinued within CBRS units.
The certification statements that the agencies submitted to OMB with their budget submissions were often not verified. Some agency officials, including those at FEMA, attributed the lack of verification to inadequate resources. As a result, FEMA certified to OMB that it was in compliance with CBRA during certain years, even though we found that federally backed flood insurance policies had been underwritten for properties in some CBRS units during those years.

In commenting on a draft of this report, FEMA advised us that because of the extensive procedures that the agency had instituted to ensure compliance with CBRA, compliance with the act may reasonably be presumed. The agency added that ensuring absolute compliance would require substantial and uneconomical expenditures of monetary and staff resources. We agree that the expenditure of resources to verify insurance eligibility needs to be balanced against the potential for adverse public opinion and the payment of substantial costs later. However, even using FEMA's more conservative estimate of the number of ineligible federal flood insurance policies within the CBRS, which we did not verify, the net costs to the taxpayers could be substantial.

Believing that the certification process was cumbersome and that OMB did not have the resources to audit agency expenditures, the Secretary of the Interior recommended in a 1988 report on the status of the CBRS that the requirement that OMB certify agency compliance with CBRA be deleted. In response to this recommendation, the Coastal Barrier Improvement Act of 1990 removed OMB from the certification process. The revised process required the head of each federal agency affected by CBRA to issue regulations by November 16, 1991, to ensure compliance with the provisions of CBRA and to submit annually a report certifying such compliance directly to the (1) House Committee on Merchant Marine and Fisheries, (2) Senate Committee on Environment and Public Works, and (3) Secretary of the Interior. However, as of December 1991, none of the 11 federal agencies we contacted regarding the certification process had issued the required implementing regulations.

FEMA officials told us that they submitted their proposed regulations to comply with the 1990 act's requirements to OMB in October 1991; however, as of February 27, 1992, they had not received OMB's approval to obtain comments on the agency's proposed regulations. Responsible officials at several of the other agencies informed us that they were unaware that the process had changed. In fact, four of these agencies had recently submitted their annual certification statements to OMB.
Conclusions

On the basis of our work, we believe that, with two exceptions, the 10 federal agencies we specifically reviewed regarding the provision of financial assistance within the CBRS have complied with CBRA's prohibitions against new federal expenditures or financial assistance. FEMA attributes its lack of compliance to inadequate resources for overseeing the private insurers who write the flood insurance policies. As a result, FEMA certified that it was in compliance with CBRA's prohibitions during certain years when, in fact, federally backed flood insurance policies had been underwritten for properties in some CBRS units. FEMA needs to take the steps required to comply with the act.

The Air Force's noncompliance is a result of its view that the granting of a no-cost easement on its land that will facilitate construction of a bridge from the mainland into a CBRS unit is not in violation of CBRA's prohibitions. We believe, however, that the granting of the easement for anything less than fair market value constitutes prohibited financial assistance. We further believe that the action is likely to encourage development in the CBRS unit.

Although most federal agencies appear to be in general compliance with CBRA's prohibitions, the certification process is not working as the Congress intended. We believe that the failure of many federal agencies to annually certify that they are in compliance with CBRA reflects the low priority assigned by them to implementing this requirement in the act.

Recommendations to the Director, Federal Emergency Management Agency

To ensure that federal flood insurance policies are not written for properties in CBRS units, we recommend that the Director of the Federal Emergency Management Agency

- identify and cancel all ineligible federally underwritten flood insurance policies that now exist in CBRS units and
- establish procedures to ensure that such policies are not underwritten in the future.

Recommendations to the Secretary of the Air Force

To correct the inappropriate granting of financial assistance at Eglin Air Force Base, we recommend that the Secretary of the Air Force determine the fair market value of the land easement and undertake to obtain that value from the Mid-Bay Bridge Authority. Also, we recommend that the Secretary of the Air Force ensure that future actions by the Air Force on similar matters are consistent with CBRA's attempt to discourage...
development on certain coastal barriers by prohibiting new federal expenditures and financial assistance.

Agency Comments and Our Evaluation

The Department of Defense did not provide written comments on a draft of this report. However, Department of the Air Force officials provided us with both oral comments and a memorandum dated April 10, 1992, from the Air Force’s Acting Assistant General Counsel, which gave details on why they believe that an easement or grant of land (as opposed to money) from a federal agency to a public or quasi-public agency planning development within a CBRS unit does not violate CBRA, regardless of whether that transaction is for fair market value or at no cost. We have considered this information in evaluating the Air Force’s position. Furthermore, the Air Force informed us that even if it could be assumed that CBRA prohibited federal agencies from granting no-cost land easements that could encourage development on barrier islands, there is no lawful way to implement our recommendation that the Air Force should require the Mid-Bay Bridge Authority to pay fair market value for the easement, because the real estate transaction is completed and the Bridge Authority owns the easement rights. The Air Force also indicated that the cost of conducting a formal appraisal to determine the easement’s fair market value would probably be more than the value of the easement. The Department suggested, however, that the Congress, when considering possible amendments to CBRA in the future, may want to explicitly prohibit such transactions.

We do not believe that it is necessary for the Congress to clarify CBRA’s language in this respect; we believe that the statutory language is unambiguous. CBRA specifically prohibits new financial assistance for the purpose of “the construction or purchase of any “... bridge or causeway to, any System [CBRS] unit.” According to the statute, financial assistance includes any form of grant. The Air Force has made a grant, in the form of an interest in land, for the purpose of aiding construction of a bridge into a CBRS unit. Thus, the Air Force’s action falls within the statutory prohibition.

The Air Force apparently concluded that because, in the legislative history, the Congress does not specifically address the question of property grants, the Congress intended to exclude such grants from the term “financial assistance.” Such a conclusion not only contradicts CBRA’s statutory definition of financial assistance as “any form” of grant but also
CBRA's purpose of reducing federal financial assistance for development within CBRS units.

In addition, although the Air Force asserts that there is no lawful way of recovering the fair market value of the easement from the Bridge Authority, it does not explain the legal impediments to recovery; nor are we aware of any. Accordingly, we continue to believe that the Air Force should take appropriate action to obtain the fair market value of the easement from the Bridge Authority. Also, we continue to recommend that the Air Force treat any similar transaction in a manner consistent with CBRA's provisions.

Although the Air Force contends that it would not be practical to collect the fair market value of the easement because the cost of a formal appraisal to determine such value would be excessive, the Air Force provided no support for this assertion. We believe that the value of the easement could be ascertained by less formal means, such as obtaining estimates from local real estate agents.

FEMA recommended certain clarifying language to our recommendations to the Director, which we incorporated. OMB reaffirmed that it no longer has a role in certifying agencies' compliance with CBRA.
Although CBBA does not prohibit federal regulatory activities in CBRS units, permits issued or denied by federal regulatory agencies can influence coastal development. Recognizing this potential impact, the Congress established a Coastal Barriers Task Force in November 1990 to, among other things, analyze and report on the effects of federal regulatory activities on development within the CBRS by November 16, 1992. Over a year later, however, the task force had yet to convene.

Our review of regulatory activities focused primarily on three federal agencies: the Army Corps of Engineers (the Corps), EPA, and the Coast Guard. Each of these agencies had issued permits that facilitated certain development in one or more of the five CBRS units where we examined such effects. Most of the federal regulatory activities we found involved Corps permits for placing dredged or fill material in U.S. waters, including adjacent wetlands. The permits generally involved relatively small parcels of wetlands; however, the potential cumulative impacts of such filling of wetlands can be significant, especially within the expanded CBRS. Of the 374 units added to CBRS in 1999, for example, many are largely made up of wetlands and adjacent aquatic habitat.

Under section 404 of the Clean Water Act, the Corps has the authority to issue or deny permits for the discharge of dredged or fill material into U.S. waters, including wetlands. Under the act, selection of sites for disposal of dredged or fill materials into such waters must be in accordance with guidelines—known as the 404(b)(1) Guidelines—developed by EPA in conjunction with the Secretary of the Army. Before it issues a permit, the Corps conducts a public-interest review during which many environmental, economic, recreational, conservation, and other factors are considered within the context of the needs and welfare of the public. The Corps approves the permit only after determining that it is in the public interest. As part of its decision-making process, the Corps must consider the cumulative impacts of its permit decisions within geographical areas. Because the expanded CBRS is composed of almost 50 percent wetlands and aquatic habitat, the impact of future Corps permit decisions on CBRS units could be significant.

The Corps has historically approved about 97 percent of all applications for section 404 permits. However, many applicants withdraw permit applications before the Corps has completed its public-interest review. For cumulative impacts, as defined in regulations prepared by EPA in consultation with the Secretary of the Army, are changes that take place in aquatic ecosystems (including wetlands) that can be attributed to the collective effect of a number of individual discharges of dredged or fill material.
example, two permit applications in the Cape San Blas unit in Florida were withdrawn by applicants before the Corps made a decision on whether to approve the permits.

The Corps did, however, issue at least 12 permits for filling or altering wetlands in the Cape San Blas unit between October 1982 and December 1990. Nine of the 12 permits were for filling wetlands for driveways leading from the main highway to structures built on developable land. The remaining three permits were for an office parking lot, fence, and boat dock with an access road. Figure 4.1 shows several driveways that have been constructed through wetlands in the Cape San Blas unit.

At the Mobile Point unit in Alabama, the Corps received two applications to fill or alter wetlands for development. The Corps issued one permit in April 1986, which allowed filling or altering of about 8 acres of wetlands to facilitate the building of an 18-hole golf course on 250 acres adjacent to a resort community. The second permit application, involving the same golf course, was denied in May 1989 by the state of Alabama before the Corps made a decision. Alabama denied the proposed project because it was inconsistent with the state's Coastal Area Management Program. Because of funding problems, the developer never completed the golf course.
Construction scars from the original development, however, had not been repaired at the time of our visit.

Another developer contemplating construction within the Mobile Point unit attempted to build a waste facility in a wetland area without a Corps permit. Corps officials discovered the unauthorized construction in January 1983 and, in accordance with agency policies, instructed the developer to restore the damaged wetlands. However, a large portion of this damage remained unrestored at the time of our review because replacement foliage had yet to grow in the damaged area.

The developers of a planned 10,000-unit resort on about 4,000 acres in the South Padre Island CBRS unit in Texas will, if they pursue development efforts, require a Corps permit because a portion of the resort would be built in an area classified as wetlands. The developers told us that the wetlands within the units are of poor quality, and that if they apply for a Corps section 404 permit, they will propose creating extensive high-quality vegetated wetlands on the mainland side of the CBRS unit to mitigate the damage that would be caused to the existing wetlands.

Although the Corps has primary responsibility for issuing section 404 permits, the Clean Water Act, in effect, gives EPA the authority to veto Corps decisions to approve section 404 permits if EPA determines that the discharge of dredged or fill material would adversely affect municipal water supplies, shellfish beds and fishery areas, wildlife, or recreational areas. EPA had not vetoed any permits approved by the Corps in the CBRS units we reviewed.

The Corps may also influence development within the CBRS by issuing or denying permits to construct piers or marinas in navigable waters. Section 10 of the Rivers and Harbors Appropriation Act of 1899 prohibits the obstruction or alteration of any navigable water of the United States without permission from the Corps. Property owners who wish to build a pier or marina must first obtain a permit from the Corps. Although applications for section 10 permits in the five CBRS units we reviewed are fewer in number than those for section 404 permits, the effects of section 10 permits on CBRS units can be significant.

Between October 1982 and December 1990, two developers applied for permits to build in navigable waters associated with two of the five CBRS units included in our review. One developer withdrew the permit.
application before the Corps decided whether to grant approval. However, in June 1988 the Corps approved an application to build a 500-foot boat dock extending into St. Joseph's Bay, adjacent to the Cape San Blas unit in Florida. The County Planning Board and Regional Planning Council stopped this major project by denying the developer permission to dredge St. Joseph's Bay to accommodate large boats. The board and council based their opposition on potential adverse effects on the area's important habitat for the bay scallop and certain fish species. Responsible FWS and Corps officials told us, however, that the land is very valuable and it is just a matter of time before new attempts are made to develop it.

**EPA and States Issue Permits for National Pollutant Discharge Elimination System Facilities**

In addition to its key role regarding section 404 permits, EPA can facilitate development of some CBRS units by granting permits under authority of section 402 of the Clean Water Act. Under the provisions of section 402, EPA and authorized states issue National Pollutant Discharge Elimination System permits that allow the discharge of wastes into navigable waters.

Alabama, as an EPA-authorized permitting state, issued the only two section 402 permits granted between October 1982 and December 1990 within the five CBRS units included in our review, both of them in the Mobile Point CBRS unit. One approved facility was not constructed, and the other facility served an area where development in the unit had already begun. Although such a facility is not specifically prohibited by CBRA, EPA officials agreed that the presence of the facility will likely facilitate further development in the unit.

**Coast Guard Issues Permits for Bridge Construction Over Navigable Waters**

The Bridge Act of 1906, as amended, authorizes the Secretary of Transportation to issue permits for the construction of bridges across or over navigable U.S. waters. The Coast Guard, to whom this authority has been delegated, can thus have a significant impact on development in CBRS units that are isolated from the mainland.

Although some coastal barrier islands were accessible by bridges before being included in the CBRS, the Coast Guard issued a permit to construct a bridge that will run from the mainland, across an inland bay, to the Moreno Point CBRS unit in Florida. This was the only permit issued for such construction between October 1982 and December 1990 in the five CBRS units where we examined the effects of regulatory activities. The southern terminus of the bridge will be in the CBRS unit; the northern terminus will be on the Eglin Air Force Base land on which an easement...
Chapter 4
Effects of Federal Regulatory Actions on Development Within the CBRS

was granted by the Air Force to a quasi-state agency. This bridge is expected to increase access to and use of the CBRS unit.

Federal Regulatory Activities Are to Be Reviewed by a Task Force

The Coastal Barrier Improvement Act of 1990 established an interagency Coastal Barriers Task Force to review and report to the Congress regarding the CBRS. This report, due no later than November 16, 1992, was to include, among other things,

- an analysis of the effects of any regulatory activities of the federal government within CBRS units from 1975 to 1990,
- an analysis of federal tax policies on development (including development of second home and investment properties) within CBRS units from 1975 to 1990,
- estimates of the number of existing structures located on coastal barriers that are included in the CBRS because of its expansion under the 1990 act, and
- recommendations for any federal policies and legislative actions needed to promote the protection of coastal barriers and minimize federal government activities that would contribute to their destruction and degradation.

In commenting on a draft of this report, the Department of the Interior said that this complex study will not be completed by the November 16, 1992, deadline. None of the 11 federal agency heads, including the Secretary of the Interior, whose designee is to chair the task force, had named their designees. Interior said that it would conduct the study between October 1993 and October 1994 if funding is appropriated for it.

Conclusions

Although not prohibited by CBRA, permits issued by federal agencies such as the Corps, the Coast Guard, and EPA for activities including discharging dredged and fill material into wetlands, building wastewater facilities, and discharging waste into navigable waters can influence or facilitate development in the CBRS. The Coastal Barriers Task Force, established by the Congress to, among other things, analyze and report on the effects of federal regulatory activities on development within the CBRS, had not convened at the time of our review, even though more than half of the time the task force was given to do its work had expired. It is too late to conduct a serious analysis of the effects of CBRA and report the results by the deadline prescribed in the Coastal Barrier Improvement Act of 1990, because the task force members have not yet been named. However, it is
imperative that the task force begin its work on the important activities it is charged with reviewing as soon as possible.

Recommendation to the Secretary of the Interior

We recommend that the Secretary of the Interior, as the agency head charged with providing a designee to serve as the chairperson for the Coastal Barriers Task Force, promptly name his designee and encourage the other 10 agencies to promptly name their designees and direct the designated chairperson to promptly convene the task force to begin its work.

Agency Comments and Our Evaluation

The Department of the Interior agreed that the Coastal Barriers Task Force study must be done. However, Interior said that the target date, given the complexity of the study, the amount of data to be acquired, and the lack of funding for the study, is unrealistic. Interior said that the study will be conducted if funding is appropriated for this activity. If the study is funded, it will be initiated on October 1, 1993, with a planned completion date of October 1, 1994.

Although the Coastal Barrier Improvement Act of 1990 authorized annual appropriations of up to $1 million to the Secretary of the Interior for carrying out the act’s purposes for fiscal years 1990 through 1993, the only appropriations that have been provided were specifically earmarked for interpretation of aerial photography. While the lack of funding to undertake the task force study is a consideration, we believe that Interior’s delay in designating a chairperson for the task force is unjustified. At the very least, Interior should have named a chairperson to begin negotiations with (1) other agencies named to participate in the task force and (2) the Congress regarding the timely initiation and completion of the study. Interior’s delay in initiating any actions to convene the task force has thwarted any chance of meeting the November 1992 reporting deadline.
# Agency Offices Visited During the Review

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## Appendix I
### Agency Offices Visited During the Review

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db  | Disaster Assistance Area 2, Atlanta, Georgia                                  |
|                                        | Georgia District Office                                                        |
| Small Business Administration         | Region III, Baltimore, Maryland                                                |
|                                        | Region IV, Atlanta, Georgia                                                   |
|                                        | Region VI, Fort Worth, Texas                                                  |
|                                        | Alabama Division Office                                                       |
|                                        | Alabama State Highway Department³                                           |
|                                        | Florida Division Office                                                       |
|                                        | Georgia Division Office                                                       |
| Department of Transportation           | North Carolina Division Office                                                |
|                                        | South Carolina Division Office                                                |
|                                        | Texas Division Office                                                         |
|                                        | District III Department of Highways and Public Transportation, Fort Lauderdale, Florida³|
|                                        | Maintenance Office, Department of Highways and Public Transportation, Fort Pierce, Florida³|
| U.S. Coast Guard                       | New Orleans, Louisiana, District Office                                        |
| Department of Veterans Affairs         | Atlanta, Georgia, Regional Office                                             |
|                                        | St. Petersburg, Florida, Regional Office                                      |

³State agencies through which the federal program is administered.

³OMB does not provide financial assistance, but before the 1990 amendments to CBRA, it was responsible for certifying to the Congress that other federal agencies were in compliance with the Coastal Barrier Resources Act’s funding restrictions.
## CBRS Units GAO Reviewed

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## Types of Federal Assistance Analyzed at Selected CBRS Units

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Appendix III
United States Department of the Interior
OFFICE OF THE SECRETARY
Washington, D.C. 20240
May 12, 1992

Mr. James Duffus, III
Director, Natural Resources Management Issues
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Duffus:

This is in response to your request for comments on the Draft Report entitled "Coastal Barriers: Development Occurring Despite Prohibitions Against Federal Assistance" (Report Number GAO/RCED-92-115). The Department of the Interior (Department) is in general agreement with your findings. However, we are concerned that there appears to be a major flaw in the methodology for determining the impact of the Coastal Barrier Resources Act (CBRA) on development within the Coastal Barrier Resources System (CERS). The Department is also responding to the General Accounting Office's (GAO) recommendation to the Secretary of the Interior.

Throughout the report, the data appears to be based on the level of development present at the time CBRA was enacted on October 1, 1982. The significant fact that does not appear to be considered is that the ban on Federal flood insurance did not take effect until October 1, 1983. The one year grace period mandated by CBRA allowed many developers the opportunity to complete structures within several of the CERS units evaluated in this report prior to the deadline. If the level of development had been measured from October 1, 1983, not 1982, the Department believes that the impact of CBRA on discouraging new development may have been significantly more evident. The Department believes GAO should revise its data to measure the impact of CBRA on development between October 1, 1983, and the conclusion of the study.

GAO recommends that the Department immediately convene the Task Force required by section 8 of the Coastal Barrier Improvement Act, in order to meet its November 16, 1992, reporting deadline to Congress. The Department agrees that the study must be done. However, the target date, given the complexity of the study, amount of data to be acquired, and the lack of funding for this study, is unrealistic. The Fish and Wildlife Service will conduct the study in Fiscal Year 1994, if funding is appropriated for this activity.
Additional discussion of these two concerns, plus other minor comments are enclosed. I hope these comments will be useful in completing your report. If I can be of further assistance, please do not hesitate to contact me.

Sincerely,

[Signature]

Assistant Secretary for Fish and Wildlife and Parks

Enclosure
Appendix IV
Comments From the Department of the
Interior

Department of the Interior Response to GAO Draft Report "Coastal Barriers: Development Occurring Despite Prohibitions Against Federal Assistance" GAO/RCED-92-115

Following is a more detailed discussion of the two major items in the report that are highlighted by the Department in the cover letter, plus minor corrections.

1. The Department has a major concern with the findings of this report that substantial development has occurred within certain units of the Coastal Barrier Resources System that may be due to the ineffectiveness of the Coastal Barrier Resources Act. The data appears to be based on the level of development present at the time CBRA was enacted on October 1, 1982. CBRA did not become fully effective until October 1, 1983, when the ban on Federal flood insurance went into effect. This is the date that should be used as the baseline to measure the effectiveness of CBRA in discouraging development. Following is a review of those parts of the report that appear to obscure the impact of CBRA on development within the CBRS.

A. Page 4, first paragraph, fourth line -
"For example, the North Bethany Beach CBRS unit contained only 2 single-family residences in 1982, but as of October 1, 1990, the number of such residences had increased to 74."

The evaluation should be based on how many residences were present on October 1, 1983, when Federal flood insurance was cut-off.

B. Page 17, last paragraph, last line -
"We then selected 27 other units that were located adjacent to or in close proximity to the 7 units to provide added perspective on the impact CBRA has had on development."

None of the Louisiana or Texas units are anywhere near the developed units. Development within Louisiana and Texas units has been practically nil.

C. Page 19, second paragraph, line 3 -
"For example, we conducted a random sample of 250 residences on 5 of the 10 CBRS units to determine if the Federal Emergency Management Agency was inappropriately providing federally backed flood insurance policies to property owners on these units."

Was it determined whether any of these residences had flood insurance prior to October 1, 1983?

D. Page 21, first paragraph, line 5 -
"However, despite CBRA's prohibitions, 9 of the 34 CBRS units included in our review have undergone new development since 1982."

The effectiveness of CBRA should be measured from October 1, 1983.
Appendix IV
Comments From the Department of the Interior

E. Page 23, last paragraph last sentence -
"However, since 1982, over 1,200 housing units, including both single-family and high-rise condominium units and other structures have been built on these nine CBRS units."

How many of these were built after Oct 1, 1983 and were the "other structures" insurable? CBRA has limited impact on building construction if flood insurance is not required.

F. Page 24, Table 2.1 "Extent of Development on Nine CBRS Units as of October 1982"

The table should be based on October 1, 1983. There should be a table to compare development as of the completion of the report. Four Mile Village, Florida, does not fit the definition of developed. There was no development in this unit in 1982; there is none now. The North Bethany Beach, Delaware and Cape San Blas, Florida units are excellent examples of units where substantial construction occurred during the one year grace period.

G. Page 34, Table 3.1 "Ineligible Federal Flood Insurance on Sampled Residences within Selected CBRS Units"

Were any of these structures ensured prior to October 1, 1983? If so, the policies cannot be cancelled.

Recommendation to the Secretary of the Interior

2. "We recommend that the Secretary of the Interior, as the agency head charged with providing a designee to serve as the chairperson for the Coastal Barrier Task Force, promptly name his designee and encourage the other 10 agencies to promptly name their designees and that the Secretary direct his designee to promptly convene the task force to begin its work in order to meet its November 1992 reporting deadline."

The Department agrees that the study must be done. However, the target date, given the complexity of the study, the amount of data to be acquired, and the lack of funding for this study, is unrealistic. The Fish and Wildlife Service will conduct the study in Fiscal Year 1994, if funding is appropriated for this activity. If funded, the Service will initiate the study on October 1, 1993, with a completion date of October 1, 1994.

3. Other minor changes to consider.

A. Page 14, last paragraph and the top of page 15
The discussion on allowable exceptions to the ban on Federal assistance.

The Coastal Barrier Improvement Act made one major change in the exceptions allowed under CBRA. Federal shipping channels authorized before passage of the CBIA can be widened and deepened.
as well as maintained. Under CBRA, only maintenance dredging was allowed.

B. Page 15, third paragraph, line 7 -
"recommending modifications to CBRS unit boundaries, as needed:"

There is nothing in CBRA or CBIA giving the Fish and Wildlife Service such authority.

C. Page 53, Table - "CBRS Units GAO Reviewed"

There are four typos in the unit names:
Bastain Bay Complex should be Bastign Bay Complex
Timbalier Island should be Timbalier Islands
Rollovera should be Rollover
The following are GAO's comments on the Department of the Interior's letter dated May 12, 1992.

**GAO Comments**

1. We used data on the level of development present at the time CBRA was enacted on October 18, 1982. These data provided a basis for including certain coastal barrier units in the CBRS; the units contained fewer than one roofed and walled structure per 5 fastland acres and lacked structures that would impede geomorphic and ecological processes. In our analyses of the extent of development that had occurred since the enactment of CBRA, we considered the effective date of the prohibition against providing federally underwritten flood insurance (October 1, 1983) and the possibility that development could occur during the 1-year grace period. We determined that about two-thirds of the development that occurred subsequent to the passage of CBRA was after October 1983, when all prohibitions, including the one against providing flood insurance, became effective. We have clarified the text of the report to show the extent and type of development on certain CBRS units since October 1983. For the most part, we based our analyses on county building permit records and appraisal reports.

We do not dispute that CBRA has had an impact on discouraging development in some CBRS units, and we discuss this in the report. However, we also believe that some attractive, easily accessible CBRS units have been and will continue to be developed despite CBRA’s prohibitions. This is borne out by the already existing structures and plans to undertake considerable further development in several of the units we reviewed.

2. At the end of chapter 4, we have recognized and evaluated the Department’s comments.

3. According to county building records, permits for 72 additional structures in the North Bethany Beach unit were granted after October 1, 1983, when federal flood insurance was prohibited within the CBRS.

4. We revised the report to show that several of the additional units selected were located adjacent to or in close proximity to the seven highly developed units identified by FWS.

5. None of the 42 residences in our sample with federally underwritten flood insurance had policies in effect before October 1, 1983. However, as we discuss in the report, FEMA’s followup of the 42 policies disclosed that
some of the residences were not within the CBRS, and the policies were allowed to remain in effect.

6. We attempted to compare development at the time of our review with development existing at the time CBRA was enacted. However, much of the development that has occurred since October 1, 1988, has involved multunit condominiums and duplex structures. According to FWS’ Coastal Barrier Coordinator, when such structures were encountered during the original recommendations on which units were to be included in the CBRS, an attempt was made to draw the boundaries of the units to exclude such structures. We could not apply the Department’s criterion that an undeveloped coastal barrier was one “containing fewer than one walled and roofed structure per 5 fastland acres” to a condominium complex that might contain several hundred individual residences.

We agree that the Four Mile Village CBRS unit would, even today, fit FWS’ definition of undeveloped. We do not agree, however, with Interior’s assessment that there has been no development since CBRA prohibitions became effective. For example, with the assistance of the county property appraiser, we determined that the following development has occurred:

- In 1987 a recreational vehicle resort containing 89 lots with their own electrical and water hookups and on-site sewerage system was built. The resort also includes an office, clubhouse, mobile home, tennis court, bathhouse, and swimming pool.
- Two restaurants were built in 1986 and 1990, respectively.
- A realty office was built in 1986.

We agree that substantial development may have occurred in the Cape San Blas, Florida, CBRS unit during the 1-year grace period provided for in CBRA. However, we confirmed that considerable development continued to occur after October 1, 1983, and that significant further development is planned. Our photograph in chapter 2 (figure 2.2) shows construction under way at the time of our visit to the unit.

7. The report has been revised to reflect the change in exceptions allowed under the Coastal Barrier Improvement Act of 1990.

8. The report has been revised to clarify that FWS was to consult with others before making modifications to CBRS unit boundaries.

9. We have revised the report to reflect these changes.
Appendix V

Comments From the Environmental Protection Agency

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 6 1992

Mr. James Duffus III
Director
Natural Resources Management Issues
Resources, Community, and Economic Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Duffus:

On March 24, the General Accounting Office (GAO) issued to the Environmental Protection Agency (EPA) a draft report entitled "Coastal Barriers: Development Occurring Despite Prohibitions Against Federal Assistance" (GAO/RCED-92-115). Agency staff have reviewed the report, and, pursuant to Public Law 96-226, the Agency submits the following official response to the report. Our comments fall into two categories: wastewater permits and Section 404 permits.

Wastewater Permits

On page 40, the report incorrectly states that EPA issued two Clean Water Act (CWA) Section 402 permits in the Mobile Point Coastal Barrier Resources System (CBRS) unit since 1982. These permits were issued by the State of Alabama. The State of Alabama has been authorized by EPA to issue National Pollutant Discharge Elimination System (NPDES) permits since 1979. As an "NPDES authorized State," Alabama was the permit issuing authority in both 1982 and 1984 when both permits were issued. Furthermore, in issuing the permits, Alabama was obligated to ensure that all federal and State treatment requirements would be met by the permitting facilities and that the discharges would not result in excursions above state water quality standards. While we agree with the conclusion on page 40 that the presence of the facility may lead to development, we believe it is important for the report to point out that neither the Coastal Barriers Resources Act (CBRA) nor CWA provides EPA and States with explicit authority to withhold the issuance of NPDES permits on the basis that the facility is located in or would serve homes in a CBRS.

Section 404 Permits

The draft report offers the conclusion that implementation of the Section 404 regulatory program is not consistent with the goals of CBRA because approval by the Army Corps of Engineers (Corps) of permits for discharges into CBRS overlooks cumulative impacts in decision making within coastal barriers. However, the report does not state that all permits reviewed within the Section 404 program

See comment 1.

See comment 2.

Now on page 38.
must ensure compliance with the Section 404(b)(1) Guidelines, as well as the Corp's public interest review. For a permit to be issued into waters of the United States, including those with CBRS, the proposed discharge must be found by the Corps to be in compliance with the Guidelines which consider, among other things, cumulative impacts to aquatic resources. Given this clarification, EPA believes that the current Section 404 regulatory framework provides adequate recognition of many of the values and functions of coastal barriers which CBRA was designed to protect.

I appreciate the opportunity to comment on the GAO draft report. I hope that these comments are useful in clarifying these points, and I look forward to receiving the final report.

Sincerely,

Richard D. Morgenstern
Acting Assistant Administrator
The following are GAO's comments on the Environmental Protection Agency's letter dated May 6, 1992.

1. We have revised the report to reflect these comments.

2. We did not conclude that the permit approval process of the Corps of Engineers overlooks cumulative impacts within coastal barriers. In fact, we specifically stated that as part of its decision-making process, the Corps must consider such impacts. Rather, we indicated that the potential cumulative impacts of Corps permits to fill wetlands can be significant, especially within the CBRS, which was expanded in 1990 to include additional acreage made up largely of wetlands and adjacent aquatic habitat. We have added a statement to the report to indicate that the selection of sites for disposal of dredged or fill materials must be in accordance with guidelines developed by EPA in conjunction with the Secretary of the Army.
Appendix VI

Comments From the Federal Emergency Management Agency

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

Federal Emergency Management Agency
Washington, D.C. 20472

Mr. James Duffus, III
Director, Natural Resources
Management Issues
Resources, Community, and Economic Development Division
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Duffus:

The Federal Emergency Management Agency has reviewed the GAO draft report "Coastal Barriers—Development Occurring Despite Prohibitions Against Federal Assistance." We note that the draft report concludes that development has continued to occur regardless of the withholding of flood insurance and other federal assistance and that it is the location, accessibility, and other geographical characteristics of the Coastal Barrier Resources System's units that largely determine whether or not development will occur. This conclusion is consistent with our experience. Also, the National Wildlife Federation's Coastal Barrier Project Coordinator concluded that "prohibition of federal flood insurance did not preclude development." See "Building in the Coastal Barrier Resources System, Elise Jones and William Stolzenburg," at page 8 (copy enclosed). It should be noted that the Coastal Barrier Resources Act of 1982 (CBRA), while denying the availability of federal flood insurance in CBRA units, expressly authorizes the continued availability of mortgage financing by federally insured lending institutions.

We may comment upon the final report when it is issued. What follows are our thoughts and observations about the draft report:

In the Executive Summary, under "Results In Brief," it is stated that FEMA "was making federally underwritten flood insurance available to residents in some CBRS units." It is believed that clarification is in order concerning this statement. FEMA never willingly or knowingly made flood insurance available in CBRS units and continues to do everything reasonably possible to prevent the insuring of structures that are subject to the CBRA prohibitions against insurance. We do acknowledge that notwithstanding these efforts some property owners in some units have, due to a variety of reasons, erroneously obtained insurance for which they were ineligible.

We will take a moment to provide some of the background relative to the National Flood Insurance Program's (NFIP) efforts to prevent the insuring of ineligible properties. The NFIP has given a high priority to implementing the CBRA and has made every reasonable effort to assure its success.
As I describe below, the NFIP already has in place procedures to prevent the improper issuance of flood insurance policies in CBRS units. I realize that in spite of the existing procedures there are a few instances where NFIP flood insurance is inadvertently provided for structures in prohibited areas. Therefore, the NFIP is always looking for new procedures which can be used to improve our ability to successfully implement the mandates of the Coastal Barrier Resources Act.

The NFIP obtains its policyholders through the submission of applications for insurance made by local property insurance agents. The local agent, in turn, relies upon information furnished to him or her by local community officials and property owners-applicants, including NFIP Flood maps, when he or she attempts to determine the eligibility of a particular property for flood insurance and the premium to be paid in requesting insurance on behalf of the property owner. This is the traditional manner in which the business of insurance is conducted, with the exception that private insurance policies such as fire and homeowners do not involve the use of maps in the eligibility and rating processes. In the NFIP, normal insurance industry procedures are followed and even if the NFIP were to physically inspect every risk, given the number of people involved in the underwriting process and the inadequacies of the available local and mapping data, some errors would still occur.

When the CBRA became law, it became evident that a great deal of communication with FEMA's agency force would be needed if agents were to be able to properly meet the new requirements. Site inspection in respect to each application received from a CBRS community was not feasible from the logistical and cost perspectives because, under the NFIP, communities are entire counties, cities and other incorporated municipalities, whereas CBRS units constitute smaller parts of such geographic areas. It was evident the program could not depart from underwriting processes traditional to the NFIP and the private sector by expending the resources needed to inspect every risk submitted from a community in which there is a CBRS unit. Therefore, the following reflects what was done, from the beginning, to prevent the insuring of ineligible risks:

The NFIP Agent's Manual, at pages CBRA 1 through CBRA 7, details the procedures to be followed by independent insurance agents in making a determination as to whether a building, which is the subject of an agent's client's request for flood insurance, is uninsurable under the NFIP by reason of the CBRA. These procedures, included in the Agent's Manual since 1983, are also followed by the private sector property insurers issuing flood insurance under arrangements with the Administrator (the WYO Program). The WYO Program Underwriting Manual also includes the CBRA procedures. If a property is uninsurable, the agent may not submit an application for flood insurance to the NFIP. In the event an applicant's agent does submit an application for an uninsurable CBRA property and a policy is issued, we have established procedures for the post-claim underwriting of such ineligible risks whereby the policy is made void and the claim is denied based upon the claims investigation's findings. Thus:

See comment 4.
A. In NFIP sponsored adjuster workshops and conferences, adjusters are made aware of the implications of the CBRA and are instructed to utilize the CBRA maps which are posted in the NFIP's flood insurance claims offices following coastal flooding events, such as Hurricane Hugo, to determine whether any properties for which claims have been made are in a designated CBRA area. If so, the claims are referred to the underwriting staff to determine eligibility for insurance. This practice commenced in 1983, following Hurricane Alicia in South Texas.

B. CBRA implications are again raised by NFIP staff at adjuster meetings conducted at the site of a coastal flood and, in the flood insurance claim office on site, CBRA maps are maintained at the underwriting desk and posted in the office for review by the adjusters, along with a direction to the adjusters to "report separately to FICO management on each risk you find located within these areas."

C. The Adjuster's Manual distributed to approved adjusters at workshops and at flood insurance claim offices stresses, at Section VIII, the need to provide NFIP underwriters with needed "Claims to Underwriting Feedback" on CBRA risks, among other issues, such as substantially damaged buildings, elevated buildings, and other possible misrating situations. If a CBRA "situation is discovered during the course of an investigation, a narrative report is needed commenting on the findings."

D. In a WYO Program context, participating property insurers are obliged under the WYO arrangement to underwrite and process applications for flood insurance in accordance with the rules of the NFIP, including the CBRA underwriting rules and related regulations (see 44 CFR Part 62 and /1.1, et seq.).

E. While WYO companies, typically, have copies of the Adjuster's Manual obtained at adjuster workshops and through direct request, the "Write-Your-Own Claims Manual" also highlights the need for proper handling of claims involving properties in CBRA communities.

F. In addition to the materials described above, many WYO Companies have included CBRA claims alerts in their own claim manuals and educational programs.

G. In a related, educational effort, two national property insurance organizations, the Independent Insurance Agents of America (IIAA) and the National Committee on Property Insurance (NCPI), along with the Florida Association of Insurance Agents (FAIA), utilize and have distributed a training text "Flood Insurance School" which emphasizes the treatment to be accorded CBRA properties by independent property insurance agents.
H. In addition to the coverage on CBRA contained in its various underwriting and claims manuals, the NFIP has made educational efforts to inform agents of the CBRA and its implementation. Since 1983, the NFIP has continuously issued Technical Assistance Bulletins, revised manual pages, and "Watermark" articles, which are sent to the Program's agency force. And, in numerous agents and lenders workshops throughout the country since 1983, agents and lending institution representatives have been advised of the unavailability of federal flood insurance as to ineligible properties in the CBRS.

In Chapter 2, under the section titled "Development Increases Potential Costs to the Federal Government," it is stated that "Federal disaster relief and National Flood Insurance Program payments to mitigate the ravages of Hurricane Hugo cost over $1 billion, according to the Federal Emergency Management Agency—the focal point within the Federal government for emergency planning, preparedness, mitigation, response, and recovery." While we agree with the statement, generally, it should be noted that NFIP payments to the insured victims of Hurricane Hugo were at no cost to the United States taxpayer. The total FEMA funding expended in South Carolina in that disaster amounted to approximately $765 million, of which about $410 million was a disaster relief cost to the federal government, while the remaining $355 million of flood insurance payments was funded by the NFIP's policyholders, themselves, in the form of premium funds paid for flood insurance. Other federal agencies provided the remaining $260 million of disaster relief funding. The NFIP has not used any appropriated taxpayer funds to pay its losses and administer the program since 1985 and the program is actuarially sound for the average historical loss year.

The report contains the finding that there were, in five "units...that would likely become developed with or without federal financial assistance," forty-two residences ineligible for federal flood insurance which were, nevertheless, insured. In the course of its investigation, GAO actually referred a total of 47 such policies to us. We are gratified at the relatively low number of policies issued and can confirm that no claims were ever paid in connection with these properties. Review of our records and the documentation submitted by insurers and their agents presents the following analysis, which can be used to augment the GAO findings depicted on Table 3.1 of the draft report, at page 34:

| Insurer Discovered Ineligibility and Cancelled Policy prior to GAO Finding: | 6 |
| Property Probably In CBRS and Policy Lapsed Prior to GAO Finding: | 7 |
| Property Ineligible and Policy Cancelled After GAO Finding: | 16 |
| Property FEMA found not to be in CBRS: | 18 |
| Total Findings Reviewed: | 47 |
Reviewing the above analysis, only sixteen of the 47 properties cited as being ineligible actually had current policies incorrectly in effect at the time that GAO made its findings. This represents 6.4% of the 250 CBRS unit residences sampled. The cancellation and lapse of some thirteen other policies out of the 47 questionable risks strongly suggests that agents and insurers are serious about policing the CBRS risks to avoid CBRA noncompliance.

Concerning the difficulty of administering the CBRA, the draft report also recounts the problem of limited FEMA resources, which both FEMA Regional and Headquarters had brought to GAO's attention, along with human oversight limitations in preventing the issuance of policies to ineligible properties. Some insurers pointed to inadequate county records of CBRS units and imprecise CBRS maps as reasons for the issuance of policies on some ineligible properties (p. 34).

The draft report, at page 35, also suggests that insurers have little incentive to deny federal flood insurance for structures in CBRS units. However, it may well be that agents and insurers, having difficulty drawing the line in the sand between eligibility and CBRS unit noneligibility while looking at broadly delineated map boundaries, might, however unwittingly, tend to "sit" on the side of eligibility so as to avoid costly errors and omissions liability and coverage denial liability suits brought by property owners who were incorrectly denied coverage only to find out, after sustaining large uninsured flood losses, that their properties were not in a CBRS unit. The eighteen properties cited by GAO (39% of the total of 47) which FEMA found, based on the documentation from insurers and agents, to be eligible for flood insurance could give rise to such claims if coverage was wrongfully denied.

On the other hand, FEMA is not and should not be uncomfortable with denying coverage to an ineligible property following a loss, with return of all premiums (p. 36 of the draft report), and such denials have occurred in the past. The reason this must be done is that it would be a violation of federal statute for FEMA to pay a loss on a policy which was void from its inception because the underlying statute did not authorize its issuance.

The report comments on FEMA's certification of compliance with the CBRA during fiscal years 1985-90 (p. 39 of the draft report). Given the extensive, continuing, instructional and educational processes undertaken to assure compliance, the rule of reason dictates that FEMA should be able to presume compliance in favor of an alternative of unreasonably delaying access to flood insurance coverage to virtually every property owner in a CBRS unit/community until a painstaking, expensive ($250-400 per property) site inspection was made to determine eligibility. FEMA believes compliance may reasonably be presumed
and that, to assure absolute underwriting certitude, i.e., "zero" mistakes, in denying federal flood insurance to ineligible CBRS property owners, the Agency would require substantial and uneconomical monetary outlays and a mechanism involving sufficient personnel resources to make site determinations and inspections in participating NFIP communities having some 560 CBRS units (and now in 303 "otherwise protected areas" as well) on an on-going basis. It is not a matter of monitoring private insurers and agents but, rather, the heart of the matter is the issue of whether substantial sums of money and resources should be spent to assure absolute correctness in the denial of federal flood insurance to property owners in CBRS units, when FEMA procedures already assure that no claim will be paid even if a policy is erroneously issued.

The draft report concludes that "FEMA needs to take steps required to bring itself into compliance with the Act." The conclusion also focuses upon the linkage between "lack of compliance" and FEMA's "inadequate resources." The draft report's recommendations (p. 41) are that FEMA should:

- identify and cancel all federally underwritten flood insurance policies that now exist in CBRS units and
- establish procedures to ensure that such policies are not underwritten in the future.

Of the eighteen properties found by FEMA not to be subject to the CBRA, six of these buildings are in a CBRS unit but are eligible for insurance by reason of being constructed prior to October 1, 1983. Noting that the draft report's recommendation encompasses "all" CBRS unit properties, we recommend a clarification to make it clear that the "grandfather" provision of CBRA means that not all CBRS unit properties are ineligible for federal flood insurance.

Lastly, we will be studying the feasibility of utilizing a relatively recent scientific mapping breakthrough, the Global Positioning System (GPS), to determine the location of CBRS unit properties by latitude and longitude coordinates through the use of digital information from satellites in conjunction with our new initiative to produce digital Flood Insurance Rate Maps for selected communities during the next 10 years. While the CBRS maps do not contain latitude and longitude information, it is hoped that the underlying data and studies will be helpful in this regard. Once the coordinates are known as to a specific CBRS area as seen by aerial images, a ground surveyor could establish the latitude and longitude of a specific building as to which flood insurance may be applied for and a determination made as to whether it is in the prohibited area. Assuming a system could be worked out at a reasonable cost, it would narrow or reduce the number of properties in a community having CBRS units in it which would need to be site-visited and surveyed. An issue that has to be addressed is who would pay the cost of the work on the ground to establish the property's coordinates, particularly in the case of the property which turns out to be ineligible for insurance.
Thank you for providing me an opportunity to provide input on your draft report. I hope my comments are helpful.

Sincerely,

Wallace E. Stickney
Director

Enclosure
The following are GAO's comments on the Federal Emergency Management Agency's letter dated May 29, 1992.

**GAO Comments**

1. We have not included the referenced study in this report because we considered its contents during the course of our work.

2. We recognize that federal mortgage financing is authorized under CBRA on page 11 of this report.

3. The report has been revised to recognize these comments.

4. These comments have been recognized in chapter 3 of the report.

5. These comments have been recognized in chapter 2 of the report.

6. As we pointed out in the draft report, because no claims or denials had occurred relating to the five CBRA units included in our review, the validity of this assumption could not be verified. However, as past catastrophic events have demonstrated, special provisions for relief of victims of disasters can result in significant costs to taxpayers.
Honorable James Duffus III  
Director, Natural Resources Management Issues  
General Accounting Office  
Washington, D.C. 20548

Dear Mr. Duffus:

Thank you for providing the draft GAO report on the Coastal Barrier Resources System (CBRS) for our review and comment.

The CBRS reauthorization eliminated the provision that the Office of Management and Budget annually certify that Federal agencies were in compliance with the CBRS Act. The 1990 Act, among other things, designated the Department of the Interior as the Federal lead agency for administering activities within the system, and for ensuring that all other Federal agencies abide by CBRS provisions.

If you have any additional questions or concerns, please contact us at your convenience.

Sincerely,

Robert E. Gray  
Associate Director  
Natural Resources, Energy and Science
## Appendix VIII

### Major Contributors to This Report

<table>
<thead>
<tr>
<th>Region</th>
<th>Staff Members</th>
</tr>
</thead>
</table>
| Resources, Community, and Economic Development Division, Washington, D.C. | Ralph W. Lamoreaux, Assistant Director  
Edward A. Niemi, Assignment Manager  
Sherry L. Casas, Staff Evaluator |
| Atlanta Regional Office | Jesse J. Flowers, Evaluator-in-Charge  
Christopher T. Brannon, Site Senior  
Jodi A. McDade, Staff Evaluator  
Stuart A. Ryba, Staff Evaluator  
Natalie A. Hastings, Staff Evaluator  
Pamela A. Scott, Writer-Editor |
| Office of the General Counsel | Stanley G. Feinstein, Senior Attorney  
Richard P. Johnson, Attorney-Advisor |
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