

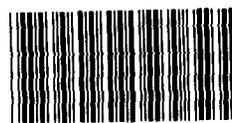
GAO

Report to the Chairman, Subcommittee
on Fisheries and Wildlife Conservation
and the Environment, Committee on
Merchant Marine and Fisheries, House
of Representatives

June 1991

COASTAL POLLUTION

Environmental Impacts of Federal Activities Can Be Better Managed



144287

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**Resources, Community, and
Economic Development Division**

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June 5, 1991

The Honorable Gerry E. Studds
Chairman, Subcommittee on Fisheries
and Wildlife Conservation and the
Environment
Committee on Merchant Marine and
Fisheries
House of Representatives

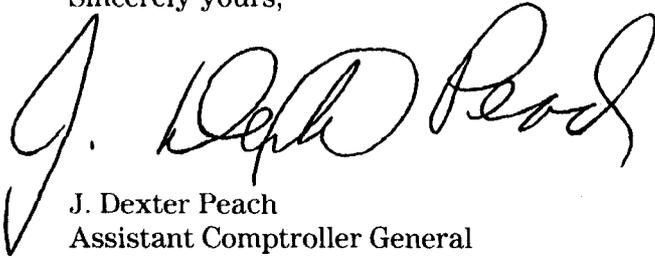
Dear Mr. Chairman:

As requested in your October 23, 1989, letter and subsequent discussions with your office, we have examined (1) whether federal agency activities affecting coastal areas are undergoing required environmental reviews and (2) whether such reviews ensure that all major environmental impacts are considered in the decision-making process.

As arranged with your office, unless you publicly announce its contents earlier, we will make no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies to other appropriate House and Senate Committees; the Secretary of Commerce; the Chairman, Council on Environmental Quality; the Administrator, Environmental Protection Agency; the Director, Office of Management and Budget; and other interested parties.

This work was prepared under the direction of Richard L. Hembra, Director, Environmental Protection Issues, who may be reached at (202) 275-6111 if you or your staff have any further questions. Other major contributors to this report are listed in appendix IV.

Sincerely yours,



J. Dexter Peach
Assistant Comptroller General

Executive Summary

Purpose

Rapid population growth in coastal areas over the past several decades has placed increased stress on coastal resources that has resulted in beach closures, declining fish populations, and destruction of wetlands. Trends pointing to more densely populated coastal areas suggest the likelihood of continued deterioration.

Concerned that the federal government spends millions of dollars to protect the coastal environment while supporting other activities that may inadvertently accelerate environmental degradation in coastal areas, the Chairman, Subcommittee on Fisheries and Wildlife Conservation and the Environment, House Committee on Merchant Marine and Fisheries, asked GAO to evaluate whether or not federal activities in coastal areas conflict with sensible growth and long-term environmental quality. Specifically, GAO examined (1) whether federal agency activities affecting coastal areas are undergoing required environmental reviews and (2) whether such reviews ensure that all major environmental impacts are considered in the decision-making process.

Background

Currently, nearly one-half of the U.S. population is crowded into coastal counties, and population projections indicate a continued increase in coastal population density. Increases in coastal housing construction, domestic water use, residential energy demands, solid waste production, and discharges from waste water treatment plants are also projected. These factors cause concern about the possible loss of coastal natural and recreational resources worth billions of dollars.

Numerous federal agency activities can have direct or indirect effects on the coastal environment. Direct effects are those in which the impact is immediate and directly associated with the federal activity—such as waste discharges from federal facilities. Indirect effects, such as changes in population density, occur later in time and/or in locations removed from the activity itself.

Two key statutes require reviews of the environmental impacts of federal activities in coastal areas. The Coastal Zone Management Act (CZMA), administered by the National Oceanic and Atmospheric Administration (NOAA), Department of Commerce, requires proponents of federal activities to notify states that the proposed activities are consistent with federally approved state coastal zone management programs. These programs are designed by individual states to balance economic growth in coastal areas with the need to protect these areas from environmental

decline. The National Environmental Policy Act requires federal agencies to assess the environmental impacts of all major federal activities significantly affecting the environment. The Council on Environmental Quality is responsible for issuing regulations on how these assessments should be prepared.

Results in Brief

According to federal and state coastal zone managers, most federal agencies comply with environmental review requirements when their activities affect coastal areas. However, GAO's review of federal activities in four states and two estuaries indicates that state and federal agency officials sometimes disagreed as to whether certain federal agency activities were subject to environmental review requirements.

Even in the cases where there were no disputes regarding the need for an environmental review, GAO found that questions were sometimes raised about how well the review process accounted for the full range of environmental impacts. This was particularly true for federal activities with indirect effects, such as accelerated population growth. Such impacts are often more significant than direct impacts but are more difficult to quantify. Currently, little guidance is available on how indirect impacts should be assessed.

Although strengthening the review process would help to ensure that the environmental impacts of specific projects or activities are considered, comprehensive planning in coastal zones would help ensure that the cumulative effects of activities are considered in addition to their individual impacts. However, there is little guidance available on developing comprehensive plans or on how such plans could be used to assess cumulative impacts.

Principal Findings

Application of Environmental Review Requirements Sometimes Disputed

Among the cases in which federal and state officials disagreed over the application of CZMA environmental review requirements were certain "paper" transactions, such as the sale or lease of federal land and the designation of ocean-dumping sites. Some federal agencies have contended that such activities are not subject to CZMA environmental review requirements because the activities do not directly affect the coastal zone. States have argued that such reviews should be done because

these activities are the first step in a process that can lead to significant future impacts. For example, in the case of offshore oil and gas leases, CZMA review does not occur until after the lease is sold and the buyer submits an exploration plan.

Recent amendments to CZMA require that all federal activities, regardless of their location or whether their impacts are direct or indirect, must be consistent with state programs. NOAA officials, however, expect that some federal agencies will continue to argue that their activities do not affect the coastal zone at all.

Disagreements Over the Adequacy of Environmental Reviews

State coastal managers also raised concerns about the quality and adequacy of environmental reviews of proposed federal activities. In one case GAO reviewed, state coastal managers described as “appalling” the environmental impact statement for the re-routing and expansion of a highway. State officials found that the highway project would have a “significant growth-inducing” effect and predicted that the resulting population growth would exceed state planning limitations established for the area by 100 percent.

Disagreements over the adequacy of environmental reviews commonly involve indirect impacts, which are typically more difficult to predict and measure than direct impacts. NOAA and the Council on Environmental Quality have issued little guidance on how to assess indirect impacts.

Benefits of Comprehensive, Long-Range Planning

While evaluating the impacts of specific activities on the coastal environment is important, it is also important to consider the cumulative impacts of these activities. Long-term, areawide plans provide a basis for assessing the cumulative impacts of individual activities within the context of an overall framework that balances growth and development with environmental protection. Conversely, lack of such planning has led to the deterioration of certain coastal waters.

Although NOAA has issued guidance to states regarding how to develop comprehensive plans, this guidance is not current and provides little information on how to assess the cumulative impacts of activities. According to NOAA officials, only about one-third of the states with federally approved coastal zone management programs have good comprehensive plans that are useful in managing the cumulative effects of activities on coastal areas.

Recommendations

GAO recommends that the Secretary of Commerce direct the Administrator, National Oceanic and Atmospheric Administration, to (1) ensure that, in light of the recent CZMA amendments, the CZMA implementing regulations clearly address those federal activities that have historically been disputed and stipulate whether such activities are subject to CZMA's environmental review requirements; (2) develop and issue additional guidance, in consultation with the Council on Environmental Quality, on how to conduct environmental assessments of the indirect impacts of proposed federal activities; and (3) improve assistance to states on how to develop comprehensive plans, with emphasis on assessing cumulative impacts.

Agency Comments

The Department of Commerce agreed that it needs to provide additional guidance on how to assess the indirect and cumulative impacts of proposed activities on the coastal zone. Commerce, however, disagreed that NOAA should revise its regulations to clarify whether certain federal activities are subject to CZMA environmental review requirements. Commerce maintains that the recent amendments to the consistency provisions of CZMA codify NOAA's existing interpretation of CZMA environmental review requirements, with the exception of offshore oil and gas leases. Since the Department of the Interior is already revising its procedures to address these leases, Commerce believes no other changes to the CZMA implementing regulations are needed. Because GAO's review disclosed that federal agencies, other than Interior, have contended that some of their activities are not subject to CZMA environmental review requirements and because NOAA officials believe that these disputes may continue, GAO maintains that the act's implementing regulations need to stipulate whether activities that have been the subject of past disputes are subject to consistency review.

The Environmental Protection Agency (EPA) generally agreed with GAO's findings and recommendations and noted that EPA, in consultation with other agencies, is preparing a guide to help environmental managers in federal agencies address cumulative impacts.

The Council on Environmental Quality generally agreed with GAO's findings and recommendations. The Council also agreed to assist NOAA in developing and issuing additional guidance on how to conduct environmental assessments of proposed federal activities that affect coastal areas.

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Abbreviations

CZM	Coastal Zone Management
CZMA	Coastal Zone Management Act
EIS	environmental impact statement
EPA	Environmental Protection Agency
GAO	General Accounting Office
GSA	General Services Administration
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
SBA	Small Business Administration

Introduction

The nation's coasts are a vital and substantial part of our national resource base. They abound with estuaries, beaches, bays, lagoons, islands, and wetlands. Coastal wetlands provide nurseries, food, and habitat for most of the commercially valuable fish; coastal barrier islands and dunes provide an important buffer to protect the mainland from coastal storms; and coastal areas provide an aesthetic and recreational resource enjoyed by millions.

In terms of real value, coastal resources are worth billions of dollars. A recent report, sponsored by the National Coastal Resources Research and Development Institute, concluded that in 1985, 31.7 percent of the U.S. gross national product, or almost \$1.3 trillion, originated in the 413 coastal counties that are within 50 miles of an ocean, bay, or Great Lake, or are within an estuarine region. Production of these goods and services provided 28.3 million jobs and \$479.9 billion in payroll.¹

In addition, coastal resources have intangible values that people enjoy, but for which they do not pay. Each year, millions of people enjoy the coastal environment for swimming, boating, hiking, and bird watching and as parks, refuges, and open space.

Environmental Quality of Coastal Areas Is Declining

Evidence of declining environmental quality in coastal areas is accumulating steadily, and the signs of damage and loss are pervasive. Among the visible signs of the problem in recent years have been beach closures, declining fish populations, and destruction of wetlands. Because much of this deterioration is associated with population growth in these areas, trends pointing to more densely populated coastal areas suggest the likelihood of continued deterioration in the future.

As coastal populations have increased, coastal waters have become contaminated and shorelines, wetlands, and submerged lands have been physically altered. The cumulative effect has been that this decline in coastal water quality threatens public health, the health and survival of living resources, the coastal economy, and the recreational assets of coastal areas and resources.

¹Valuing Coastal Zone Management, a report prepared by the Center for Urban and Regional Studies, University of North Carolina at Chapel Hill, for the National Coastal Resources Research and Development Institute, NCRI Publication No. NCRI-T-90-005, March 1990. This report notes that combined federal and state spending on coastal zone management is only four thousandths of one percent of the value of goods and services produced in the coastal zone.

While coastal counties (excluding Alaska's) comprise only 11 percent of the nation's land area, nearly one-half of the nation's population inhabits these areas. Coastal population is a major cause of the decline in coastal environmental quality; it is also one of the major reasons why solving this problem is so critical—the health and the quality of life of so many depend on it.

Population Growth in Coastal Areas Places Increased Stress on the Environment

Residential population in coastal counties increased from about 80 million in 1960 to 112 million in 1990. Between 1960 and 1988, coastal population density increased from 248 to 341 persons per square mile—more than 4 times the U.S. average. Further, population density in coastal areas is expected to increase as more people continue to move into this limited space. About 68 percent of all coastal counties will have a population density increase of more than 10 percent between 1988 and 2010.

As the coastal population increases, so does the demand for housing, transportation, and services. In an October 1989 study of the trends in coastal development, the National Oceanic and Atmospheric Administration (NOAA), Department of Commerce, estimated that by the year 2000, there will be over 7 million new housing units and 11 million more vehicles in coastal areas over 1980 levels (increases of 23 and 27 percent, respectively). Between the mid-1980s and 2000, NOAA estimated domestic water use will increase about 1.5 billion gallons per day (16 percent), the demand for residential energy will increase about 327 trillion British thermal units (12 percent), solid waste generation will increase about 10 million tons (19 percent), and discharges from waste water treatment plants will increase about 2.5 billion gallons per day (18 percent).

Federal Activities May Have Significant Impacts on the Coastal Environment

The federal government exercises considerable influence over coastal resources through its regulatory and financial assistance programs, as well as its direct actions as a user of the coastal zone. Federal programs are as diverse as the uses of the coastal zone, ranging from wilderness preservation to a variety of activities intended to foster economic development.

In 1981, NOAA issued a report that concluded that nearly every federal program affects coastal resources. NOAA focused its review on key federal programs in five areas: (1) development and reconstruction assistance programs; (2) infrastructure development programs; (3)

landholding programs; (4) energy-related programs; and (5) regulatory and planning programs. In each of these areas, NOAA identified conflicts between the federal program activities and coastal environmental management goals. NOAA's report addressed a wide range of issues to improve the administration of federal programs and procedures affecting coastal resources and made detailed recommendations in several areas.

NOAA conducted a similar study in 1985 which concluded that some progress had been made in resolving earlier problems but that much remained to be done. For example, NOAA concluded that federal infrastructure programs and disaster and reconstruction programs could still inadvertently encourage development and population growth in sensitive and otherwise unsuitable areas.

Coastal Areas Are Protected Under Two Key Environmental Statutes

Among the key federal environmental statutes that address coastal resources are two that were enacted, in part, to balance the impacts of federal activities with environmental concerns. These statutes, the Coastal Zone Management Act (CZMA) and the National Environmental Policy Act (NEPA), provide tools for coastal managers to assess the potential environmental impacts of federal activities, identify alternatives to the proposed activities, and, where possible, reduce or mitigate environmental damage where alternatives are not feasible options.

Coastal Zone Management Act of 1972

The Congress enacted CZMA to balance the competing demands of growth and development with the need to protect coastal areas. In enacting CZMA, the Congress declared that it is the national policy "to preserve, protect, develop, and where possible, to restore or enhance, the resources of the Nation's coastal zone. . ."

CZMA is administered by the Secretary of Commerce, with general authority delegated to the Under Secretary of Commerce for Oceans and Atmosphere. Day-to-day responsibility for CZMA has been assigned to NOAA's Office of Ocean and Coastal Resource Management. The act establishes a voluntary, cooperative program to encourage states to exercise their "full authority" over coastal areas by developing Coastal Zone Management (CZM) programs meeting minimum federal standards. In carrying out these plans, federal, state, and local governments; the private sector; and citizens can act in partnership to develop and implement comprehensive programs to protect coastal resources, uses, and values from the pressures of population and development.

CZMA provides two key incentives for states to participate. First, it provides for federal financial and technical assistance to states and local governments during program development and implementation. Second, the federal consistency provisions of CZMA require that federal activities affecting the coastal zone be conducted in a manner consistent with federally approved state coastal zone programs.

The consistency provisions apply to four basic types of activities: direct federal activities, including development projects; federally licensed and permitted activities; Outer Continental Shelf exploration, development, and production plans; and federal assistance to state and local governments. Federal agencies must prepare a "consistency determination" which states whether or not a direct federal activity is consistent with a state's CZM program. The proponent of the other three types of activities must certify that the proposed activity is consistent with the state's CZM program. The determination or certification, together with supporting documentation, must be submitted to the state CZM agency for review and concurrence or objection. If the state objects to the determination or certification, it must describe the basis for its objection as well as how the activity could be modified to be consistent with the state's CZM program. In cases of serious disputes between the state CZM agency and the proponent of an activity, the Secretary of Commerce is authorized to mediate the disagreement.

The federal consistency provisions of CZMA can be effective tools for the states to ensure that federal activities are coordinated with their coastal management programs. While direct federal activities, including development projects, need only be consistent with state coastal programs "to the maximum extent possible," CZMA expressly prohibits federal agencies from granting federal licenses and permits; approving plans for exploration, development, or production on Outer Continental Shelf lands; or approving applications for federal financial assistance unless the state CZM agency concurs with the proponents' consistency certification.

Through fiscal year 1990, 29 of 35 eligible coastal states and territories have chosen to develop coastal management programs and have received federal approval for these programs. Together, the national network of approved state programs covers 94 percent of the nation's coastline, including that of the Great Lakes. Through fiscal year 1990, federal CZMA funding for assistance to eligible states and territories to develop and implement coastal programs totaled about \$657 million.

National Environmental Policy Act of 1969

The Congress enacted NEPA to ensure that the potential environmental effects of proposed federal activities are identified and considered in the decision-making process. While not specifically directed towards the coastal environment, NEPA requires that the applicable federal agency prepare a detailed environmental impact statement (EIS) for every "major" federal action that may significantly affect the quality of the human environment. The EIS is designed to ensure that important environmental impacts will not be overlooked or underestimated before the agency makes a commitment to a proposed action.

The Council on Environmental Quality, established by NEPA, developed regulations implementing NEPA governmentwide. These regulations provide agencies with a process for determining whether or not to prepare an EIS. When an agency is not sure if an EIS is necessary, it prepares an environmental assessment to determine whether to prepare an EIS. If the environmental assessment determines that the proposed action will not significantly affect the environment, the agency prepares a "finding of no significant impact," which explains why the proposed action will have no significant impact on the environment. The Environmental Protection Agency (EPA) is responsible for reviewing agencies' environmental impact statements. Other federal, state, and local agencies and the public may also review and comment on draft environmental impact statements.

When an EIS is required, the regulations state that the EIS shall address the following five issues: (1) the environmental impacts of the proposed action (including the direct, indirect, and cumulative impacts); (2) any adverse environmental impacts that cannot be avoided should the proposed action be implemented; (3) alternatives to the proposed action; (4) the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity; and (5) any irreversible and irretrievable commitments of resources that would occur should the proposed action be implemented.

Objectives, Scope, and Methodology

In an October 1989 letter to us, the Chairman, Fisheries and Wildlife Conservation and the Environment Subcommittee, House Committee on Merchant Marine and Fisheries, expressed concern about whether federal programs are working at cross purposes. The Chairman stated that while the federal government spends millions of dollars trying to protect and improve coastal water quality and coastal management, it may also be aggressively financing and supporting other activities that directly conflict with sensible growth and long-term coastal environmental

quality. On the basis of subsequent discussions with the Chairman's office, we agreed to examine (1) whether federal agencies' activities affecting coastal areas are undergoing required environmental reviews and (2) whether such reviews ensure that all major environmental impacts are considered in deciding whether such activities are to be undertaken.

To address these issues, we (1) examined a variety of studies on coastal zone management and pollution issues; (2) interviewed NOAA, EPA, and selected state agency officials with coastal resource responsibilities; and (3) examined records of federal activities impacting coastal resources. We also interviewed representatives of various environmental organizations concerned with federal activity impacts on coastal resources.

We concentrated our review on federal activities in the coastal zones of California, Florida, Massachusetts, and South Carolina. These states were selected based on their significant projected coastal population growth and to provide geographical representation. We also reviewed federal activities impacting two estuaries—the Chesapeake Bay, the largest estuary in the United States and the subject of a comprehensive restoration and protection program since 1977, and Puget Sound, one of the original participants in EPA's National Estuary Program which focuses on protecting and improving water quality and enhancing resources in nationally significant estuaries. In addition, we reviewed applicable literature regarding the use of comprehensive planning to control further degradation of the Great Lakes.

To address the first objective, we interviewed officials of state CZM and water quality agencies, representatives of local environmental organizations, the Coastal States Organization, and the Natural Resource Defense Council, which identified significant federal activities affecting coastal resources. These interviews and subsequent review of records pertaining to the federal activities disclosed whether agencies' proposed activities were undergoing the required environmental reviews. The federal agencies sponsoring the activities identified were EPA, General Services Administration (GSA), Small Business Administration (SBA), Federal Deposit Insurance Corporation, Department of Transportation, Department of the Interior, Department of the Navy, and the Army Corps of Engineers.

To address the second objective, we analyzed records of federal consistency reviews completed by state CZM agencies and environmental assessments performed by federal agencies to identify disputes

involving the adequacy of coverage of the environmental reviews performed. We also interviewed state, federal, and environmental group officials to obtain detailed information on the disputed issues and to identify any environmental impacts that might have been omitted during the environmental reviews.

We did not attempt to develop a complete universe of all federal activities affecting the coastal environment or the most significant federal activities from a national perspective. Officials from federal and state offices and environmental groups in the four states and two estuaries selected for review identified 20 projects as the most significant federal activities in these areas. Our focus was on reviewing the impacts of these 20 projects on coastal resources and identifying disputes regarding environmental reviews performed on these projects.

Our review was conducted between November 1989 and March 1991 in accordance with generally accepted government auditing standards. EPA, Department of Commerce, and the Council on Environmental Quality provided written comments on a draft of this report. EPA's, Commerce's, and the Council's comments are presented in appendixes I, II, and III, respectively.

Assessments of the Impacts of Federal Activities on Coastal Environmental Quality Are Sometimes Disputed

In our review of four states and two estuaries, we found that while virtually any federal activity may have an impact on the coastal zone, the federal activities most commonly identified in our review as having significant impacts on coastal areas or estuaries were the construction of highways, the dredging of harbors and rivers, and the transfer of federal lands. For example, the direct impacts of the highway construction projects we reviewed included erosion, filling of wetlands, and destruction of wildlife habitats. Examples of indirect impacts associated with the highway construction projects included increased population growth and development caused by improved access to coastal areas.

Two federal statutes—the Coastal Zone Management Act of 1972 and the National Environmental Policy Act of 1969—are designed to promote thorough assessments of the impacts of federal activities on environmental quality. In most of the cases we reviewed, state Coastal Zone Management officials generally agreed that the environmental review processes established by these statutes provided adequate information to assess the environmental impacts of proposed federal activities. In some cases, however, state and federal officials disagreed on (1) whether certain types of activities should have been subject to CZMA review or (2) whether some of the environmental assessments conducted under NEPA adequately considered all significant impacts. In both cases, such disagreements arose more frequently in cases involving activities with indirect impacts on the environment. According to state and federal officials responsible for conducting environmental reviews, indirect impacts are often more difficult for federal agencies to predict, although these impacts may produce the more significant effects.

Federal Activities Can Have Direct and Indirect Impacts on Coastal Areas

Federal activities can impact coastal areas either directly or indirectly. NEPA regulations define direct impacts as those that occur at the same time and place as the activity, while indirect impacts are those that occur at a later time or in a different location than the activity.

In the four states and two estuaries we reviewed, federal and state officials and representatives of local environmental groups identified the significant federal activities affecting coastal resources in their areas. The majority of activities the officials identified involved construction of highways, dredging of harbors and rivers, and transfer of federal lands. The highway construction projects involved widening roads ranging in length from 7 miles to 22 miles. The dredging projects, most sponsored by the U.S. Army Corps of Engineers (Corps), typically involved maintenance dredging needed to ensure safe navigation and

the subsequent disposal of the dredged material. We also reviewed projects involving actual and potential sales of federal properties by the Department of Defense, Federal Deposit Insurance Corporation, GSA, and SBA. Since property sales to private parties can lead to development projects, such sales can indirectly affect the coastal environment.

Direct Impacts

Federal activities that can directly impact the coastal environment include construction of waste water treatment plants, maintenance dredging of harbors and rivers, disposal of dredged materials, and construction of federally funded highways.

Although federally permitted waste water treatment plants remove many pollutants from waste water, these plants can also discharge pollutants, including toxic wastes, into the environment. These discharges can also raise the concentration of nutrients, such as nitrogen and phosphorus, in coastal waters to levels that contribute to massive increases of tiny organisms, often referred to as “green tides” or “red tides,” which can harm or kill other marine organisms.

The Corps has historically been responsible for dredging U.S. harbors to improve navigation and disposing of both contaminated and uncontaminated materials produced as a result of this dredging. Dredging can destroy or alter the habitat of living marine resources if not conducted in an environmentally sound manner. Further, because dredged material is sometimes disposed of in wetland areas or at designated coastal and open ocean-dumping sites, the disposal of dredged material can also damage marine habitat and organisms.

Federally funded highway construction projects can also have direct impacts on the coastal environment. Direct impacts include the filling of wetlands and the removal of vegetation that serves as a natural barrier for filtering sediments from the stormwater runoff that flows into coastal waters.

The direct impacts most commonly associated with the activities identified during our review were the filling of wetlands and those associated with the disposal of dredged material. In two of the dredging projects we reviewed, the dredged sediments contained chemical contaminants and were the subject of dispute. In one of these cases, NOAA efforts to mediate the dispute resulted in a settlement that was environmentally acceptable to state CZM officials. In the other case, the agency involved

agreed to submit an EIS to better assess the environmental impacts of the disposal activity.

Indirect Impacts

Indirect impacts can be less obvious to reviewers of proposed activities and more difficult to predict, avoid, or mitigate. Significant indirect impacts include accelerated population growth and development, which may occur with the construction of a new highway or bridge that improves access to coastal areas. Over the long term, such indirect impacts can be significant.

In addition to the direct impacts described earlier, the construction of waste water treatment plants can also have significant indirect impacts on population growth and development. When sewage treatment capacity is increased, increases in residential and commercial development usually follow.

The indirect impacts associated with Corps navigational dredging projects can include an increase in waterfront development as access for recreational boat traffic is improved. Increased waterfront development can, in turn, degrade coastal water quality due to increased oil residue from boats and nonpoint pollution related to commercial development.¹

Federally sponsored infrastructure programs, such as road and bridge construction, can provide the basis for the large-scale development of coastal areas. The increases in both residential and commercial development that accompany these programs can also lead to increases in both nonpoint runoff and waste water treatment discharges.

The indirect impacts that surfaced in our review commonly involved nonpoint runoff from highways and residential development and the growth-inducing effects associated with construction activities.

¹Nonpoint source pollution is defined as all pollution entering the surface water system from sources other than pipes. Examples include soil eroding into streams, agricultural fertilizer seeping into creeks, and runoff from parking lots adjacent to rivers.

Disagreements Sometimes Exist as to What Types of Federal Activities Are Subject to CZMA Review

The state coastal managers we interviewed were generally satisfied that federal activities were undergoing CZMA consistency reviews as required. Coastal managers in one state noted that to facilitate the review process, they hold formal interagency committee meetings, which include appropriate federal agencies, in the pre-planning stage of a project when it is easier to resolve potential problems. Other coastal managers explained that past problems with federal agencies have since been resolved due to efforts by CZM staff members to educate federal officials on the review process. In one state, for example, the CZM office prepared a consistency handbook to guide federal agency officials through the consistency review process. After this handbook was made available, improvements in federal agency compliance were noted.

Nevertheless, although coastal managers indicated an overall level of satisfaction with their states' consistency review processes, they identified two instances in which the applicability of consistency review requirements was in dispute. First, coastal managers said that the applicability of consistency review requirements to projects that involve so-called paper transactions, such as the lease or sale of federal land or the designation of land for a future use, is being questioned by federal agencies. Second, the applicability of consistency reviews to projects that involve interstate impacts is also in dispute.² In each case, 1990 amendments to CZMA help to clarify whether consistency reviews are required.

Disputes Over Paper Transactions

Until October 1990, CZMA provided that federal activities subject to consistency reviews included federally conducted or supported activities, including development projects, directly affecting the coastal zone. The term "directly affecting" has been the subject of controversy. Disputes have occurred over whether activities such as the lease or sale of federal land or the sale of oil and gas leases are paper transactions that have no direct effect on a coastal zone and, therefore, are not subject to consistency review.

The applicability of CZMA federal consistency review requirements to the sale of federal land by GSA was tested in court. In 1983, a federal district court ruled in *Ono v. Harper*,³ that a land transfer of two missile sites in a coastal zone had no direct effects on the land or water uses of the coastal zone. The court stated that the "mere transfer of title does not

²Federal projects that occur in one state but impact the coastal zone of another state.

³592 F. Supp. 698 (D. Ha. 1983).

directly affect the coastal zone or the state's management program. It does not change the way in which the land is being utilized."⁴ Consequently, a federal consistency review was not required.

In 1984, the United States Supreme Court ruled in Secretary of the Interior v. California⁵ that the Department of the Interior's sale of oil and gas leases on the Outer Continental Shelf are not activities that directly affect the coastal zone and, therefore, are not subject to consistency review under CZMA. The Court reasoned that the sale of a lease grants the right to conduct only very limited, preliminary activities. Full-scale exploration, development, or production may not begin until separate federal approval has been obtained. These latter activities are subject to consistency review, and approval to carry them out may be denied. The Court stated that: "In these circumstances, the possible effects on the coastal zone that may eventually result from the sale of a lease cannot be termed 'direct'."⁶

Since this ruling, other federal agencies interpreted the Supreme Court's decision in a manner that excluded some of their activities from undergoing a federal consistency review. In some cases we reviewed, federal agencies maintained that activities such as land sales and ocean-dumping site designations are paper transactions that do not directly affect the coastal environment. Consequently, the agencies questioned whether these activities are subject to the federal consistency review requirements. Coastal managers generally believe that such activities should be subject to consistency review because any subsequent activities on these lands could well result in significant impacts to coastal resources.

In one case we reviewed, a private developer was able to purchase federally owned land from SBA without going through the federal consistency review process because SBA maintained that the sale alone had no direct effect on the coastal zone. State coastal zone officials later discovered that the developer had built a condominium complex on the land with a septic system which did not meet state guidelines. State evaluation of the applicant's engineering report suggested that the septic tank was sitting in groundwater which served as the complex's drinking water source. The evaluation noted that, under such conditions, bacteria

⁴592 F. Supp. at 700.

⁵464 U.S. 312 (1984).

⁶464 U.S. at 342.

and other contaminants could be discharged into the complex's drinking water. A state coastal zone official told us that these problems would have been avoided if the land transfer had undergone a consistency review.

In cases where subsequent activities need a federal license or permit, the required consistency review may be too late. Coastal managers believe they are in a weaker position to object to activities once the federal agency has leased or designated a property for a specific purpose. For example, until recently, under Secretary of the Interior v. California, consistency reviews of oil and gas lease sales were not required until the leases are sold and the buyer submits an exploration plan. According to one CZM official, at this point, the buyer has already made a considerable investment and the state CZM agency feels compelled to approve the exploration plan. He cited one case in which an oil company spent \$333 million to purchase its lease—before it had any assurance that its drilling plans would be deemed consistent with the state's coastal zone management plan. He noted that, in cases where significant resources have been committed, the coastal zone management agency feels obliged to allow the project to continue regardless of the consistency review findings.

EPA has said in the past that designation of an ocean-dumping site under the Ocean Dumping Act does not authorize any actual dumping operations. Since dumping at designated sites may not take place until additional federal permits have been issued, EPA maintained that designation in and of itself does not directly affect the coastal zone and therefore is not subject to consistency review. In October 1989, however, EPA established an Agency policy in which EPA agreed to voluntarily submit ocean-dumping site designations to consistency review. This policy also states the Agency's belief that the applicability of CZMA requirements to this type of activity is "subject to debate."

Changes to CZMA's consistency provisions enacted in the Coastal Zone Act Reauthorization Amendments of 1990 delete the term "directly" from the definition of those federal agency activities subject to consistency review. Now consistency review includes any activity "within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone." The conference report accompanying the amendments states that the amended provision is intended to overturn the Supreme Court decision in Secretary of the Interior v. California and makes it clear that oil and gas lease sales are subject to federal consistency review. The report states that the amendment also is intended to

make it clear that no other federal agency activities are categorically exempt from the consistency requirement.

NOAA officials believe that the new CZMA language should be helpful in clarifying what federal activities are subject to consistency reviews. Specifically, these officials noted that the new definition of federal activities that are subject to consistency review should dispel the arguments previously submitted to NOAA by agencies that claim that some of their activities were exempt from CZMA consistency review requirements because these activities did not directly affect the coastal zone. These officials are concerned, however, that federal agencies may try to find other reasons for arguing that certain activities do not “affect” the coastal zone and are therefore not subject to consistency reviews.

Disputes Over Projects With Interstate Impacts

Disputes over the authority of a state CZM agency to review the consistency of federal activities arose in two cases where the federal activities in one state affected the land or water uses in the coastal zone of another state. Two states included in our review have attempted to invoke their consistency review authority over federal activities in an adjacent state. In one case, the proposed activity was suspended for reasons unrelated to interstate review authority, and the other case is currently in litigation.

The first case involves a dispute concerning whether South Carolina could require a consistency review of a project located entirely within the state of Georgia. The project, a residential and commercial development project, was proposed for construction on Hutchinson Island, Georgia, an island in the Savannah River between Georgia and South Carolina.

The project developer applied for a dredging permit from the Army Corps of Engineers. The developer did not submit the project to South Carolina for consistency review and the Corps agreed that such submission was not necessary.⁷ Nonetheless, South Carolina CZM officials objected to the issuance of the Corps permit and argued that the project was inconsistent with their state’s CZM plan because the project would produce adverse impacts to South Carolina’s coastal zone. These officials claimed that the proposed dredging needed to construct a marina and access channels for this project would conflict with an earlier Corps

⁷Since Georgia does not have a CZM plan, a consistency determination assessing this project’s effects on the coastal zone of Georgia was not prepared.

project to restore several hundred acres of freshwater wetlands located along a South Carolina river. South Carolina officials also claimed that the state's coastal water quality would be degraded by pollution from marina activities.

The state's objection triggered an analysis of interstate federal consistency review rights under CZMA by the Corps, NOAA, and the Department of Justice. Justice, in response to NOAA's request for comments, advised NOAA that, in its view, CZMA does not allow a state to invoke the consistency provisions of the act for a federal activity that occurs wholly in another state. Justice stated that it had previously taken this position in court proceedings. NOAA disagreed with Justice's position and issued an opinion to the Corps that concluded that South Carolina had a right under CZMA and NOAA regulations to review and object to this activity. The Corps declined to follow NOAA's advice and instead adopted Justice's legal position. The Corps issued the necessary permit to the developer with certain conditions that partially satisfied South Carolina's concerns. According to a South Carolina official, the developer has not proceeded with this project. A state coastal manager we interviewed explained that, should the developer proceed with this project, the state would likely take legal action against the Corps to halt the project.

The other case involves a Corps project to reallocate water used for generating electricity from Lake Sidney Lanier to Atlanta, Georgia, where the water will be used for municipal and industrial water supply. This lake, located in Georgia, drains into a river that flows through Alabama and the coastal zone of Florida. Florida officials contend that the Corps water diversion project will reduce the flow in this river which, in turn, will degrade or destroy shellfish areas, wetlands, and other coastal resources in their state. The Corps has not prepared a consistency determination for this project. Florida has initiated legal action to participate in a law suit filed by Alabama against the Corps.⁸ Florida's action is based, in part, on the Corp's failure to submit the project to be reviewed for consistency with Florida's CZM program. At the time of our review, the states of Florida, Alabama, and Georgia along with the Corps are attempting to settle the lawsuit by revising a Memorandum of Understanding to modify the original Corps plan and avoid adverse impacts to Florida and Alabama waters.

⁸Alabama is suing the Corps, in part, on the basis that the Corps did not comply with NEPA.

Although the Coastal Zone Act Reauthorization Amendments of 1990 did not specifically refer to interstate consistency, the amendments provide that “each federal agency activity within or outside the coastal zone” is subject to consistency review. The objective of this amendment, as described in the conference report, is to establish that any federal agency activity, regardless of its location, is subject to CZMA review requirements if it will affect the coastal zone of a state with an approved CZM plan. While the amendment was specifically designed to overturn *Secretary of the Interior v. California* and dispel its shadow effect, the language also supports NOAA’s longstanding interpretation that federal agency actions within one state that affect the coastal zone of another state are subject to consistency review.

According to NOAA officials, despite the CZMA amendments, some federal agencies will likely continue to maintain that some of their agencies’ activities are not subject to the CZMA consistency provisions. According to these officials, federal agencies that have historically maintained that their activities are not subject to the consistency provisions will likely try to find a loophole in the amendment’s language. As a consequence, these disputes may have to be settled in the courts.

Disagreements Exist as to the Adequacy of Environmental Reviews Performed Under NEPA

As noted in chapter 1 of this report, the NEPA review process was developed to help public officials make decisions based on a thorough understanding of the environmental consequences of proposed activities. Under the NEPA environmental review process, both the direct and indirect impacts of federal activities must be assessed. For most of the projects we reviewed, there was little dispute as to whether federal agencies undertook the actions required by NEPA. However, we identified several cases in which disputes occurred about the adequacy of the environmental reviews—particularly regarding how well indirect impacts were assessed and considered in project decisions. This problem can be attributed, at least in part, to the difficulty of predicting indirect impacts. Moreover, little guidance is available to federal agencies to assist them in making these assessments.

With regard to the adequacy of environmental reviews conducted under CZMA, none of the state coastal managers we interviewed surfaced any concerns in this area. Instead, as noted earlier, disputes surrounding CZMA consistency reviews focused on if certain federal activities were subject to review. Coastal managers explained that the lack of disputes over the adequacy of the review process is probably attributable to the fact that a great deal of informal negotiation takes place between the

CZM agency and federal agency prior to the actual review. In most cases, this negotiation allows early resolution of conflicts that arise over whether the project is consistent with the state's plan.

Examples of Disagreements Over the Adequacy of NEPA Environmental Reviews

During our site visits, we identified several cases in which the adequacy of environmental reviews was the subject of disagreements and, in some instances, litigation. Although the cases we reviewed varied considerably and involved different federal agencies, most of them focused on the extent to which indirect impacts were assessed.

In two cases, environmental groups or state officials also questioned the adequacy of the agency's assessment of direct impacts. In the case of a project involving the planned expansion of a naval base, an environmental group claimed that the Navy did only a cursory review of direct impacts and thus did not adequately assess the potential for destruction of wildlife habitats and the possible disturbance of existing hazardous waste sites. In a case involving a Navy project designed to test the effects of electromagnetic pulses on ships' electrical and electronic equipment, state officials expressed concern that the Navy did not adequately assess the project's potentially lethal effects on fish, birds, and shellfish.

While assessments of direct impacts were sometimes at issue, most of the cases we identified had disputes involving the adequacy with which indirect impacts were assessed. For example, in a case cited earlier as an instance in which the need for a CZMA consistency review was disputed, environmental officials in Florida and Alabama also disputed the adequacy of the NEPA environmental assessment, prepared by the Corps of Engineers. The proposed project would divert water from current hydroelectric use in Lake Sidney Lanier in Georgia to supply water to the metropolitan Atlanta area. Alleging that the indirect impacts of this project on their respective states have not been adequately addressed in the environmental assessment, Alabama and Florida have initiated legal action to halt this project until a complete assessment of the indirect impacts to their states' waters has been completed. Also at issue in this case is the Corps' finding of no significant impact in its environmental assessment of this project. Under NEPA procedures, this determination precluded the need for the Corps to prepare an EIS, which would have provided more detail about the impacts of the project and a fuller opportunity for Alabama and Florida to comment on the project.

Another case cited by environmental officials involved dredge and disposal operations associated with the construction of a Navy base in Puget Sound, Washington. The Navy planned to dredge material from a bay and dispose of this material in a deep water disposal site in Puget Sound. Some of the dredged material was known to contain certain chemical contaminants, and environmental groups claimed that the dredged material contained toxic wastes. The Navy planned to cover the site with a cap of "clean" material to prevent contamination of the water and marine life surrounding the disposal site. The Corps granted the Navy a dredge and fill permit for this operation. Environmental groups challenged this project, in part, on the basis that the indirect impacts of the proposed activity were not adequately addressed in the project's environmental impact statement. Specifically, these groups were concerned that the integrity of the cap to prevent contamination of the surrounding environment over a long period of time was not proven.

Questions Raised Over
How Well Highway
Construction Projects
Consider Indirect Impacts

Assessment of indirect impacts has also been an issue in highway construction projects. It is generally acknowledged that highway construction projects can induce significant growth and development. Increases in commerce, industry, and residential development, which tend to locate along transportation routes, usually accompany highway construction or expansion projects. For example, in one case we reviewed, a federal official described a highway construction proposal as having the potential to spur the construction of large numbers of homes in a previously undeveloped rural area.

Disagreements over how well indirect impacts were assessed occurred in two highway construction projects we reviewed. In one case, for example, federal and state agencies expressed concern that the EIS for a proposed highway did not sufficiently address the highway's impact on population growth and development along the proposed highway corridor. A decade after construction began, the area along the corridor of this highway has filled with business parks, and population growth in the area has greatly increased. In another case, a state CZM official reviewing an impact statement for a highway construction project described the assessment as "appalling" because it failed to assess the tremendous growth impacts the highway would have. In the latter case, the state CZM office found that the re-routing and expansion of this highway would have "a significant growth-inducing" effect and predicted that population growth would exceed state planning limitations established for this area by 100 percent. In response to these and other concerns, the highway was redesigned from four lanes to three.

To recognize the need to ensure that measures are taken to minimize the adverse environmental effects of transportation construction activities, in April 1990, the Federal Highway Administration issued a long-term environmental policy statement that enumerates several goals to minimize the adverse environmental impacts of highway construction projects. These goals include (1) promoting the integration of land use transportation and environmental planning; (2) encouraging states, metropolitan planning organizations, and local governments to identify and consider environmental concerns during the development of transportation plans; (3) ensuring full and objective consideration of all reasonable alternatives that avoid adverse impacts to environmentally sensitive areas; and (4) ensuring that all necessary steps are taken to avoid or minimize the adverse effects of highway projects on parklands, air, farmland, energy, fish and wildlife, water quality, and endangered species.

The disagreements about the adequacy of the indirect impact assessments for highway construction projects, as well as the disputes about the adequacy of indirect impact assessments for other federal activities, underscore the difficulty of conducting such analyses. As discussed in the following section, one factor contributing to the problem of inadequate assessments is the lack of clear guidance under NEPA as to how these impacts should be addressed.

Little Guidance Available on How to Assess Indirect Impacts

Federal and state officials we interviewed generally agree that predicting and assessing indirect impacts is difficult. According to these officials, there are many uncertainties involved in predicting and assessing impacts that are removed from a project in time and/or place. Although NEPA regulations require environmental assessments to consider indirect impacts, little guidance is available to federal agencies to assist them in this effort. For example, although the Council on Environmental Quality has issued guidance to federal agencies on identifying the types of impacts an EIS should address, the guidance provides little information on how these impacts can best be assessed. Similarly, NOAA's guidance to federal agencies contains little information about how indirect impacts should be assessed.

The need for federal guidance in this area may increase because the 1990 amendments to CZMA require coastal managers to begin assessing indirect impacts in conducting federal consistency reviews. Specifically, the act provides that any federal agency activity "that affects any land or water use or natural resource of the coastal zone" is subject to the

consistency review process. The conference report accompanying the amendments states that it is the conferees' intent that the term "affecting" be construed broadly, including direct effects that are caused by the activity and occur at the same time and place, and indirect effects that may be caused by the activity and are later in time or further removed in distance but are still reasonably foreseeable. With this provision, it becomes increasingly important to develop federal guidance on ways to assess indirect impacts. Officials from both the Council on Environmental Quality and NOAA acknowledged that additional guidance to federal agencies on how to assess indirect impacts would be beneficial.

Conclusions

For many years, differing interpretations of CZMA requirements led to disagreements as to whether certain types of federal activities—particularly those involving paper transactions and those with interstate impacts—were subject to the act's federal consistency provisions. The 1990 amendments to this act have, to some extent, addressed this issue by requiring that all federal agency activities that affect the coastal zone undergo consistency review. Previously, the act had only focused on activities that have a direct effect on the coastal zone. However, according to NOAA officials, the amended language may still leave some doubt in the minds of federal officials as to whether their specific activities have an effect on land or water uses in a state's coastal zone. Indeed, these officials told us that they expect some federal agencies to continue to argue that their particular activities do not affect the coastal zone at all. Consequently, we believe that the act's implementing regulations need to clearly define the types of federal activities that are subject to CZMA's consistency provisions.

Although NEPA requires federal agencies to include indirect impacts in their environmental assessments, little guidance has been developed to assist federal agencies in developing such assessments. Disagreements between state coastal managers and federal agencies often focus on the adequacy of assessments of indirect impacts. Much of the controversy could be avoided through the development of better guidance on methods to identify and assess the indirect impacts of federal activities on the coastal environment. With the recent change in CZMA requirements to require states to begin assessing indirect impacts in the federal consistency review process, federal guidance to assist states in this effort has become even more important.

Recommendations

We recommend that the Secretary of Commerce direct the Administrator, NOAA, to ensure that regulations currently being developed to implement the Coastal Zone Act Reauthorization Amendments of 1990 clearly address those activities that have historically been the subject of disputes between state coastal managers and federal agencies and stipulate whether such activities are normally expected to affect a coastal zone and are, therefore, subject to CZMA consistency provisions.

We also recommend that the Secretary of Commerce direct the Administrator, NOAA, in consultation with the Council on Environmental Quality, to develop and issue additional guidance on how to conduct environmental assessments of the indirect impacts of proposed federal activities in the coastal zone.

Agency Comments and Our Evaluation

The Department of Commerce agreed that additional guidance is needed to assess the indirect impacts of proposed federal activities on the coastal zone and said that the agency will address this need. Commerce, however, disagreed with our recommendation that NOAA ensure that regulations to implement the Coastal Zone Act Reauthorization Amendments of 1990 clarify whether certain disputed federal activities are subject to CZMA's consistency provisions. Commerce believes that the changes made to the consistency provisions by the 1990 amendments merely codify NOAA's existing interpretation of these provisions, with the exception of the amendment that states that oil and gas lease sales on the Outer Continental Shelf are subject to consistency review under CZMA. In this regard, Commerce stated that the Minerals Management Service of the Department of the Interior, which is responsible for off-shore leasing, has already begun to revise its procedures to comply with the new provisions. Consequently, Commerce does not believe that these changes require revising the implementing regulations as we recommend.

Our review disclosed that, in the past, several federal agencies have maintained that some of their activities are not subject to CZMA consistency provisions. NOAA officials expect some agencies to continue to argue that certain activities are not subject to these provisions. As a result, we maintain that NOAA should revise its regulations to clarify whether federal activities that have been the subject of past disputes are subject to consistency review.

Both EPA and the Council on Environmental Quality agreed with our recommendations. The Council on Environmental Quality also said that it is

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Assessments of the Impacts of Federal
Activities on Coastal Environmental Quality
Are Sometimes Disputed

willing to assist NOAA in developing and issuing more guidance on how to assess the indirect effects of federal activities on the coastal zone. (See app. I, II, and III for further discussion of the agencies' comments.)

Long-Range, Comprehensive Plans Would Improve States' Ability to Assess Cumulative Impacts of Federal Activities in Coastal Regions

While it is important to evaluate the impacts of specific activities on the coastal environment, having long-term, areawide plans is also important so that the cumulative effects of individual activities can be taken into account. Comprehensive plans that address environmental—as well as social and economic—goals for a region and the infrastructure needed to support growth could help decision makers in assessing the cumulative impacts of both federal and nonfederal activities on coastal resources. Thus, comprehensive plans could help ensure that development and environmentally sensitive resources coexist.

We found that significant growth-related problems have occurred in coastal areas where comprehensive planning has not taken place, or where such planning took place only after significant development has occurred. We also found that where states have developed comprehensive plans for coastal areas, coastal managers have been better equipped to assess the long-term, cumulative impacts of proposed activities. When comprehensive plans are integrated into state CZM programs, the state's ability to control activities adversely affecting coastal areas is increased. Although the CZMA has always encouraged participating states to develop comprehensive plans, NOAA guidance to states on planning contains little information on how to assess the cumulative impacts of proposed activities.

Lack of Comprehensive Planning Often Results in Serious Environmental Degradation

There are a number of examples where lack of comprehensive planning has contributed to environmental problems in coastal areas. In these cases, population growth and new development were allowed to occur without considering the cumulative impacts of individual activities. In the examples discussed below, comprehensive planning was undertaken, but only after considerable damage had occurred. As a result, costly remedial action was required that has still not fully reversed the damage.

Great Lakes

Years of urbanization, industrial development, and agricultural activities have deteriorated the water quality of the Great Lakes. As large-scale logging operations blocked feeder streams, spawning areas, and rivers with tree pulp and sediment, the natural flow of water was disrupted, filling the lakes with pulp and heavy particulates. Untreated domestic and industrial wastes from growing population centers added to the deterioration of water quality.

Despite their size, the Great Lakes have been especially sensitive to pollution. Because less than 1 percent of the total volume of water in the Great Lakes flows out the St. Lawrence River each year, toxic pollutants are left to accumulate in bottom sediments and fish. Concentrations of toxic wastes have affected aquatic life and the natural food chain. The relatively closed nature of the system has made the Great Lakes vulnerable to pollution over the long-term, and their huge volume of water has made reversal of pollution problems very difficult.

To deal with this problem, Canada and the United States signed the first Great Lakes Water Quality Agreement in 1972 "to restore and maintain the physical, chemical, and biological integrity of the Great Lakes Basin ecosystem." Under this agreement, the parties agreed to develop a systematic and comprehensive approach to identify specific actions necessary to control existing sources of pollution, abate environmental contamination already present, and restore beneficial uses of the waters. Although this agreement has been in place for almost 20 years, we reported, in September 1990, that progress has been slow in cleaning up the Great Lakes.¹

Chesapeake Bay

Activities similar to those in the Great Lakes have also impaired the environmental quality of estuaries and coastal regions. In the Chesapeake Bay area, several incidents have focused public attention on environmental problems. Declines in submerged aquatic vegetation have affected valuable fisheries, bottom-dwelling organisms, and waterfowl populations; numerous shellfish beds have been closed because of bacterial contamination; and contamination of sediments and organisms by metals and organic chemicals is severe in local areas. Many of these problems are caused by pollutants originating from municipal sewage treatment plants and from agricultural runoff. Other pollutants enter the Bay from industrial sources and from urban runoff.

In response to concerns about the environmental quality of the Bay area, the Chesapeake Bay Program began in 1977 as a federal-state partnership, involving Maryland, Virginia, Pennsylvania, and the District of Columbia. This program is intended to address the complexity of problems and multiple responsibilities for activities affecting the environmental quality of the Bay area. A recent program initiative involves

¹Water Pollution: Improved Coordination Needed to Clean Up the Great Lakes (GAO/RCED-90-197, Sept. 28, 1990).

developing and implementing plans for managing the effects of population growth and development in the Bay region. Although initiatives to restore the Bay have been developed and implemented, it is still too early to determine the effectiveness of these measures.

Puget Sound

Other coastal regions have also suffered from the cumulative effects of individual activities. The environmental degradation of Puget Sound, for example, is reflected in the fact that some areas in this estuary have been designated as Superfund sites. High concentrations of toxic metals and organic chemicals have made a section of the Sound one of the most contaminated sites in the country. In addition, large parts of commercial shellfish beds have been closed because of bacteria contamination. These impacts have arisen from waste disposal practices and from nonpoint pollution. Over 400 municipal and industrial pipelines discharge significant quantities of pollutants into the Sound. Runoff from agricultural lands, forests, and urban areas is also a major contributor of pollutants to the Sound.

To deal with pollution problems from multiple sources, the state of Washington created the Puget Sound Water Quality Authority in 1983 to manage and protect water quality in the Sound. In 1985, EPA initiated the Puget Sound Estuary Program which is jointly managed by EPA, the Authority, and the Washington State Department of Ecology. The Puget Sound program focuses on (1) identifying and prioritizing known environmental problems, including those associated with chemical contamination in the Sound; (2) developing an information base that incorporates scientific data on estuarine processes, current environmental conditions, and changes to those conditions; and (3) developing a coordinated approach to estuarine management for the effective and timely resolution of environmental problems. The program finalized its comprehensive conservation and management plan for the estuary in December 1990.

Cape Cod

Barnstable County, Massachusetts, an area commonly known as Cape Cod, is located in this state's coastal zone. Rapid population growth transformed Cape Cod from a group of rural villages into a suburban community with regional problems. These problems included increased housing, traffic congestion, waste disposal, and contamination of coastal waters. Historically, no mechanism existed on Cape Cod for making land use decisions on a regional basis, and development projects in one town could easily affect adjoining towns.

Regional impacts of local activities are particularly important on Cape Cod since the area relies on a sole-source aquifer for its water supply. The water table on Cape Cod is near the surface and the soil is highly permeable, making the area especially vulnerable to groundwater pollution. Four landfills on Cape Cod have been cited by the state as potential threats to drinking water supplies and the environment.

In January 1990, Massachusetts enacted a law to address the need for regional-level, comprehensive planning for development activities on Cape Cod. This law established a 19-member regional land use planning and regulatory commission with authority to control projects that have impacts beyond a local area and to regulate development projects proposed to take place within designated districts of critical planning concern.

Comprehensive Plans Are Not Always Integrated Into State CZM Programs

While the use of comprehensive plans has increased for specific coastal areas, policies vary on the statewide use of such plans. In recent years, some state and local governments have become increasingly aware of the environmental damage that can result from the cumulative impacts of individual activities in coastal areas. Recognizing the environmental problems caused by uncontrolled growth, these state and local governments have established comprehensive plans for their coastlines. Others, however, have not yet evaluated development-oriented activities within the context of an overall plan. Further, even where comprehensive plans have been developed, these plans are not always integrated into state CZM programs. If the plans were integrated into CZM programs, the states would have increased authority to restrict federal activities in coastal areas because these activities would be subject to the CZMA consistency provisions.

In 1985 and 1986, Florida revised its "Local Government Comprehensive Planning and Land Development Regulation Act." Under these revisions, the state established statewide goals, policies, and guidelines for use by local governments in developing detailed comprehensive plans for their areas. Among the factors that the state requires local comprehensive plans to address are (1) how and when approved infrastructure projects will be completed to meet the needs of future development, (2) hurricane and erosion hazards, and (3) wetlands protection.

According to Florida state officials, the local comprehensive plans are not linked to the state's CZM program and, therefore, federal activities are not required to be consistent with the local plans. Although the state

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reviews proposed federal activities for consistency with local plans and can object to a proposed federal activity,² the federal agency is not bound by the state's objection. In contrast, if the plans were part of Florida's CZM program, the state would have greater authority to restrict federal activities that are inconsistent with state plans. Similarly, Massachusetts would have greater authority to restrict federal activities in its coastal areas if activities affecting Cape Cod were integrated into the state's CZM program.

California's 1976 Coastal Act was enacted to provide for the conservation and development of California's coastline. The act established (1) the California Coastal Commission as a permanent state CZM agency and (2) polices to guide coastal zone conservation and development decisions. The act also created a unique state and local government partnership to assure that public concerns of statewide importance are reflected in local decisions about coastal development. This partnership is achieved through the development of Local Coastal Programs by each of California's coastal cities and counties. Local programs consist of a land use plan, zoning ordinances, and other implementing actions to protect coastal resources and set rules for future development.

Unlike the programs just described, California's Local Coastal Programs are part of the state's CZM program and, as such, have provided criteria for determining the consistency of proposed federal activities with the state CZM program. In one notable case, the California Coastal Commission initially rejected a proposed, federally supported, 4-lane highway in San Mateo County that was intended to replace a 2-lane highway. The Commission objected to the proposed highway, in part, because its increased capacity was projected to accelerate growth in the area at a level that was inconsistent with the Local Coastal Program for the area. This Local Coastal Program required the Commission to consider the long-term impacts of this project and to determine whether population growth beyond that anticipated in the local program would be acceptable. A scaled-down version of the proposed highway was ultimately approved by the Commission.

South Carolina intends to integrate local comprehensive plans into its CZM program. In 1988, South Carolina amended its Coastal Zone Management Act to require each of the state's coastal communities to develop and implement comprehensive management plans, including land use

²This review is accomplished under Executive Order 12372, Intergovernmental Review of Federal Programs.

controls, for their beachfront areas. A state coastal manager said that once these local plans are developed, they will be integrated into a state-wide comprehensive management plan and incorporated into the state's CZM program. Once this integration takes place, the state will have the authority to object to federal activities that are inconsistent with its comprehensive plans.

Coastal Zone Management Act Amended to Encourage Comprehensive Planning

In 1972, the Congress envisioned that a primary purpose of CZMA was to control land use activities that have a direct and significant impact on coastal waters. In considering reauthorization of CZMA in 1990, the Congress concluded that this basic underlying purpose of the act had not been effectively implemented. As a result, the Congress included provisions in the Coastal Zone Act Reauthorization Amendments of 1990 to require state CZM programs to more clearly focus on controlling land use activities and to encourage state CZM programs to improve in certain areas, such as the assessment of the cumulative impacts of activities affecting coastal areas.

The 1990 amendments require each participating state to develop a "Coastal Nonpoint Pollution Control Program" to implement land use management measures for controlling nonpoint source pollution.³ The amendments authorize state grants totaling \$42 million over 4 years to help states develop programs to deal with nonpoint source pollution problems and provide that states that do not develop such programs will have their annual CZM implementation grants cut by up to 30 percent. In developing nonpoint source pollution programs, states are required to identify (1) land uses that may, individually or cumulatively, contribute to degradation of coastal waters; (2) critical areas in the coastal zone within which new land use activities will be subject to land use management measures; and (3) outstanding resource waters within the coastal zone to serve as a signal that land use activities must be particularly sensitive to pollution problems.

The 1990 amendments also encourage each participating state, through a "Coastal Zone Enhancement Grants" Program, to continually improve its CZM program in one or more of eight areas: (1) managing and protecting coastal wetlands, (2) reducing threats to life and property from natural hazards, (3) improving public access to coastal areas, (4) reducing marine debris, (5) assessing cumulative and secondary impacts

³The 1990 amendments to CZMA specify that these programs shall be coordinated closely with state nonpoint programs established under section 319 of the Clean Water Act.

of coastal growth and development, (6) preparing special area management plans, (7) planning for the use of ocean resources, and (8) siting of coastal energy and government facilities. The amendments authorize annual funding of up to \$10 million for this program and specify that state participation in this program is voluntary.

Little Guidance Available on How to Address Cumulative Impacts

NOAA officials that we interviewed agreed that long-range, comprehensive plans would help states better manage the cumulative effects of activities on the coastal zone. Such plans would allow states to determine not only what types of activities should occur in a specific area but also how much of a particular activity is environmentally acceptable. These plans would, in turn, provide a basis for determining the cumulative impacts of an individual activity on a coastal area and for judging whether these impacts are acceptable.

The Chief of NOAA's Coastal Programs Division told us that a good comprehensive plan should address all of the issues that affect the coastal zone—including erosion control, hazards management, pollution reduction, recreational access, and the effects of growth and development—in an integrated manner. According to this official, most of the states with federally approved CZM programs do some form of land-use planning; however, only about one-third of these states have good comprehensive plans. This official said that two of these states do a particularly good job assessing the cumulative impacts of projects based upon their comprehensive plans.

To encourage states to do comprehensive planning, NOAA issued guidance in the mid-1970s on how to develop comprehensive plans. This guidance contains little information about how to assess the cumulative impacts of activities on the environment, and the Chief of NOAA's Coastal Programs Division acknowledged that this guidance should probably be updated and expanded in order to better address such assessments. Moreover, this official also acknowledged that, although NOAA has helped states share information about coastal zone management in the past, NOAA could better facilitate the exchange of information between states regarding techniques for using comprehensive planning to better assess cumulative impacts.

In consideration of the recent CZMA amendments, NOAA plans to issue guidance to states on how to develop and implement nonpoint source pollution programs and guidance related to the eight management improvement areas of the Coastal Zone Enhancement Grants program.

At this time, NOAA officials are in the early stages of developing this guidance and are not certain how this new guidance will address the assessment of cumulative impacts.

Conclusions

If recent trends continue, stresses on coastal resources, occasioned by population growth and new development, can be expected to continue well into the next century. While it is important to assess the immediate impacts of individual activities on coastal resources, the cumulative impacts of these activities should also be considered in the decision-making process. The development and use of comprehensive land and water use plans would provide coastal managers with a tool for assessing the long-term and cumulative impacts of activities affecting coastal resources. Use of this planning tool would also improve the ability of coastal managers to intelligently balance economic development and environmental protection goals in coastal regions.

Historically, comprehensive planning requirements for coastal areas have generally been invoked in reaction to significant environmental degradation or population growth that threatens environmental resources. At the federal level, the Great Lakes, Chesapeake Bay, and National Estuaries programs were all established in response to significant environmental problems in the affected waters. However, these programs were established only after serious environmental degradation had occurred and, as a result, costly remedial action will be needed to reverse past damages. While the four states we reviewed all had some form of comprehensive planning in place, these plans were well-integrated into state CZM programs in only one of the four cases.

The 1990 amendments to CZMA that require states to develop programs to address nonpoint source pollution and encourage state CZM programs to improve in certain areas, such as the assessment of the cumulative impacts of activities affecting the coastal zone, are a step in the right direction. These amendments provide states with an opportunity to take preemptive action by providing a basis for developing comprehensive plans for coastal areas that not only address pollution from nonpoint sources, but also establish long-term goals for all coastal areas, and plans to achieve these goals. Linking the comprehensive plans to state CZM programs would provide states authority to object to proposed federal activities that are inconsistent with the comprehensive plans.

Existing NOAA guidance to states on how to develop comprehensive plans is not current and could better address the assessment of cumulative

impacts. With better guidance on comprehensive planning, more states would be in a better position to assess the cumulative impacts of activities on the coastal zone. In addition, states could also benefit from exchanging information with other states that have developed comprehensive plans that effectively address the assessment of cumulative impacts.

Recommendations

We recommend that the Secretary of Commerce direct the Administrator, NOAA, to improve assistance to the states on how to address the cumulative impacts of activities on the coastal zone. In this regard, NOAA should (1) update and expand its existing guidance on how to develop comprehensive plans, with emphasis on identifying and assessing cumulative impacts, and (2) better facilitate the exchange of information between states on innovative and effective techniques for using comprehensive planning to better assess cumulative impacts.

Agency Comments and Our Evaluation

Commerce agreed that additional guidance is needed to help assess the cumulative impacts of federal activities on the coastal zone. However, Commerce did not say whether the agency will address this need by providing additional guidance to states on comprehensive planning. We believe that comprehensive plans can be an effective tool for addressing the cumulative effects of activities on the coastal zone. In this regard, we continue to believe that NOAA should update and expand its guidance to states on comprehensive planning and better facilitate the exchange of information among states on innovative and effective techniques for using these plans to address cumulative impacts.

EPA and the Council on Environmental Quality generally agreed that additional guidance is needed to help assess cumulative impacts. EPA noted that, together with the Council on Environmental Quality and other organizations, it is preparing a guide to assist federal agencies in addressing cumulative impacts. (See app. I, II, and III for a further discussion of the agencies' comments.)

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

APR 4 1991

OFFICE OF
POLICY, PLANNING AND EVALUATION

Mr. Richard L. Hembra
Director, Environmental Protection Issues
Resources, Community, and Economic Development Division
General Accounting Office
Washington, D.C. 20548

Dear Mr. Hembra:

The Environmental Protection Agency (EPA) has reviewed the General Accounting Office (GAO) draft report entitled "Coastal Pollution: Environmental Impacts of Federal Activities Can Be Better Managed." In accordance with Public Law 96-226, I am hereby providing the formal Agency response to the draft report.

GAO has examined whether federal agency activities affecting coastal areas are undergoing required environmental reviews and whether such reviews ensure that all major environmental impacts are considered in the decision-making process. To examine these types of federal activities, GAO focused primarily on two federal statutes: the Coastal Zone Management Act (CZMA) and the National Environmental Policy Act (NEPA). The Coastal Zone Act Reauthorization Amendments of 1990 brought into focus the importance of proper management of the territorial sea and the exclusive economic zone, as well as control of land use activities which result in nonpoint source pollution of coastal waters. Because the report was drafted before CZMA reauthorization, many of the issues cited by GAO have since been resolved and clarified.

Specifically, the report focuses on cases where federal agencies have contended that certain activities were not subject to CZMA consistency review requirements because they did not "directly" affect the coastal zone. The 1990 CZMA amendments, however, now require federal agencies to ensure consistency with state coastal zone management programs of all federal activities in

Appendix I
Comments From the Environmental
Protection Agency

See comment 1.

or outside of the state's coastal zone that affect land or water use or natural resources in the coastal zone, regardless of whether their impact is direct or indirect. For example, GAO cites the federal government's past practice of not obtaining a consistency certification for outer continental shelf oil and gas lease sales. Oil and gas lease sales were targeted during reauthorization. Under the present law, the Department of Interior would clearly be required to ensure consistency prior to conducting a lease sale that affects land or water use or natural resources in the state's coastal zone.

The problems identified by GAO concerning NEPA primarily involve the adequacy of the cumulative (direct and indirect) impact analysis included in the NEPA document. While the NEPA discussion should be expanded to clarify its purpose and intent, we agree with the report's conclusion that little guidance is available for states to evaluate the cumulative impacts of various activities on the coastal zone. The report recommends that the National Oceanic and Atmospheric Administration (NOAA) be directed to develop guidance and provide assistance to address this need. NOAA should directly coordinate their identification of covered actions with the federal programs involved in consistency reviews. In addition, all levels of government, including federal, state, and local agencies, should be encouraged to improve their ability to assess and manage indirect and cumulative effects of individual activities. Attention by a single federal agency is unlikely to improve our capabilities in this area.

See comment 2.

To this end, EPA, the Council on Environmental Quality (CEQ), and the National Science Foundation are funding a World Wildlife Fund/Conservation Foundation project to prepare a guide for environmental managers to improve the manner in which programs address the cumulative nature of environmental problems. The guide proposes a framework for evaluating how environmental management programs currently account for cumulative impacts and how they could do so more effectively. The guide is presently in draft form.

Whether or not cumulative impacts fall under an agency's jurisdiction, NEPA requires the disclosure of such impacts in order for the public and decision-makers to be well-informed. However, while an agency must consider environmentally preferable alternatives, NEPA does not require an agency to select environmentally preferable alternatives, avoid impacts, or provide compensatory mitigation. Under NEPA, the agency is required to identify mitigation capable of reducing identified impacts to a level below significance, but not necessarily to implement such mitigation. The strongest mitigation requirements are often embodied in a federal agency's own regulations, such as the U.S. Army Corps of Engineers' requirement that fish and wildlife impacts attributable to federally-funded construction be offset. Thus, perfecting the process of environmental impact analysis does not guarantee a reduction in adverse impacts, although it provides the agency with crucial information.

Appendix I
Comments From the Environmental
Protection Agency

An equally important management tool may be long-range plans for coastal zones. Such plans have the potential to help minimize adverse environmental effects, particularly if they incorporate growth management elements for states with high rates of growth. However, federal agencies often attempt to separate proposed federal actions as much as possible from the local planning process, assuming that growth, planned or unplanned, would occur with or without the proposed federal development. These agencies often take the position that, from a policy and legal perspective, it is not their role to question local decisions as to how to spend federal funds. Overall, a reluctance to address long-range planning may be understandable given the highly charged economic and political debates which surround questions of local growth.

See comment 3.

The draft report does not identify several agencies whose activities also affect the coastal zone: the U.S. Coast Guard (through administration of shipping lanes and oil spill contingency plans), the National Marine Fisheries Service (through the administration of fishery management plans), the U.S. Forest Service (in cases where National forests are contiguous with the coastline or encompass watersheds with substantial coastal drainage), and the Federal Energy Regulatory Commission.

See comment 4.

Finally, the report refers to various examples of federal activities that impact the coastal environment. Without the actual project names and locations it is difficult to verify the accuracy of the statements. Referencing those projects would improve the clarity of the report.

See comment 5.

Page-by-page comments are enclosed. In addition, draft copies are being returned to you under separate cover containing editorial comments in the margins. Thank you for the opportunity to respond to the draft report.

Sincerely,


Richard D. Morgenstern
Acting Assistant Administrator

Enclosure

The following are GAO's comments on the Environmental Protection Agency's letter.

GAO Comments

1. We agree with EPA's comments that the provisions of the Coastal Zone Act Reauthorization Amendments of 1990, as discussed in our report, are intended to clarify that all federal agency activities are subject to consistency requirements if they affect natural resources, land uses, or water uses in the coastal zone. However, our review disclosed that several agencies have maintained that their activities are not subject to consistency requirements, and NOAA officials told us that these agencies may continue to argue that their activities are not subject to these requirements. Therefore, we continue to believe that NOAA should revise its regulations to clearly address those activities that have historically been the subject of disputes and stipulate whether such activities are subject to CZMA consistency provisions.

2. Given the difficulty involved in assessing the cumulative impacts of activities on the environment, we support EPA's current efforts to help federal agencies improve these assessments. In addition to these efforts, however, we believe that comprehensive land and water use plans would provide coastal managers with a valuable tool for assessing the long-term and cumulative impacts of activities affecting coastal resources. In this regard, we continue to believe that NOAA, given its responsibilities for CZMA, should improve assistance to states on how to develop comprehensive plans that address cumulative impacts in coastal areas.

3. We realize that many of the issues addressed by comprehensive plans, such as land use issues, are the responsibility of state and local governments. Accordingly, we do not suggest that federal agencies need to become involved in state and local land use planning issues. However, we continue to believe that NOAA, as the agency responsible for administering CZMA, should improve assistance to states in developing and using comprehensive plans to help assess the cumulative impacts of federal activities on the environment.

4. As stated in our report, we did not attempt to develop a complete universe of all federal activities affecting the coastal environment. Instead, our review focused on the most significant federal projects occurring in the four states and two estuaries selected for our review.

5. Our intent was not to identify and publicize the merits of specific projects but rather to use these projects to obtain insights about the adequacy of environmental reviews.

Comments From the Department of Commerce

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



UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Administration
Washington, D.C. 20230

APR 3 1991

Mr. Richard L. Hembra
Director, Environmental Protection Issues
Resources, Community and Economic
Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Hembra:

Thank you for your letter requesting comments on the draft report entitled, "Coastal Pollution: Federal Impacts on Coastal Environmental Quality Can Be Better Managed."

We have reviewed the enclosed comments of the Assistant Secretary for Oceans and Atmosphere and believe they are responsive to the matters discussed in the report.

Sincerely,

A handwritten signature in dark ink, appearing to read "Otto J. Wolff".

Otto J. Wolff
Deputy Assistant Secretary
for Administration

Enclosure

Appendix II
Comments From the Department
of Commerce



UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary
National Oceanic and Atmospheric Administration
Washington, D.C. 20230

APR 3 1991

Mr. Richard L. Hembra
Director, Environmental Protection Issues
Resources, Community, and Economic
Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Hembra:

Thank you for your letter requesting the Department's comments on the draft General Accounting Office (GAO) report entitled Coastal Pollution: Federal Impacts on Coastal Environmental Quality Can Be Better Managed. Our specific comments are indicated on the enclosed. In addition, we have two general comments with regard to the recommendations contained in the report.

The GAO report recommends that NOAA revise its regulations pursuant to Section 307 of the Coastal Zone Management Act (CZMA), the Federal consistency provisions, so as to further stipulate what types of Federal activities are subject to those provisions. We do not agree with this recommendation.

The changes made to Section 307 in the 1990 reauthorization of the CZMA merely codified NOAA's existing interpretation of that Section with one major exception. The new provision overturns the 1984 Supreme Court decision which found that oil and gas lease sales on the Outer Continental Shelf (OCS) did not "directly" affect the coastal zone, and therefore, were not subject to the Federal consistency requirements. The Minerals Management Service, which is responsible for OCS leasing, has already begun to revise its procedures to comply with the new provisions. Therefore, we believe extensive revision to our regulations is unnecessary. NOAA will continue to work with Federal agencies to implement the Federal consistency requirements.

The second and third recommendations of the report is that NOAA, in consultation with the Council on Environmental Quality, develop and issue additional guidance on how to assess the indirect and cumulative impacts of proposed Federal activities on



THE DEPUTY ADMINISTRATOR

See comment 1.

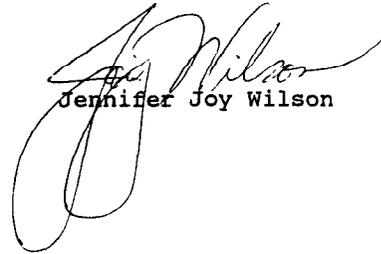
**Appendix II
Comments From the Department
of Commerce**

See comment 2.

the costal zone. We agree that such guidance is necessary. We will be refocusing some of our efforts under the Coastal Ocean Program in order to address these needs.

We appreciate the opportunity to comment on the draft report.

Sincerely,



Jennifer Joy Wilson

Enclosure

The following are GAO's comments on the Department of Commerce's letter.

GAO Comments

1. We recognize that the 1990 amendments to the Coastal Zone Management Act made changes to the consistency provisions of this act that overturned the Supreme Court's 1984 decision in Secretary of the Interior v. California. As the conference report accompanying the 1990 amendments states, however, the conferees also intended that the changes clarify that all federal agency activities—whether in or outside of the coastal zone—affecting any natural resources, land uses, or water uses in the coastal zone are subject to the consistency requirements. The conference report clearly states that no federal agency activities are categorically exempt from this requirement. Also, our review disclosed that several federal agencies, other than the Department of the Interior, have maintained that their activities are not subject to CZMA consistency requirements, and NOAA officials told us these agencies may continue to argue that their activities are not subject to these requirements. Accordingly, we continue to believe that NOAA should amend its regulations to clearly address those activities that have historically been the subject of disputes and stipulate whether those activities are subject to CZMA consistency provisions.

2. Commerce agreed that additional guidance is needed to help assess the indirect and cumulative impacts of federal activities on the coastal zone. We believe that comprehensive plans can be an effective tool for addressing the cumulative effects of activities on the coastal zone. Therefore, we continue to believe that NOAA should update and expand guidance to states on how to develop and use comprehensive plans and facilitate the exchange of information between states on how to use comprehensive plans to address cumulative impacts.

Comments From the Council on Environmental Quality



EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL ON ENVIRONMENTAL QUALITY
WASHINGTON, D.C. 20500

Michael R. Deland
Chairman

(202) 395-5080

March 19, 1991

Mr. Richard L. Hembra
Director, Environmental Protection Issues
Resources, Community and Economic Development
Division
General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Hembra:

I am enclosing the Council on Environmental Quality's comments on the proposed report Coastal Pollution: Environmental Impacts of Federal Activities Can Be Better Managed (GAO/RCED-91-85).

Thank you for forwarding the report to the Council for review and comment.

Sincerely,

A handwritten signature in cursive script that reads "Michael R. Deland".

Michael R. Deland

Enclosure

Appendix III
Comments From the Council on
Environmental Quality

The Council on Environmental Quality (CEQ) has reviewed the proposed report Coastal Pollution: Environmental Impacts of Federal Activities Can Be Better Managed (GAO/RCED-91-85), with particular emphasis on those portions of the report which discuss the how proposed federal agency activities affecting coastal areas are currently reviewed and considered under the National Environmental Policy Act (NEPA).

In general, CEQ agrees with the findings in the report, particularly those pertaining to the uncertainty and difficulty which federal agencies experience in evaluating indirect impacts and cumulative impacts of proposed actions. Because the CEQ regulations implementing the procedural provisions of NEPA apply to such a wide range of actions¹ occurring in virtually all types of ecological contexts, CEQ has traditionally left the issue of the most appropriate method of analyzing impacts to each agency. However, we concur that the areas of uncertainty identified in this report are problematic for agencies, and have no objection to working with the National Oceanic and Atmospheric Administration as they develop and issue additional guidance on how to conduct environmental assessments of proposed federal activities which affect coastal areas.

¹. "Major federal actions" include new and continuing activities, new or revised agency rules, regulations, plans, policies, or procedures and legislative proposals. 40 C.F.R. 1508.18(a).

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