



Water Island U.S. Virgin Islands Title Transfer

*Final Environmental Assessment
and
Finding of No Significant Impact*

May 1996

United States Department of the Interior

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Final Environmental Assessment
Finding of No Significant Impact

Water Island, U.S. Virgin Islands
Title Transfer

Lead agency: Department of the Interior
Bureau of Reclamation

Responsible official: Director
Office of Insular Affairs

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Abstract: The final environmental assessment (EA)/finding of no significant impact documents the analysis of no action and three other alternatives and multiple options that were developed for the title transfer of Water Island. The alternatives are to (1) offer the land for sale (various options), (2) turn the island over to the Virgin Islands (V.I.) Government or to former sublessees via a life estate, and (3) combination, offer land for sale and turn over part to V.I. Government.

The preferred alternative is the combination, offer land for sale and turn over part to the V.I. Government.

This final EA was prepared in compliance with the National Environmental Policy Act and Bureau of Reclamation procedures and is intended to serve the environmental review and consultation requirements pursuant to Executive Order 11990 (Wetlands Protection), National Historic Preservation Act (Section 106), Fish and Wildlife Coordination Act, and the Endangered Species Act (Section 7c). The Department of the Interior (Interior) is not required to seek comments on the final EA. The Bureau of Reclamation and the Interior thank everyone who provided comments, recommendations, or objections on the draft EA so that comments may be considered and responded to in this final EA.



United States Department of the Interior

BUREAU OF RECLAMATION
Washington, D.C. 20240

IN REPLY REFER TO

May 17, 1996

To: All Interested Persons, Organizations, and Agencies

From: Roberta Ries, Activity Manager *R. Ries*

Subject: Final Environmental Assessment and Finding of No Significant Impact for the Transfer of Title to Water Island, U.S. Virgin Islands

Enclosed is a copy of the Final Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the transfer of title to Water Island, U.S. Virgin Islands, prepared by the Bureau of Reclamation, Department of the Interior, for the Office of Insular Affairs. This EA/FONSI describes the environmental impacts of no action and other alternatives for the transfer of title to Water Island.

The preferred alternative was identified after the public review process and is presented in the final EA/FONSI. The proposed action is a combination of actions, including offering the land for sale to Water Island former sublease holders and turning over part of the island to the Virgin Islands Government in return for certain actions. Release of this final EA/FONSI completes the environmental process.

JACKSONVILLE DISTRICT

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A

FROM **R. BRIDGERS**

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Water Island U.S. Virgin Islands Title Transfer

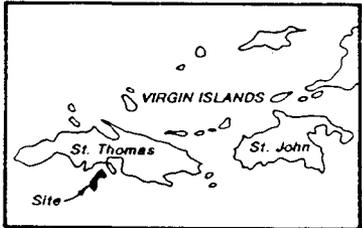
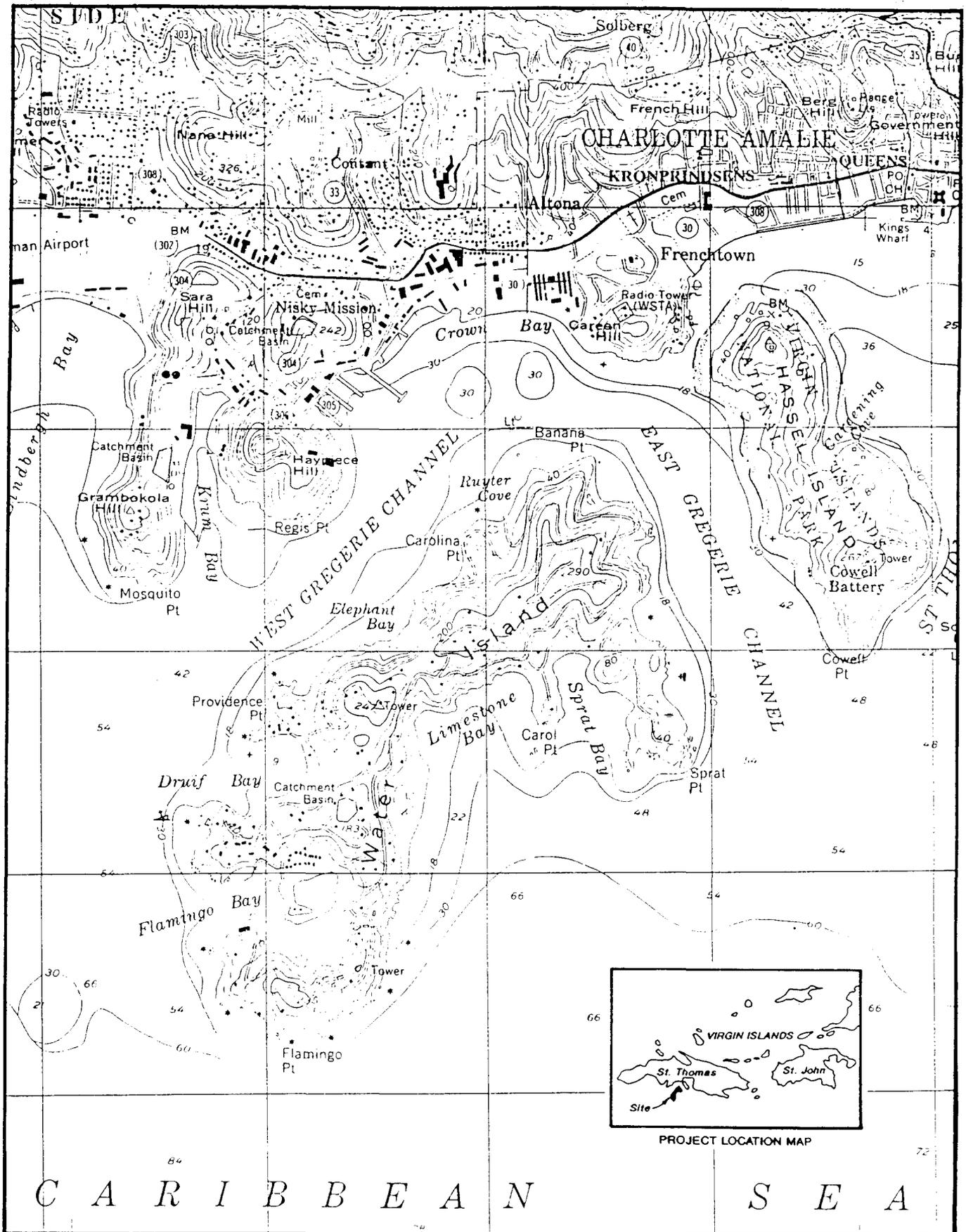
*Final Environmental Assessment
and
Finding of No Significant Impact*

May 1996

United States Department of the Interior
Bureau of Reclamation

for the

Office of Insular Affairs



PROJECT LOCATION MAP

C A R I B B E A N S E A

OIA-FONSI-96-1

United States Department of the Interior
Office of Insular Affairs

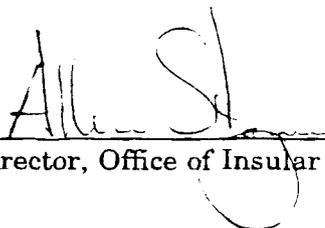
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FINDING OF NO SIGNIFICANT IMPACT

WATER ISLAND, U.S. VIRGIN ISLANDS
TITLE TRANSFER

Approved:



Director, Office of Insular Affairs

5/13/96
Date

Finding of No Significant Impact

Title Transfer Water Island, U.S. Virgin Islands

In accordance with the National Environmental Policy Act of 1969, as amended, and the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR Parts 1500-1508), the Bureau of Reclamation has determined that an environmental impact statement is not required to implement the title transfer of Water Island from the Department of the Interior to former sublessees and the Virgin Islands Government.

Background

Water Island is the fourth largest island in the United States Virgin Islands (V.I.). The United States acquired Water Island in 1944 for the Department of Defense. Water Island was transferred to the Department of the Interior (Interior) in 1952 and leased for two 20-year terms to a private party (former master lessee) to construct a resort complex. The former master lessee granted more than 140 separate subleases. Many of the former sublessees have built homes on Water Island. The eastern one-third of Water Island (about 160 acres or 64 hectares) was leased in 1956 to a single party, the Sprat Bay Corporation, which also subdivided the land and issued sub-subleases to individuals.

Hurricane Hugo destroyed or badly damaged most of the structures in 1989. Many homes were rebuilt, but the island's only hotel was not.

Interior has no public need to own Water Island. On December 24, 1992, the Interior Solicitor wrote letters to the former master lessee and each sublessee offering to sell them title to their respective tracts on Water Island. The former master lessee declined the offer to purchase, and effective December 27, 1992 (i.e., 5 days before the lease would have expired), it had elected to terminate the lease.

The sale process was suspended in late January 1993 to review the activities surrounding Water Island. By then, 36 contracts to purchase United States real property interests on Water Island were jointly signed by the former sublessees and Interior officials, with earnest money on deposit. The 36 signed contracts, including a single contract by the Sprat Bay Corporation, are conditional; are subject to completion of various environmental studies; and are capable of modification under the terms of the contract.

Hurricane Marilyn, on September 15, 1995, destroyed many rebuilt homes and further devastated the island. Without a lease or title to the property on which their home sits, Water Island residents are unable to obtain loans to rebuild after hurricane damage.

Proposed Action

The proposed action is a combination of actions, including offering the land for sale to Water Island former sublease holders and turning over part of the island to the Virgin Islands Government in return for certain actions. Some elements were common to all the alternatives considered and are included in this proposed action. They are:

- **Honor 36 Contracts.** The 36 signed contracts would be honored and executed, pending completion of environmental compliance studies.
- **Protect Endangered Species—Land and Marine Resources.** This action includes the provisions, in perpetuity, to protect land and marine resources associated with Water Island as required by the Fish and Wildlife Service's no jeopardy opinion. The various green areas would be subject to a conservation easement to be negotiated between the Interior and the V.I. Government. Protection would take the form of public ownership of certain lands in the interest of the public, limitations on development, and restrictions on land use, otherwise known as restrictive covenants.
- **Protect Cultural Resources.** Subject to further consultation with the State Historic Preservation Officer, the sites eligible for the National Register of Historic Places would be preserved in place with binding covenants or subjected to adequate data recovery. A mitigation plan would be identified before title to parcels containing those resources are transferred.
- **Determine Hazardous Materials and Other Wastes.** The U.S. Army Corps of Engineers (Corps) will perform an investigation to determine whether hazardous materials remain on Water Island as a result of the activities of the U.S. Army. If chemical residues or suspect munitions are found, the U.S. Army will develop a procedure to remove the wastes and proceed with the removal. In the course of the investigation, the Corps will remove the majority of the household refuse and discarded vehicles from the open dump located in test site 4.

The 36 outstanding signed purchase contracts would be honored for any sublessee who wishes to proceed. The offer to sell would also be extended to all other sublessees. The price may be renegotiated to the extent necessary to account for changed conditions resulting from Hurricane Marilyn; any restrictions imposed by the biological, hazardous waste, or cultural resources findings of the environmental assessment; and issues concerning the 1991 appraisal, such as the passage of time.

The Federal Government would continue to be responsible for the dump until it is cleaned up or declared by the Corps to be free of chemical ordnance. At that time, it would be turned over to the V.I. Government.

Assuming a satisfactory resolution of the litigation with the former hotel owners, the former hotel tract and related properties would be turned over to the Virgin Islands Government. In consideration for receiving the tracts, they would be responsible for cleaning them up. Properties not subleased and not required for conservation or preservation purposes would also be turned over to the V.I. Government. The net proceeds, less hotel cleanup costs, resulting from any subsequent sale or lease of these hotel-related or non-subleased properties by the Virgin Islands would be placed in a trust fund to provide services to Water Island, including ferry service. If such a fund is adequately capitalized, then any additional net proceeds would be returned to the Federal treasury.

Environmental Impact

The environmental assessment indicates that this is not a major Federal action that would significantly affect the quality of the human environment; therefore, an environmental impact statement is not needed. Determining adverse or beneficial impacts requires value judgments. This determination is based on the following factors, a summary of which is discussed in detail in the EA:

1. Impacts on vegetation, wildlife, marine resources, and threatened and endangered species would be minimized or mitigated by setting aside lands and restricting development on other lands to protect these resources. These actions are considered reasonable and prudent or conservation recommendations and are further explained by the U.S. Fish and Wildlife Service in their no jeopardy opinion.
2. Cultural resources would be protected or preserved in place with binding covenants or subjected to adequate data recovery before transfer of the parcels containing eligible resources by the Interior.
3. Hazardous or toxic wastes, including chemical warfare materials, would not be affected. The Corps would continue to investigate whether hazardous materials remain on Water Island as a result of the U.S. Army activities, regardless of the proposed action or no action. If chemical residues or suspect munitions are found, the U.S. Army would develop a protocol to remove the material and proceed with that removal.
4. The most adverse impacts would be to the social well-being of the residents and other former sublessees if the proposed action is **not** undertaken. After Hurricane Marilyn, loans to repair or rebuild homes cannot be obtained until they have title to their lots.

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Summary

Before title to Water Island can be transferred, an environmental study must be completed in compliance with the National Environmental Policy Act of 1969 (NEPA) to determine if any significant impacts would result from the termination of Federal jurisdiction and ownership.

Purpose and Need

The purpose of the proposed action is to transfer title from the United States to one or more entities. The need for the action is that the Government's 40-year lease to Water Island to a private company was terminated on December 27, 1992, and the U.S. Government no longer needs all of the island for public purposes. Individuals to whom the island was leased have built homes on the island; and without a lease or title to the property on which their home sits, they are unable to rebuild after hurricane damage.

The Secretary of the Interior has the authority provided in 48 U.S.C. 1545 to sell Water Island if it is not needed for public purposes. The terms of the sale may be as he deems advantageous to the Government of the United States.

Background

Water Island is the fourth largest island in the United States Virgin Islands. It lies about 1,097 miles (1,770 kilometers) southeast of Miami and about 0.4 mile (0.6 kilometer) from St. Thomas. The United States acquired Water Island in 1944 for the Department of Defense (DOD).

Water Island was transferred to the Department of the Interior (Interior) in 1952 and leased for two 20-year terms to a private party (former master lessee) to construct a resort complex. The former master lessee granted more than 140 separate subleases. Many of the former sublessees have built homes on Water Island. The eastern one-third of Water Island (about 160 acres or 64 hectares) was leased in 1956 to a single party, the Sprat Bay Corporation, which also subdivided the land and issued sub-subleases to individuals.

Hurricane Hugo destroyed or badly damaged most of the structures in 1989. Many homes were rebuilt, but the island's only hotel was not.

On December 24, 1992, the Interior Solicitor wrote letters to the former master lessee and each sublessee offering to sell them title to their respective tracts on Water Island. Many former sublessees claim that the limited timeframe in which to respond (about 3 weeks) prevented them from taking action. The former master lessee declined the offer to purchase, and effective December 27, 1992 (i.e., 5 days before the lease would have expired), it had elected to terminate the lease.

The sale process was suspended in late January 1993 to review the activities surrounding Water Island. By then, 36 contracts to purchase United States real property interests on Water Island were jointly signed by the former sublessees and Interior officials, with earnest money on deposit. The 36 signed contracts, including a single contract by the Sprat Bay Corporation, are conditional, are subject to completion of various environmental studies, are capable of modification under the terms of the contract, and are voidable if not closed within 90 days after the contracts were signed and returned.

Hurricane Marilyn, on September 15, 1995, destroyed many rebuilt homes and further devastated the island.

Land Use and Zoning Regulations

The island, although owned by the United States Government, is under the administrative jurisdiction of the Virgin Islands Government for fire and police protection, zoning regulations, building permits, and land use planning.

The current *Coastal Land and Water Use Plan* designates R-1 Protection, Residential Low Density for the eastern one-third or the Sprat Bay portion of the island. The other two-thirds of the island is zoned W-1, Waterfront Pleasure. Specific areas, such as the hotel site, are identified for specific uses. Development of the island is generally consistent with the current use plan (Pritchett, 1991).

Medical services are lacking on Water Island. Fire protection or police protection are not readily available because access is limited.

Scope of the Study

This environmental assessment examines only the impacts of transferring title to Water Island. This study does not propose, nor does it evaluate, the impacts of any future development. Current land use zoning will continue to direct the development of the island.

The draft environmental assessment and public comments were used to select a preferred plan and to determine that significant environmental

impacts are not expected to occur from the proposed action of transferring title. A finding of no significant impact (FONSI) is attached.

The draft report was prepared after reviewing reports from other agencies, after holding public meetings and listening to those commenting orally and in writing, and after conducting significant personal interviews with island residents, former subleaseholders, and representatives of the Virgin Island (V.I.) Government. The authors and principal investigators have made extreme attempts to review the documentation, to hear the residents and others, and to remain neutral with no legal interpretation of the lease or other legal findings. Should any reference in this document appear to be an interpretation, it is without grounds and strictly inadvertent.

This document fulfills the disclosure requirements of the National Environmental Policy Act of 1969, as amended, and will serve as the public involvement summary report.

In preparing the final environmental assessment after Hurricane Marilyn devastated the island, questions arose about the accuracy and need to possibly revise and republish a draft environmental assessment. The authors and the Department of the Interior have determined that the impacts of proceeding with the preferred alternative described in the final environmental assessment would lessen the intensity of social and economic impacts. A continued analysis, on the other hand, would intensify social and economic impacts because of the devastation of Hurricane Marilyn. Therefore, this final environmental assessment and finding of no significant impact are being published.

Alternatives

Alternatives Considered in Detail

Alternatives considered in detail must include a no action alternative, which provides the baseline conditions against which all other alternatives are compared.

No Action Alternative. The no action alternative is the most likely future condition that could be expected without the proposed action. The no action alternative is not proposed as a feasible alternative but must be included as a baseline.

Under the no action alternative, the Department of the Interior would continue to own Water Island. Life on the island would continue without a master lease, some development would continue, and

uncertainty would cause stress. The contracts signed early in 1993 would remain conditional until completion of NEPA compliance, and the earnest money would continue to be held unless refunds were requested and the contracts were terminated. A few representatives of the 99 former sublessees without signed contracts have indicated they would continue to live in a state of uncertainty, although lease payments at less than fair market value would continue to be made to the former master leaseholder or the Federal Government or both—they say they are showing intent and desire to maintain a legal right to reside on the property. Former sublessees would continue to transfer their interests in the leaseholds on a very limited basis without any legal rights to the property. Development of formerly subleased vacant lots would continue without legal title to the land. Properties not subleased by the former master leaseholder would remain vacant and idle, most of which are on steep hillsides or are otherwise unsuitable for development.

The lands recommended to be set aside for wildlife habitat and other measures identified to protect threatened and endangered species would not be set aside; however, the Federal Government has the authority and responsibility to protect threatened and endangered species. The responsibility for cultural resources on Federal lands mandated by the National Historic Preservation Act and other legislation would remain unchanged.

The U.S. Army Corps of Engineers (Corps) will perform an investigation to determine whether hazardous materials remain on Water Island as a result of the activities of the U.S. Army. If chemical residues or suspect munitions are found, the U.S. Army will develop a procedure to remove the wastes and proceed with the removal. In the course of the investigation, the Corps will remove the majority of the household refuse and discarded vehicles from the open dump located in test site 4.

Presently, no plan exists to remove or remediate any other solid waste materials on Water Island resulting from civilian activities. Solid waste disposal would continue to be a challenge. Transportation and the road structure on the island would be subject to further deterioration.

Elements Common to All Action Alternatives. In this environmental assessment, most of the action alternatives are very similar, except that the parties and methods of title transfer would vary. To avoid significant repetition, all similar items will be described in this section; only the differences will be identified with each alternative.

Honor 36 Contracts. One assumption in all action alternatives is that (except as noted) the 36 signed contracts would be honored and executed, pending completion of environmental compliance studies.

Protect Endangered Species—Land and Marine Resources. All action alternatives would include the provisions, in perpetuity, to protect land and marine resources associated with Water Island as required by the U.S. Fish and Wildlife Service's no jeopardy opinion. Protection would be in the form of public ownership of certain lands in the interest of the public, limitations on development, and restrictions on land use, otherwise known as restrictive covenants. A composite of the proposed lands to be restricted is shown in figure S-1.

Protect Cultural Resources. Significant cultural resources would be addressed before disposal. Subject to further consultation with the State Historic Preservation Officer, the sites eligible for the National Register of Historic Places would be preserved in place with binding covenants or subjected to adequate data recovery before transfers of title to those parcels.

Determine Hazardous Materials and Other Wastes. The Corps would continue their study to determine the extent of DOD hazardous materials. In the course of the study, the Corps will remove the majority of household refuse and discarded vehicles from the open dump. Other solid waste material in or around dump areas or the hotel site would remain.

Offer the Land for Sale—Alternative 1. Under this alternative, the land, except that set aside for wildlife habitat, threatened and endangered species, and cultural resources, would be offered for sale:

- To the highest bidder, Option 1A
- To former sublessees, Option 1B
- To former sublessees, voiding 36 signed contracts, renegotiating with all, Option 1C
- To the Virgin Islands Government, Option 1D
- Via a lottery, Option 1E
- In a negotiated direct sale of the entire island, Option 1F

Turn Island Over [Give]—Alternative 2. This alternative involves transferring ownership of the island without any financial compensation. The options are to turn the island over:

- To the Virgin Islands Government, Option 2A
- To the former sublessees (via a life estate), Option 2B

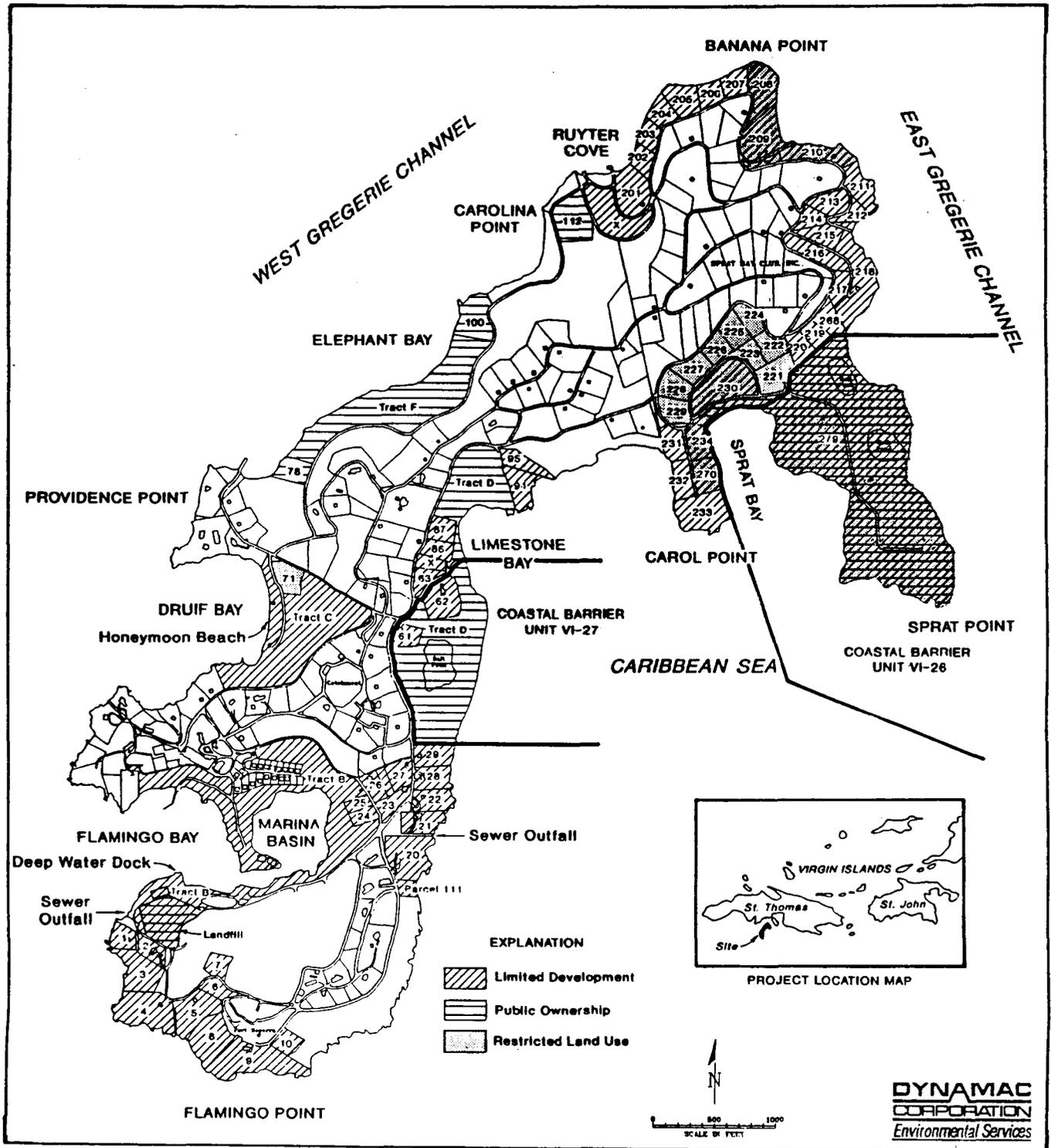


Figure S-1.—A composite of lands recommended for limitations on development and restrictions on land use.

Combination, Offer Land for Sale and Turn Over Part to the Virgin Islands Government—Alternative 5 (Preferred). Under this alternative, a combination of actions would take place. In general, the elements common to all action alternatives are part of this alternative, including honoring the 36 contracts, protecting endangered species, protecting cultural resources, and determining hazardous materials and other wastes. The land formerly leased would be offered for sale to the former sublessees. The lands to be set aside for fish and wildlife purposes would be subject to a conservation easement to be negotiated between Interior and the V.I. Government.

The 36 outstanding signed purchase contracts would be honored for any sublessee who wishes to proceed. The offer to sell would also be extended to all other sublessees. The price may be renegotiated to the extent necessary to account for changed conditions resulting from Hurricane Marilyn; any restrictions imposed by the biological, hazardous waste, or cultural resources findings of the environmental assessment; and issues concerning the 1991 appraisal, such as the passage of time.

The Federal Government would continue to be responsible for the dump until it is cleaned up or declared by the Corps of Engineers to be free of chemical ordnance. At that time, it would be turned over to the Virgin Islands Government.

Assuming a satisfactory resolution of litigation with the former hotel owners, the former hotel tract and related properties would be turned over to the V.I. Government. In consideration for receiving the tracts, they would be responsible for cleaning them up. Properties not subleased and not required for conservation or preservation purposes would also be turned over to the V.I. Government. The net proceeds, less hotel cleanup costs, resulting from any subsequent sale or lease of these hotel-related or non-subleased properties by the Virgin Islands would be placed in a trust fund to provide services to Water Island, including ferry service. If such a fund is adequately capitalized, then any additional net proceeds would be returned to the Federal treasury.

Alternatives Considered but Eliminated

None of the following alternatives satisfies the requirement to terminate Federal ownership of most of Water Island. The alternatives were considered and evaluated against the developed criteria; and as a result, the following alternatives were considered but eliminated from detailed study.

Retain Most or All Interest in the Land—Alternative 3. Under this alternative, the land would be retained in the United States Government ownership. These options would provide revenue to the Federal

Treasury but would not provide a tax base for the V.I. Government because the island would still be in Federal Government ownership. The options include:

- Lease to the former sublessees, Option 3A
- Renegotiate master lease, Option 3B
- Open leasing to others, Option 3C
- Manage internally by the Office of Insular Affairs, National Park Service, or other entity, Option 3D
- Open competitive bidding for concessionaire, Option 3E

Establish Multiple Ownership—Alternative 4. This alternative involves retaining some land, selling some land, and leasing some land. The existing executed contracts would be honored. Other lands previously leased would be offered for sale or lease. Solid waste materials in or around dump areas or the hotel would remain.

Environmental Consequences

A summary comparison of the environmental consequences is shown in table S-1. Under the no action alternative, the threatened and endangered species and cultural resources would be minimally addressed or protected, and Water Island former leaseholders would continue to experience adverse social impacts. Although economic impacts were not specifically identified, the lack of title to land creates unidentified economic impacts according to some of the island residents.

To better assess the differences among the alternatives, the environmental consequences of each alternative are compared against the environmental consequences that would result under the no action alternative.

Under either alternative 1 (offering the land for sale to various individuals or groups) or alternative 2 (turn the island over to the V.I. Government or the lessees in a life estate), a slight improvement to vegetation, wildlife, marine resources, threatened and endangered species, and cultural resources would occur because certain actions would take place to further protect these resources. Hazardous or toxic wastes will experience a substantial improvement in any alternative because the U.S. Army is attempting to locate and remove these wastes.

Only under alternative 1F, negotiating a direct sale with a group, would water resources experience any impact; and this impact is a slight

Table S-1.—Summary of the environmental consequences by alternative¹

Environmental factors	Offer the land for sale to:						Turn island over to:		Preferred	
	No action alternative	High bid 1A	Lessee 1B	Lessee, void contracts 1C	V.I. Govt. 1D	Via lottery 1E	Negotiate direct sale 1F	V.I. Govt. 2A	Lessee (life estate) 2b	Combination, offer land for sale and turn over part to the V.I. Govt. 5
Water resources	—	—	—	—	—	—	□	—	—	—
Vegetation	potential ■	□	□	□	□	□	□	□	□	□
Wildlife	potential ■	□	□	□	□	□	□	□	□	□
Marine resources	potential ■	□	□	□	□	□	□	□	□	□
Threatened and endangered species	potential ■	□	□	□	□	□	□	□	□	□
Cultural resources	potential ■	□	□	□	□	□	□	□	□	□
Hazardous or toxic wastes	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■
Social well-being	■■	■■■	□	□□	■■■	■■	■■	■■■	■■	□□

¹ "—" = no impact, ■ = slight decrease, ■■ = moderate decrease, ■■■ = substantial decrease, and ■■■■ = extreme decrease; □ = slight improvement, □□ = moderate improvement, and □□□ = substantial improvement.

improvement. The assumption is made that the hotel would be rebuilt and a different water system would be included that would also provide water to the villas.

The real differences among the alternatives are found in the social well-being area. Only by offering the land for sale to the former lessees are improvements derived. Alternative 1B allows the 36 former lessees with contracts to execute those contracts, which the individual may feel is fair or unfair. Other former lessees would be allowed to purchase their land, but the terms are not known.

Alternative 1C would allow a negotiation process among all the former lessees—those with and those without signed contracts. This open negotiation process provides moderate positive impacts through negotiation of a fair market price advantageous to both the seller and the buyer.

Impacts of the combination alternative would be similar to the impacts of alternative 1C. The existing contracts of the 36 would be honored, with the price renegotiated to account for existing conditions. Other former sublessees would be offered the opportunity to purchase their respective lots at a price advantageous to both the seller and the buyer.

Consultation and Coordination

Public involvement activities originated with the public meetings held on Water Island and St. Thomas in March 1994. Those activities were ongoing and continued during the public review and comment period following the circulation of this draft document. Public meetings were again held in December 1995, following a comment period that was lengthened because of the devastation of Hurricane Marilyn.

Consultation with the U.S. Fish and Wildlife Service and the State Historic Preservation Officer would continue.

Chapter 1

Purpose and Need

The Office of Insular Affairs (OIA) (formerly the Office of Territorial and International Affairs) in the Department of the Interior (Interior) has requested that the Bureau of Reclamation (Reclamation) prepare an environmental assessment of transferring title to Water Island. Interior is proposing to transfer title to Water Island, which was leased for 40 years under an agreement that was terminated on December 27, 1992.

Before any disposition of the property, an environmental study must be completed in compliance with the National Environmental Policy Act of 1969 (NEPA) to determine if any significant impacts would result from terminating Federal ownership. Some of the studies prerequisite to the environmental assessment had already been completed, including an endangered species study, hazardous waste survey, and an intensive cultural resources survey.

Purpose and Need

The purpose of the proposed action is to transfer title to Water Island from the United States to one or more non-Federal entities. In 1980, Congress prohibited Interior from extending, renewing, or renegotiating the lease. The need for the action was declared in an Interior report to the Congress in 1987 that concluded with Interior's intent to declare Water Island excess to its needs when the lease would have expired on December 31, 1992. The 40-year lease to Water Island was terminated early on December 27, 1992. Without a lease or without title to the property on which their home sits, residents are unable to rebuild after hurricane damage.

Authorization

The Secretary of the Interior has the authority provided in 48 U.S.C. 1545 to lease or sell any property of the United States under his administrative supervision in the Virgin Islands (V.I.) not needed for public purposes. The terms of the lease or sale may be as he deems advantageous to the Government of the United States.

Background

Water Island, the fourth largest island in the United States Virgin Islands, is located within Charlotte Amalie Harbor, about 0.4 mile (0.6 kilometer [km]) from St. Thomas. The island is 0.62 mile (1.0 km) across at the narrowest point and 1.75 miles (3 km) long, with a total area of about 491.5 acres (197 hectares). (See frontispiece map.)

The United States acquired Water Island in 1944 from the East Asiatic Company, Ltd., Denmark. From 1944 to 1952, Water Island was under the jurisdiction of the Department of Defense (DOD) and was used for military purposes. By Public Law 82-511 of July 11, 1952 [66 Stat. 588], the Congress transferred the control and administrative supervision of Water Island to the Department of the Interior.

On December 10, 1952, Interior leased Water Island in its entirety, effective January 1, 1953, to a private party to construct a resort complex. This original instrument is referred to as the "master lease." The Water Island property rights and interests in the lease were assigned, with the Government's permission, in 1965 to the Water Isle Hotel and Beach Club, Ltd., (Water Isle) a Delaware corporation with its principal place of business in Illinois.

Water Isle or its predecessor granted more than 140 separate subleases, ranging in size from one-half to 1 acre (0.2 to 0.4 hectare); and many of the former sublessees have built homes on Water Island. The eastern one-third of Water Island (about 160 acres or 64 hectares) was leased in 1956 to a single party, the Sprat Bay Corporation, which has, in turn, subdivided the land and issued sub-subleases to individuals. The overall site plan and general sublease plan is shown in figure 1.

Under the terms of the former subleases, the former master lessee agreed to form a property owners association to maintain the roads and perform other unspecified functions. The property owners association, which does not include the Sprat Bay Corporation, is known as the Water Island Civic Association (WICA), which now functions independently of the former master lessee.

Water Island was hit hard by Hurricane Hugo in 1989, and most of the structures were destroyed or very badly damaged. Many homes were rebuilt, but the hotel was not. As a result, the residents lost a focal point on the island and a major contributor to the road system.

The original master lease was for a period of 20 years with an option to renew for an additional 20 years. The option was exercised, and the renewed lease was scheduled to expire on December 31, 1992. By Public Law 96-205 of March 12, 1980 [94 Stat. 84, 89], the Congress prohibited Interior from extending, renewing, or renegotiating the lease before its expiration in 1992.

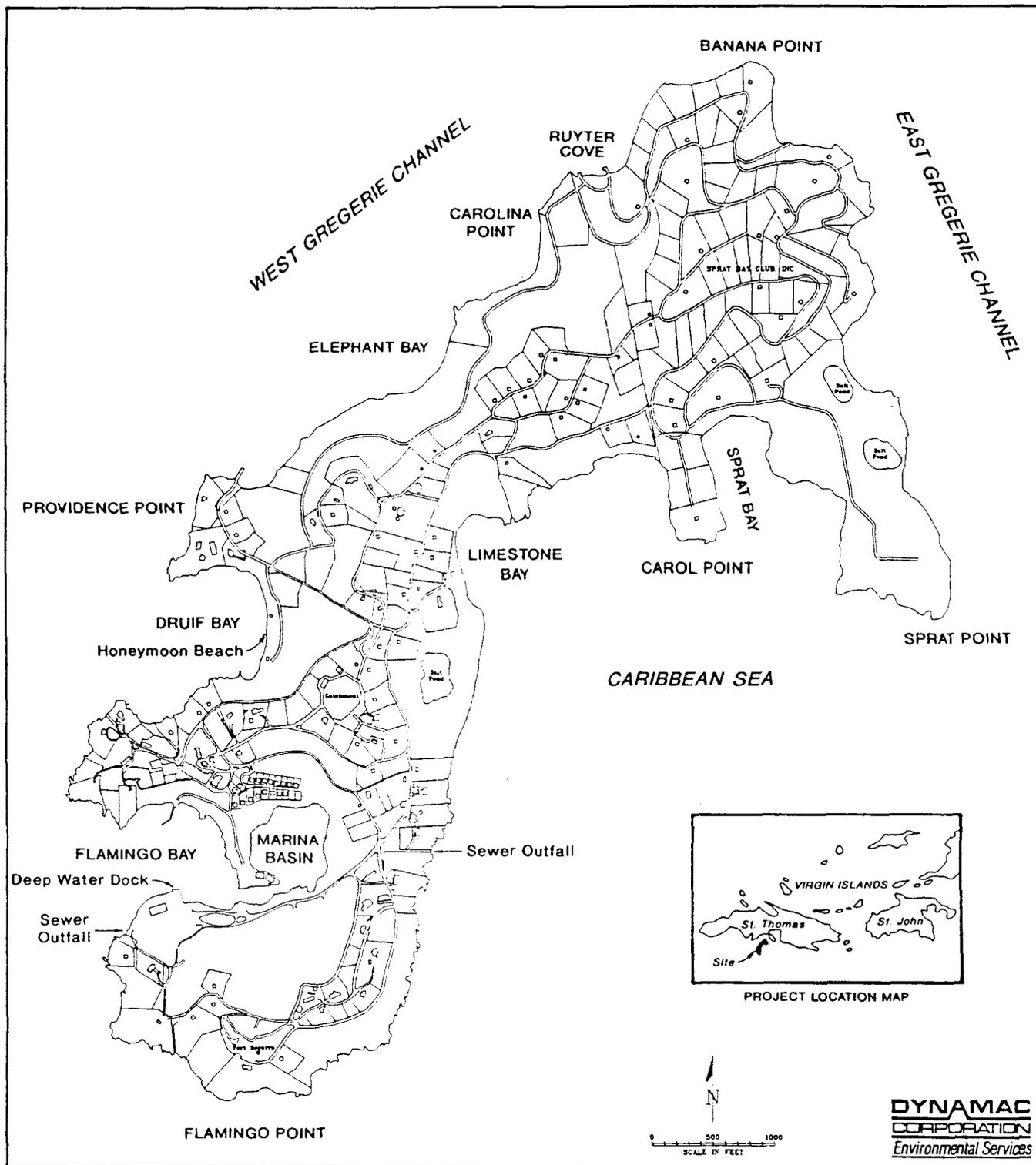


Figure 1.—The overall site plan and general sublease plan.

On May 13, 1992, the Secretary of the Interior signed a memorandum that directed Interior to pursue the following course of action:

Begin negotiations, with the master lessee, of a final lease termination document. Also, begin negotiations with all sublessees looking toward selling each fee title to the subleased land and improvements.

On December 24, 1992, the Interior Solicitor wrote letters to the former master lessee and each sublessee offering to sell them title to their respective tracts on Water Island.

Some former sublessees, including the Sprat Bay Corporation which represents numerous sub-sublessees, signed contracts and forwarded earnest money to Interior to purchase fee title, subject to completion of environmental studies. Many former sublessees, however, had questions or concerns about the conditions of sale. They believed that the limited timeframe in which to respond (about 3 weeks) prevented the receipt of answers. Subsequently, many former sublessees who desire to purchase their land were prevented from taking action during the allotted timeframe. The master lessee rejected the offer to purchase and elected to terminate the lease effective December 27, 1992 (i.e., 5 days before the lease would have expired).

Real Estate Conditions and the Initial Sale Process

Water Island real estate conditions are complex and uncertain. Some ambiguity exists in descriptions of existing conditions because of a lack of file information and process variations during the initial sale process.

After officials of the Clinton administration entered office, they suspended the sale process and began a review of the activities surrounding Water Island. By then, 36 contracts to purchase United States real property interests on Water Island were jointly signed by former sublessees and Interior officials, with earnest money on deposit.

The last master lessee filed a lawsuit against Interior in January 1993, basically stating it was entitled to payment for its possessory interests. The lawsuit is still pending in the United States Court of Federal Claims in Washington, DC.

Land Use and Zoning Regulations

The island, although owned by the United States Government, is under the administrative jurisdiction of the Virgin Islands Government for fire and police protection, zoning regulations, building permits, and land use planning.

The Sprat Bay portion of the island is zoned R-1 Residence—Low Density. The remainder of the island is zoned W-1 Waterfront—Pleasure. This information is from the *Virgin Islands Zoning, Building and Housing Laws and Regulations* of the Lieutenant Governor, St. Thomas, Virgin Islands (Pritchett, Ball & Wise, Inc., 1991).

The extensive waterfront of the Virgin Islands constitutes one of its most important assets . . . Those areas which are available for recreation should be preserved and protected against intrusion of an industrial nature. A Waterfront—Pleasure zone is established for that purpose. Private residential areas abutting the waterfront should also be protected not only against commercial and industrial uses, but equally important, against pollution.

The Virgin Islands zoning and subdivision regulations appear well defined. Much of the land in the Virgin Islands is hilly or mountainous, including Water Island, with steep slopes and a minimum amount of soil over a rocky subsurface. These areas are used for residential purposes with sewage disposal by means of septic tanks. The minimum lot area for such use should be one-half acre, and even this minimum is questionable. In areas zoned R-1, Residence—Low Density, the following uses, among others, are permitted:

- Dwellings, including detached, single-family, two-family
- Camping and picnicking areas
- Mobile homes
- Schools, various

Restrictions include lots occupied by not more than two dwelling units; principal residential structures occupied by not more than 25 percent of the lot; a minimum lot width at street line of 100 feet; structure not to exceed two stories; and minimum front, side, and rear yards of not less than 15 feet.

Under the zoning requirement of W-1 Waterfront—Pleasure, residential structures are permitted, as well as multiple other structures, such as hotel, sewage treatment plants, restaurants, and other customary accessory uses. Restrictions are similar to the residential zones and include the following: no lot shall be occupied by more than two dwelling units; no building shall occupy more than 40 percent of the lot; every parcel must have a minimum lot area of 10,000 square feet; 30 percent of the area shall be reserved for usable open space; structures shall be set back from the property line a minimum of 25 feet, with a side yard of 10 feet and a rear yard of 20 feet; and no building shall exceed three stories. Development of the island is generally consistent with the current use plan (Pritchett, 1991).

A 1990 study, identified as *Water Island Concept Plans*, had been considered by the Department of Planning and Natural Resources of the Government of the U.S. Virgin Islands. The plan identified various

alternatives for future development and use by Water Island. The alternatives considered primarily differ in intensity of use and density. As yet, no final alternate plan has been selected by the Department of Natural Resources.

Scope of the Study

This environmental assessment examines only the impacts of alternatives of transferring title to Water Island. This study does not propose nor does it examine the impacts of any future development. Current land use zoning will continue to direct the development of the island.

The draft environmental assessment was used to select a preferred plan and to determine if significant environmental impacts are expected to occur from the proposed action of transferring title; because no significant environmental impacts are expected to occur, a finding of no significant impact (FONSI) has been prepared.

The draft assessment was prepared after reviewing reports from other agencies, after holding public meetings, after listening to those commenting orally and in writing, and after significant personal interviews with island residents, former sublease holders, and representatives of the V.I. Government. The authors and principal investigators have made extreme attempts to review the documentation, to hear the residents and others, and to remain neutral with no legal interpretation of the lease or other legal findings. Should any reference in this document appear to be an interpretation, it is without grounds and strictly inadvertent.

This document fulfills the disclosure requirements of the National Environmental Policy Act of 1969 (Public Law 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Public Law 94-52, July 3, 1975, and Public Law 94-83, August 9, 1975) and will serve as the public involvement summary report.

Chapter 2 describes and compares the alternatives. Chapter 3 describes the affected environment and discloses the environmental consequences of each alternative. Chapter 4 summarizes the participation of the public and interested and affected agencies, including the U.S. Fish and Wildlife Service (FWS), the National Park Service (NPS), and the Bureau of Land Management. Chapter 4 also serves as the public involvement summary.

Chapter 2

Alternatives

This chapter describes the alternatives formulation process, the alternatives considered in detail, and the alternatives considered but eliminated from detailed study.

Alternatives Formulation Process

One assumption of this study for all alternatives (except as noted) is that the contracts signed as a result of the Interior Solicitor's December 24, 1992, letters would be honored and executed, subject to completion of the environmental compliance studies.

All reasonable alternatives were considered during the alternatives formulation process. The alternatives to retain most or all interest in the land do not fulfill the purpose of terminating Federal title to Water Island. During the public involvement process, however, a lease option was determined to be acceptable to some of the island residents and is, therefore, presented and considered.

All alternatives considered, some with multiple options, are listed below:

- No action
- Offer the land for sale—Alternative 1
 - To the highest bidder, Option 1A
 - To former sublessees, Option 1B
 - To former sublessees, voiding 36 signed contracts, renegotiating with all, Option 1C
 - To the Virgin Islands Government, Option 1D
 - Via a lottery, Option 1E
 - In a negotiated direct sale of the entire island, Option 1F
- Turn island over [give]—Alternative 2
 - To the Virgin Islands Government, Option 2A
 - To the former sublessees (via a life estate), Option 2B

- Retain most or all interest in the land—Alternative 3
 - Lease to the former sublessees, Option 3A
 - Renegotiate master lease, Option 3B
 - Open leasing to others, Option 3C
 - Manage internally by OIA, NPS, or other entity, Option 3D
 - Open competitive bidding for concessionaire, Option 3E
- Establish multiple ownership—Alternative 4
- Combination, offer land for sale and turn over part to V.I. Government—Alternative 5 (Preferred)

Criteria were developed to evaluate the alternatives. The alternatives must fulfill the purpose of substantially transferring title and meeting the following criteria.

- To protect endangered species*
- To protect or adequately address cultural and archeological sites*
- To minimize socioeconomic impacts to local residents
- To be advantageous to the Federal and Virgin Islands Governments
 - Return monies to the U.S. Treasury
 - Provide a tax base for Virgin Islands residents

* To comply with Endangered Species Act or National Historic Preservation Act.

Table 1 summarizes the alternatives considered and their comparison to the criteria.

Alternatives Considered in Detail

Alternatives considered in detail must include a no action alternative. The no action alternative provides the baseline conditions against which all other alternatives are compared.

No Action Alternative

The no action alternative is the most likely future condition that could be expected without the proposed action. For the most part, the no action alternative would be a continuation of the existing conditions, with a few exceptions.

Table 1.—Comparison of alternatives to criteria

Alternative	Criteria					
	Meets purpose ¹	Protect endangered species ²	Protect cultural resources ²	Minimize socio-economic impacts to local residents	Advantageous to	
					U.S. Treas.	V.I. Govt.
No action	No	Yes	Yes	No	No	No
Offer the land for sale, Alt. 1						
To the highest bidder, 1A	Yes	Yes	Yes	No	Yes	Yes
To the former sublessees, 1B	Yes	Yes	Yes	No	Yes	Yes
To the former sublessees, voiding 36 contracts, renegotiating, 1C	Yes	Yes	Yes	Yes	Yes	Yes
To V.I. Government, 1D	Yes	Yes	Yes	No	Yes	Yes
Via a lottery, 1E	Yes	Yes	Yes	No	Yes	Yes
In a negotiated direct sale of entire island, 1F	Yes	Yes	Yes	No	Yes	Yes
Turn Island over, Alt. 2						
To the V.I. Government, 2A	Yes	Yes	Yes	No	No	Yes
To the former sublessees (via a life estate), 2B	Yes	Yes	Yes	No	No	No
Retain most interest in the land, Alt. 3						
Lease to former sublessees, 3A	No	Yes	Yes	No	Yes	No
Renegotiate master lease, 3B	No	Yes	Yes	No	Yes	No
Open leasing to others, 3C	No	Yes	Yes	No	Yes	No
Manage internally by OIA, NPS, or other entity, 3D	No	Yes	Yes	No	No	No
Open competitive bidding for concessionaire, 3E	No	Yes	Yes	No	Yes	No
Establish multiple ownership, Alt. 4	No	Yes	Yes	No	Some	Some
Combination, offer for sale and turn over part to V.I. Govt, Alt. 5 (Preferred)	Yes	Yes	Yes	Yes	Yes	Yes

¹ Purpose is defined as transferring title to most of Water Island.

² A "yes" assumes some land is reserved in the public's interest.

The no action alternative is not proposed as a feasible alternative. It is presented only (as required by NEPA) as the alternative against which all other alternatives are compared.

Under the no action alternative, the Department of the Interior would continue to own Water Island. The contracts signed early in 1993 would remain conditional until completion of NEPA compliance, and the earnest money would continue to be held unless refunds were requested and the contracts were terminated. A few representatives of the 99 former sublessees without a signed contract have indicated they would continue to live in a state of uncertainty, although they would continue to make lease payments at less than fair market value to the former master leaseholder or the Federal Government or both.

Former sublessees would continue to transfer their interests in the leaseholds on a very limited basis without any legal rights to the property. Development of formerly subleased vacant lots would continue

without legal title to the land. Properties not subleased by the former master leaseholder would remain vacant and idle (most are topographically undesirable and unsuitable for development).

The lands recommended to be set aside for wildlife habitat and threatened and endangered species (described later) would not be set aside; however, the Federal Government has the authority and responsibility to protect threatened and endangered species, and that effort would continue. Cultural resources also would continue to be protected at a minimal level.

The U.S. Army Corps of Engineers (Corps) will perform an investigation to determine whether hazardous materials remain on Water Island as a result of the activities of the U.S. Army (Army). These actions will consist of sampling the surface soils at the former test sites of the San Jose Project where testing of chemical warfare materials occurred (test sites 4, 5, 6, and 8) and sampling an area near Tamarind Bay where Army Quartermaster materials were discovered by NPS archeologists. The sampling will consist of collecting shallow (6 inches or 15 centimeters) soil samples for chemical analysis to determine if residues from the chemical weapons testing remain. Magnetometer investigations of the subsurface will determine if objects that could be munitions or pieces of munitions remain. If chemical residues or suspect munitions are found, the Army will develop a protocol to remove the wastes and proceed with the removal. The protocol will include appropriate consideration of the cultural resources.

In the course of this investigation, the Corps will remove the majority of the household refuse and discarded vehicles from the open dump located in test site 4. This material will be disposed of in a permitted landfill on the island of St. Croix or other suitable location. Any suspected hazardous materials found and the automotive fluids drained from the vehicles would remain.

Presently, there is no plan to remove or remediate any other solid waste materials on Water Island, resulting from civilian activities. The other solid wastes include those at the former hotel and those in the open dumps on the island.

Solid waste disposal would continue to be among the challenges facing Water Island. Transportation and the road structure on the island would be subject to further deterioration.

Elements Common to All Action Alternatives

In this environmental assessment, most of the action alternatives are the same or very similar, except that the parties and the methods of title

transfer would vary. To avoid significant repetition, all similar items will be described in this section; only the differences will be identified with each alternative.

Honor 36 Contracts. One assumption in all action alternatives is that (except as noted) the 36 signed contracts—as a result of the Interior Solicitor's December 24, 1992, letters—would be honored and executed, pending completion of environmental compliance studies. The interests of all other former sublessees (99) are subject to the decisions made by Interior after publication of this draft environmental assessment, receipt of comments, a public meeting, and publication of the final environmental assessment. Interests of the former master lessee were in litigation; however, on December 8, 1995, a tentative agreement was reached between the Department of the Interior and the former master leaseholder. Assuming a satisfactory conclusion of this agreement and completion of a FONSI, the contracts can be executed.

Protect Endangered Species—Land and Marine Resources. All action alternatives also would include the provisions, in perpetuity, to protect land and marine resources associated with Water Island as required by the FWS's no jeopardy opinion. Protection would be in the form of public ownership of certain lands, limitations on development, and restrictions on land use in the interest of the public. A list of lot restrictions slightly modified based on public comment and FWS consultation is located in attachment C.

The few lands to remain in public ownership to protect threatened and endangered species and marine resources (see figure 2) include:

- A tract consisting of approximately 40 acres (16 hectares) at Sprat Point (lot 279).
- Tracts D and F, which will be retained in public ownership or subjected to a permanent nondevelopment easement.
- Lots 78, 100, and 112 were recommended to be retained in public ownership, or be restricted to no further development to reduce erosion. (Note: Lots 100 and 112 have a signed contract to transfer title of the lot, and lot 100 has been developed.)
- To the extent feasible, lands included in Coastal Barrier Units VI-26 and VI-27 will be retained in public ownership. Two lots have already been developed with homes.

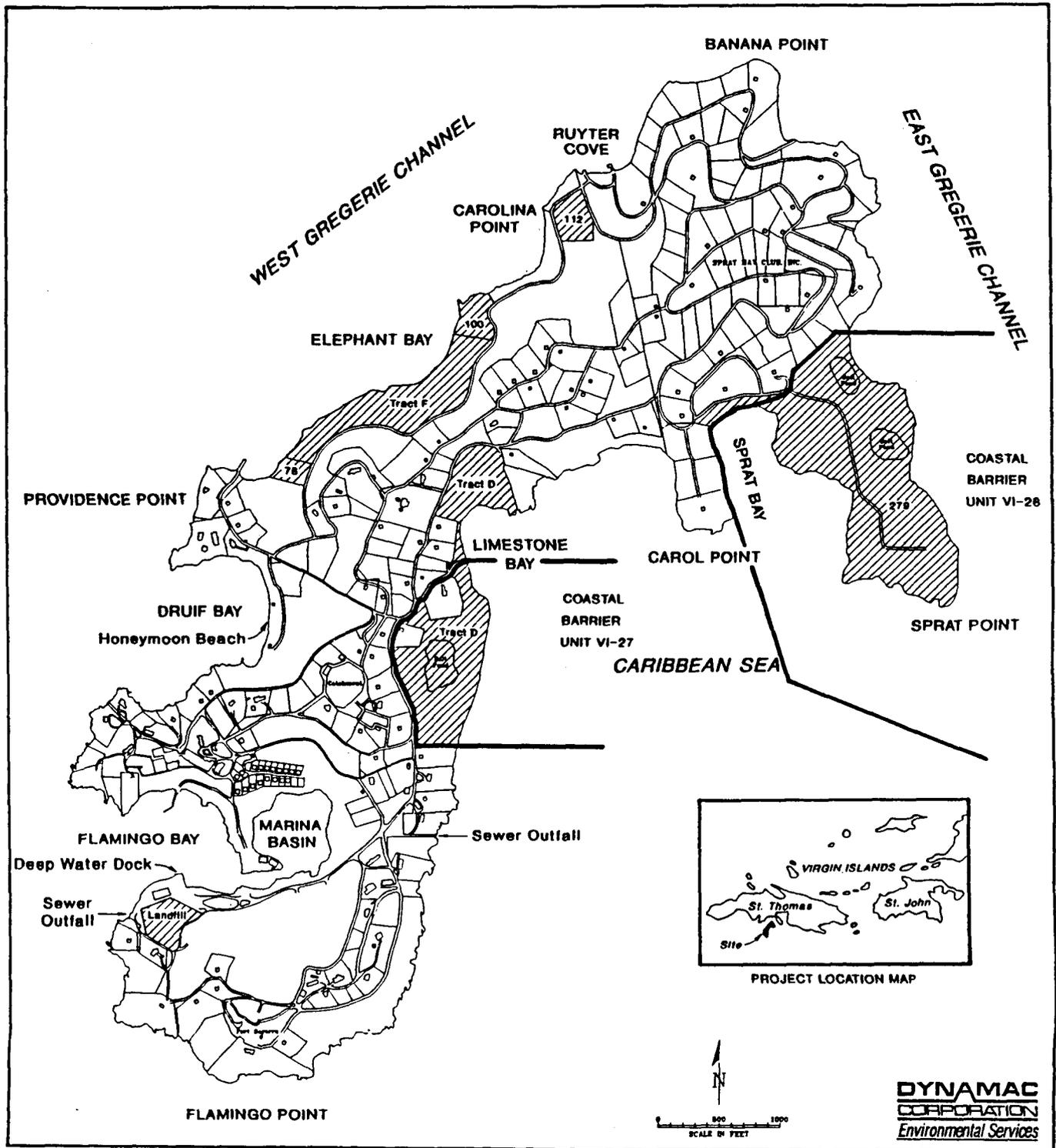


Figure 2.—Lands to be retained in public ownership to protect threatened and endangered species and marine resources.

- The DOD waste dump (designated "landfill" on map) at the southern end of the island will be retained in Federal ownership for the foreseeable future or until the Corps has completed their work. At that time, it would be turned over to the V.I. Government.

Limitations on development (see figure 3) include:

- No development would occur on lands retained in public ownership.
- The United States would retain a nondevelopment easement of 13 feet (4 meters) surrounding the marina basin off Flamingo Bay to protect the mangroves.
- The Federal Government would maintain a nondevelopment easement of 13 feet (4 meters) around any salt ponds to protect wetlands used by candidate endangered species.
- Perpetual nondevelopment easements, if the area is not yet developed, would be placed on lots 208-210, 230, 234, 270, and 279.
- Additional development on tract C would be evaluated to incorporate restrictions, such as setbacks, in addition to lighting restrictions (see below).
- The Federal Government would retain a nondevelopment easement, if the tract has not yet been developed, or a protective covenant that no additional development or removal of vegetation cover occur on portions of tract B, lots 1 through 10, 20 through 29, parcel 111, lots 61 through 63, the unnumbered lot between 63 and 86, lots 86, 87, 94, 95, the unnumbered parcel adjoining lot 201 on the south and west, lots 201 through 220, 231 through 233, 268, and 279.

Finally, the following land-use restrictions (see figure 4) would apply:

- All deeds would be conditioned and approved by FWS and the Virgin Islands Division of Fish and Wildlife to require that boats of the owners, lessees, and visitors be moored only at designated mooring sites to minimize impacts to the seagrass beds of Druif, Flamingo, Elephant, and Ruyter Bays. The type, number, and location of these moorings would be determined in cooperation with the V.I. Government, FWS, and the National Marine Fisheries Service. Anchoring or mooring in other areas would be prohibited.

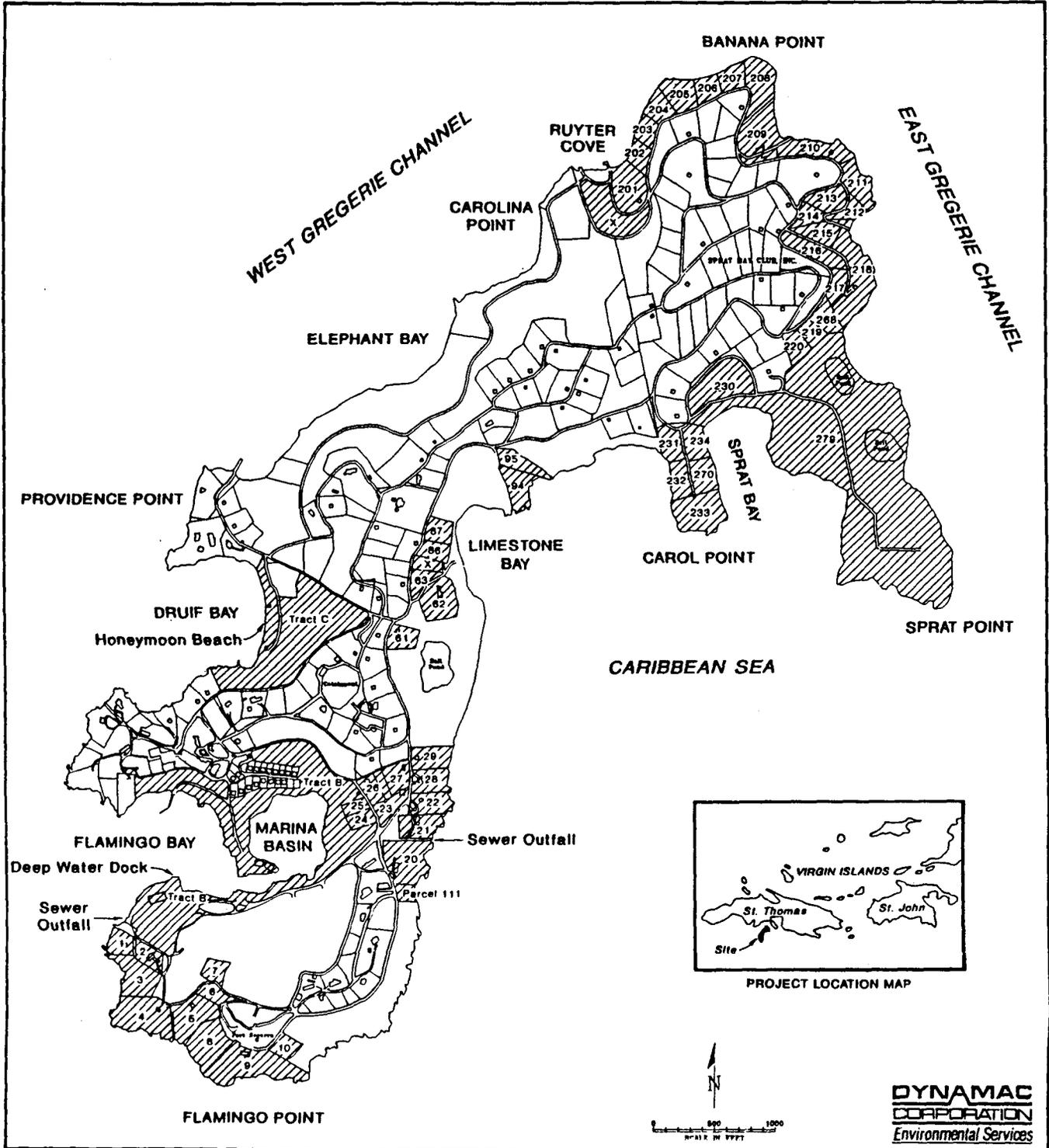


Figure 3.—Lands to have limitations on development to protect threatened and endangered species and marine resources.

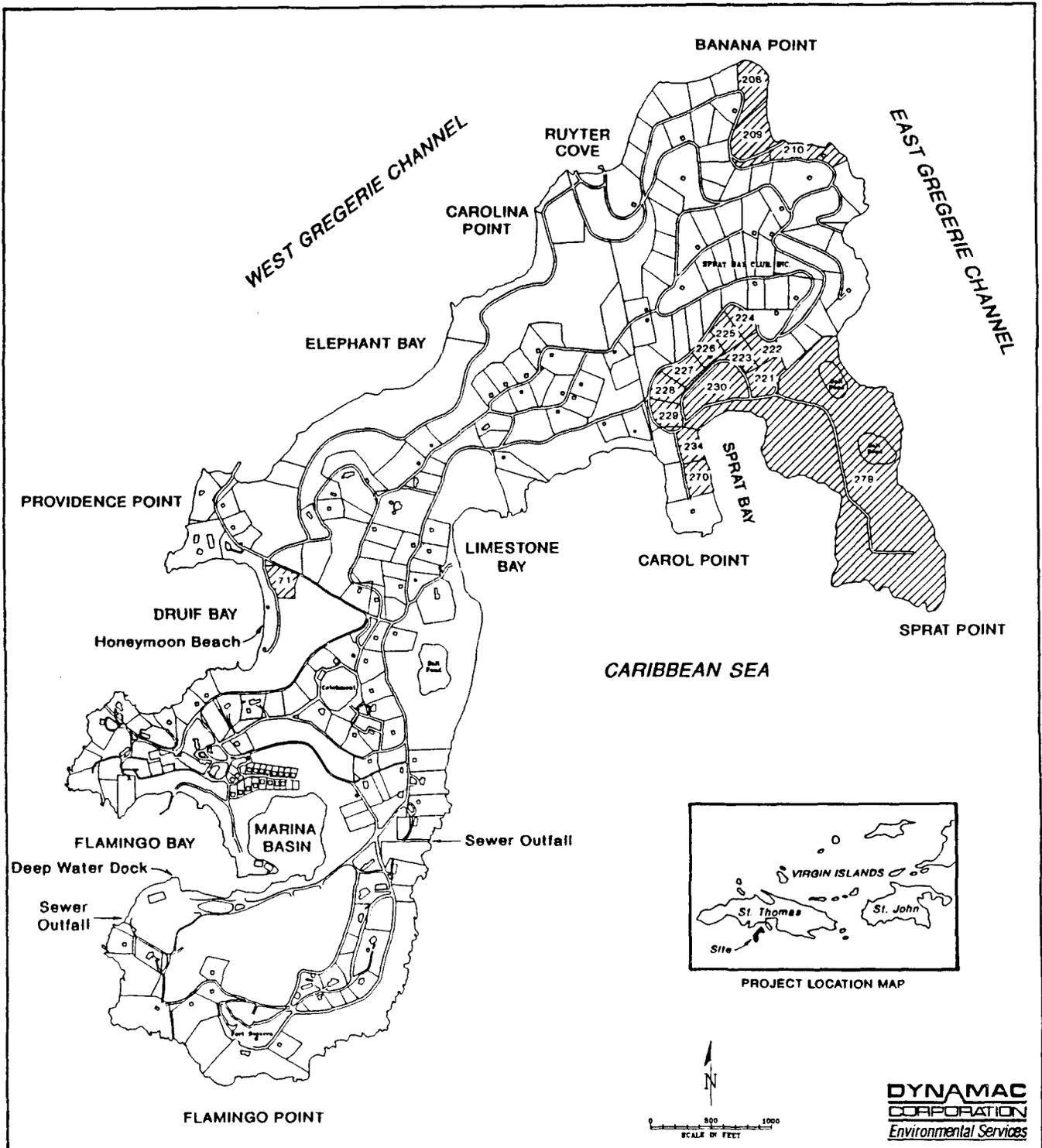


Figure 4.—Lands to have land-use restrictions to protect threatened and endangered species and marine resources.

- Lighting restrictions would be developed and approved by FWS, in conjunction with the Virgin Islands Division of Fish and Wildlife, for lots 71, 208-210, 221-230, 234, 270, and 279. Existing lighting would be reviewed and, if necessary, replaced with shielded lighting. Placement of all new lights would be reviewed and approved by FWS and the Virgin Islands Division of Fish and Wildlife.
- All deeds would be conditioned to prohibit introduction of non-native animals, such as mongoose, deer, and pigs, to the island to minimize impacts from predation on reptiles, including sea turtles.
- All deeds would be conditioned to prohibit the use of off-road vehicles, beach cleaning equipment, or recreational use of horses on beaches. All domesticated animals would be kept off the beach.

Protect Cultural Resources. Significant cultural resources would be addressed before disposal. Subject to consultation with the State Historic Preservation Officer (SHPO), the sites eligible for the National Register of Historic Places would be preserved in place with binding covenants or subjected to adequate data recovery before title to these parcels is transferred.

Determine Hazardous Materials and Other Wastes. The Corps would continue their study to determine the extent of DOD hazardous materials left on the island. In the course of this investigation, the Corps will remove the majority of the household refuse and discarded vehicles from the open dump located in test site 4. This material will be disposed of in a permitted landfill on the island of St. Croix or other appropriate landfill. Any suspected hazardous materials found and the automotive fluids drained from the vehicles would eventually be removed under any of the action alternatives. Other solid waste materials in or around dump areas or the hotel site would remain.

Offer the Land for Sale—Alternative 1

Under this alternative, the land, except that set aside for wildlife habitat, threatened and endangered species, and cultural resources would be offered for sale. The various options are described below.

Offer the Land for Sale to the Highest Bidder, Option 1A. In this option, the land would be offered for sale to the highest bidder.

Offer the Land for Sale to the Former Sublessees, Option 1B. The land would be offered for sale to the former sublessees at fair market value. It is assumed that the former lessees and Interior can successfully negotiate a fair price, perhaps a compromise that would be advantageous to both parties.

Offer the Land for Sale to the Former Sublessees, Voiding the 36 Contracts, Renegotiating with All, Option 1C. The land would be offered for sale to the former sublessees at fair market value. It is assumed that the former lessees and Interior can successfully negotiate a fair price, perhaps a compromise that would be advantageous to both parties. The existing executed contracts would be voided and negotiations would begin with holders of all former subleases on an even basis.

Offer the Land for Sale to the V.I. Government, Option 1D. The land would be offered for sale to the V.I. Government, with restrictions to protect that land set aside for wildlife habitat, threatened and endangered species, and cultural resources. Non-DOD solid waste materials in or around dump areas or the hotel site would remain.

Offer the Land for Sale via a Lottery, Option 1E. A lottery would be used to select the successful buyer of a lot when more than one buyer desired to purchase the same lot at fair market value.

Offer the Land for Sale in a Negotiated Direct Sale of the Entire Island, Option 1F. In a negotiated direct sale, the buyer(s) would purchase the entire island and would assume all obligations of the Federal Government. The island buyer(s) would honor the 36 existing executed contracts. Other residents desiring to purchase their previously leased land could purchase fee title, with the entire island buyer(s) carrying a note if necessary.

Turn Island Over [Give]—Alternative 2

This alternative involves transferring ownership of the island without any financial compensation. Two options are described below.

Turn Island Over to the V.I. Government, Option 2A. Under this alternative, the land would be turned over to the V.I. Government, with restrictions to protect that land set aside for wildlife habitat, threatened and endangered species, and cultural resources. As indicated, the 36 contracts would be honored under this alternative. The V.I. Government has previously testified they are interested in obtaining title to Water Island.

Turn Island Over to the Former Sublessees (Via a Life Estate), Option 2B. The land would be given in a life estate to all former sublessees (36 and 99±) under this option; the 36 contracts would be voided, and the earnest money held in escrow would be returned. The land would revert to the Federal Government for ultimate disposal at the end of the life estates.

Combination, Offer the Land for Sale and Turn Over Part to the V.I. Government—Alternative 5 (Preferred)

Under this alternative, a combination of actions would take place. In general, the elements common to all action alternatives are part of this alternative, including honoring the 36 contracts, protecting endangered species, protecting cultural resources, and determining hazardous materials and other wastes. The land formerly leased would be offered for sale to the former sublessees. The lands to be set aside for fish and wildlife purposes would be subject to a conservation easement to be negotiated between Interior and the V.I. Government.

The 36 outstanding signed purchase contracts would be honored for any sublessee who wishes to proceed. The offer to sell would also be extended to all other sublessees. The price may be renegotiated to the extent necessary to account for changed conditions resulting from Hurricane Marilyn; any restrictions imposed by the biological, hazardous waste, or cultural resources findings of the environmental assessment; and issues concerning the 1991 appraisal, such as the passage of time.

The Federal Government would continue to be responsible for the dump until it is cleaned up or declared by the Corps to be free of chemical ordnance. At that time, it would be turned over to the V.I. Government.

Assuming a satisfactory resolution of the litigation with the former hotel owners, the former hotel tract and related properties would be turned over to the V.I. Government. In consideration for receiving the tracts, they would be responsible for cleaning them up. Properties not subleased and not required for conservation or preservation purposes would also be turned over to the V.I. Government. The net proceeds, less hotel cleanup costs, resulting from any subsequent sale or lease of these hotel-related or non-subleased properties by the V.I. would be placed in a trust fund to provide services to Water Island, including ferry service. If such a fund is adequately capitalized, then any additional net proceeds would be returned to the Federal Treasury.

Other information can be found in attachment D, Allen Stayman's letter of October 27, 1995.

Alternatives Considered but Eliminated

Reclamation's agreement with the Office of Insular Affairs was to conduct an environmental assessment of a proposed action that may result in the transfer or sale of Federal property on Water Island, located in the U.S. Virgin Islands. None of the following alternatives satisfies the requirement to terminate Federal ownership of most of Water Island. In addition, the Congress has indicated its opposition to the continued leasing of Water Island in Public Law 96-205 of March 12, 1980, when it prohibited Interior from extending, renewing, or renegotiating the lease before its expiration in 1992. The alternatives also were considered and evaluated against the other criteria in table 2; as a result, the following alternatives were considered but eliminated from detailed study.

All elements common to the previous action alternatives also apply here unless specifically expressed otherwise.

Retain Most or All Interest in the Land—Alternative 3

Under this alternative, the land would be retained in the United States Government ownership. The alternative to retain the land does not meet the purpose of transferring title to Water Island. This alternative would provide revenue to the Federal Treasury but would not provide a tax base for the V.I. Government because the island would still be in U.S. Federal Government ownership. Various options within this alternative are described below.

Lease to Former Sublessees, Option 3A. Under this option, Interior would negotiate leases with the former sublessees at present fair market prices. This option would provide revenue from the leases to the Federal Treasury.

Renegotiate Master Lease, Option 3B. Interior would renegotiate the master lease at present fair market prices; in turn, the master leaseholder would renegotiate the subleases. This option would provide revenue from the master lease to the Federal Treasury.

Open Leasing to Others, Option 3C. Interior would open the leasing to other interested lessees, with options similar to the previous master leaseholder. This option would provide revenue from leases to the Federal Treasury.

Manage Internally by OIA, NPS, or Other Entity, Option 3D. Water Island would be managed by the OIA, NPS, or another entity. This option would provide tourist revenue to the Federal Treasury from managing the island.

Open Competitive Bidding for a Concessionaire, Option 3E. Interior would offer competitive bidding for a concessionaire to manage the island for profit. This option would provide revenue from a concessionaire to the Federal Treasury.

Establish Multiple Ownership—Alternative 4

This alternative involves retaining some land, selling some land, and leasing some land. The existing executed contracts would be honored. Other lands previously leased would be offered for sale or lease, with a large portion of former leaseholders choosing to lease.

Affected Environment and Environmental Consequences

Water Island is part of the U.S. Virgin Islands. It lies about 1,097 miles (1,770 km) southeast of Miami and 40 miles (65 km) east of Puerto Rico, along the Anegada Passage—a key shipping lane for the Panama Canal. Many large tourist ships dock at St. Thomas because Charlotte Amalie Harbor is one of the best natural, deepwater harbors in the Caribbean.

The island is part of the Greater Antilles, formed by the convergence of the Caribbean Plate with the North American and Atlantic Ocean Plates of the earth's mantle. Elevations on Water Island range from 0 to 290 feet (88 meters); the island is mostly hilly to rugged and mountainous with little level land.

Water Island lies within the subtropical dry forest life zone where mean annual rainfall ranges from approximately 23.6 inches to 43.3 inches (600 to 1,100 millimeters). The climate is tempered by easterly tradewinds, relatively low humidity, and little seasonal temperature variation; the rainy season is from May to November.

Tourism is the primary economic activity in the islands, and the resulting air quality and noise levels are in the very acceptable range. The natural resources of the area are primarily sun, sand, sea, and surf, which makes the U.S. Virgin Islands ideal for recreation. Although Water Island's manmade Honeymoon Beach in Druif Bay is open to the public, as are all beaches in the Virgin Islands, the beach is used mostly by local residents because no public facilities remain since Hurricane Hugo hit the island in 1989.

The major soil association on Water Island is Cramer gravelly clay, a well-drained, highly erodible, shallow soil found over volcanic rock. Volcanic rock outcrops and cliffs are found along most of the south coast of the island. Limestone rock outcrops and soils are found primarily in Limestone Bay.

Water Resources

The only surface water on Water Island exists in salt ponds at various locations around the island, generally on the southeast side (see figure 1 earlier in this report). These ponds are at sea level and probably are

replenished through a combination of sea water intrusion and shallow groundwater flow. No data are available on the quality of the water in these ponds. Contamination could occur from septic tank leachate reaching the ponds through the groundwater system; however, the probability of this occurring is quite low.

Water Island got its name from fresh water ponds where sailing ships could replenish their water supply. Fresh water ponds apparently were once found in association with saltwater ponds.

Drinking Water

Water Island has no central drinking water system serving the island residents. Very little data are available about the groundwater resources of the island. The depth to groundwater ranges from ground level at the saltwater ponds to more than 10 feet (3 meters) below ground surface for most of the island. In general, groundwater occurs in both the residual soils and in the fractured bedrock (Donnelly, 1959). Because of the apparent unreliability of the groundwater resources, island residents obtain their drinking water from rainfall.

Individual cisterns capture the rainwater that lands on the rooftops. During drought periods, water is brought in by trucks on a barge from St. Thomas. The former hotel used the water catchment that was constructed by the Army to collect rainwater in a 350,000-gallon (1,324,750-liter) reservoir at its base. Before Hurricane Hugo, seven of the villas associated with the former hotel were occupied, and these residents used water supplied by the military catchment system. The condition of the catchment system from a sanitary standpoint is unknown, and asbestos contamination of the water is a possibility.

No **environmental consequences** related to the drinking water are expected to occur with the no action or any of the action alternatives, except with option 1F. Option 1F includes the reconstruction of the hotel; it is expected that the Army catchment system would be abandoned and properly disposed of. A reverse osmosis system or some other environmentally acceptable system is expected to be installed which would supply the drinking water required for the hotel and the hotel villas. This should result in an improvement in the quality of the former hotel's drinking water over that which was formerly supplied by the catchment system. Under the negotiated direct sale of the entire island, option 1F, the drinking water conditions would remain essentially the same for the majority of the island residents.

Sewage Treatment

No central sewage system serves the residents of Water Island. In general, the former lessees dispose of their sewage through individual

septic systems. The condition of these systems is unknown. However, it is unlikely that the systems are pumped at the recommended frequency (every 2 to 4 years), but a well-maintained septic tank system is viable. Also, given the shallow soil horizons and fractured bedrock conditions on the island, system failure and groundwater pollution is possible.

The occupied hotel villas were thought to be using the sewage system of the old hotel. This system is believed to consist of a holding tank and an underwater discharge to the ocean to the west of the island (figure 1). However, since they were damaged during Hurricane Hugo or disconnected, that system is no longer used. Sewage drains into Flamingo lagoon (the marina area) from the villas. This is a violation of the Clean Water Act regulations because no National Pollutant Discharge Elimination System permit has been issued. One other ocean outfall exists on the southeast corner of the island (also shown in figure 1) that formerly served Fort Segarra. It is not thought that this outfall is presently being used as a sewage discharge.

The **environmental consequences** related to sewage treatment under most alternatives would be minor. Under option 1F, the reconstruction of the hotel is expected to include a sewage treatment plant located next to the warehouse to treat the wastes from the hotel and, perhaps, the hotel villas. This would alleviate the present condition of raw sewage being discharged to Flamingo Bay from the occupied hotel villas. Under the negotiated direct sale of the entire island, option 1F, the disposal of wastewater would remain essentially the same for the majority of the island residents.

Vegetation

Vegetation on Water Island is influenced by geography, topography, climate, and past and present land use as described at the beginning of this chapter.

Upland Vegetation

Vegetation has been disturbed in many areas as a result of past military activities, residential and tourist development, road construction, and the introduction of exotic species. Disturbed areas, such as roads and trails, support early successional plants, such as cat's claw, croton, guinea grass, tantan, catch and keep, and bromelia.

Some areas remain relatively undisturbed. For example, tract D, the south-facing steep slopes of Limestone Bay, is thorn scrub typical of the subtropical dry life zone (FWS, 1992). Tree height ranges from about 10 feet to 16.5 feet (3 to 5 meters). Dominant species include Christmas tree, water mampoo, and spoon-tree. Other species include strawberry

pear, dildo cactus, black torch, turpentine tree, and caper tree. Cowage cherry, a rare endemic plant considered endangered by the Virgin Island Division of Fish and Game, occurs here.

On Sprat Point, upland vegetation is characterized as thorn and cactus scrub and evergreen woodland. Larger plants include turpentine tree, water mampoo, and dildo cactus. Below these emergent forms, and forming a continuous canopy, are Christmas tree, spoon-tree, West Indian quinine bark, white cedar, nosegay tree, and caper tree. Other cactus present include barrel cactus, jumping cactus, strawberry pear, and the rare snow cactus. Cowage cherry is also present.

Along the shoreline, an evergreen littoral woodland exists, dominated by Indian mulberry, cork tree, button tree, and sea grape. Other plants include manchineel, coconut palm, bay hops, bay cedar, and seashore rush grass.

Water Island's northern slopes are less steep than the southern slopes and offer more protection to vegetation. For example, on tract F (Elephant Bay), trees may reach 40 to 50 feet (12 to 15 meters) in height in some sheltered ravines. Dominant trees include turpentine tree, water mampoo, and teyer palm. Other species include spoon-tree, brisselet, old woman's bitter, and manchineel berry.

Environmental consequences resulting from transfer of title are assumed identical among the alternatives. Buildings and roads represent human activity that may affect upland vegetation and associated wildlife habitat. Effects take the form of removal of vegetation and loss of soil during and after construction. It is assumed that such effects would occur on the undeveloped lots when future construction occurs.

Undisturbed examples of subtropical dry forest remain on Water Island and are generally restricted to areas that, for various reasons, are not currently desirable development sites. However, under **no action conditions**, there are no guarantees that these sites would be preserved.

Some 40 acres (16 hectares) at Sprat Point (lot 279) and tracts D and F would remain in public ownership to protect tracts of subtropical dry forest. Restrictions on removal of plants at other sites (see chapter 2) would further protect Water Island's vegetation. **Action alternatives**, with elements of protection for natural resources, would result in a slight improvement in the condition of upland vegetation, when compared to no action conditions.

Wetlands

Although Water Island gets its name from its historic abundance of fresh water, the only remaining wetland habitat consists of salt ponds and mangrove stands scattered around the island.

Salt Ponds. Salt ponds are formed when shallow bays or parts of bays are closed by reefs or the growth of mangroves. The deposition of sand or reef rubble by storm waves completes the closure. The chemistry of salt ponds is complex, and salinity changes seasonally. As salinity changes, different algae cause changes in water color from green to orange. Salt ponds are important wildlife habitat and are used extensively by such species as the white-cheeked pintail (Bahamas duck). Salt ponds are also sediment traps, acting as catchment and settling basins. These functions are important in maintaining water quality for offshore systems.

Salt pond woody vegetation consists of mangroves—white, black, and red—while herbaceous plants include saltwort, sea purslane, and seaside heliotrope. Larger salt ponds exist at Limestone and Sand Bays and at Revenge Beach south of Sand Bay on Sprat Point (in figure 1). Although some salt ponds were affected by Hurricane Hugo, their mangroves are recovering.

Development has eliminated several salt pond wetlands on Water Island. The salt pond on Flamingo Bay has been dredged and converted into a marina basin. At Druif Bay, the salt pond was filled as part of the Honeymoon Beach development. Several small ponds near the dock landing at Providence Point and the loading dock at Ruyter Cove have been affected by filling and other encroachment. Mangroves still exist, but most of the ponds have been filled.

In the past, salt ponds on Water Island have been dredged; one was converted to a boat marina (FWS, 1992) and others used as dump sites (Army, 1993). The remaining ponds are important wildlife habitat and should be protected. Although areas supporting salt ponds are generally poor building sites, the sites could be put to other uses in the future. Adverse **environmental consequences** could occur under **no action** conditions because protection of the salt ponds is not guaranteed. All remaining functional salt pond wetlands would be protected by remaining in public ownership and applying development restrictions. Therefore, when compared to no action conditions, the **action alternatives** would result in slight improvement in conditions for salt ponds, because they would be preserved.

Mangroves. Mangroves are important scrub-shrub/forested wetlands (Cowardin et al., 1979). These plants are "land reclamation specialists" and can create new land along the shore (Kaplan, 1988). Red mangroves

colonize sandy shallows. Their prop roots slow currents and cause increased deposition of suspended particles. The sedimentation process continues, augmented by upland organic material and mangrove leaves, until the increase in sediment elevation and nutrients allows the establishment of black mangroves. As more sediment is trapped, a mud flat develops that supports white mangroves and associated plants, such as saltwort and sea purslane.

Mangroves support numerous marine organisms on and among their prop roots, and their branches provide nest and roost sites for many birds. Mangroves also serve as nursery areas for many species of fish, shrimp, crabs, and other animals. These important wetlands function at the interface between terrestrial and marine ecosystems.

Mangroves can provide important habitat for terrestrial and marine organisms. These plants are often associated with salt ponds and are exposed to similar risks. Adverse **environmental consequences** could occur under **no action** conditions because protection of the mangroves is not guaranteed.

Under the action alternatives, mangroves would be protected by the same mechanisms detailed for salt ponds. As with salt ponds, conditions for mangroves would improve, when compared to the no action alternative.

Wildlife

In general, because of their isolation from the mainland, most islands of the Greater and Lesser Antilles are somewhat limited in native terrestrial fauna. Mammals were never numerous in the Virgin Islands, and native reptiles have been adversely affected by introductions of nonnative mammals, such as the mongoose. The numbers of bird species are influenced by the proximity of an individual island to the mainland or other large island and location in relation to migration corridors.

Water Island provides habitat for both resident and migratory birds. **Birds** detected during resource surveys in 1991 and 1992 include black-faced grassquits, smooth-billed anis, gray kingbirds, green-throated caribs, mangrove cuckoos, Caribbean elaenias, bananaquits, pearly-eyed thrashers, and ground doves (FWS, 1992).

Salt ponds are important habitat for both resident and migrant birds. Birds observed in or near the salt ponds at Sand and Limestone Bays include white-cheeked pintails, northern water thrushes, yellow warblers, black and white warblers, semipalmated sandpipers, spotted sandpipers, Wilson's plovers, and yellowlegs (FWS, 1992).

The lagoons and cliffs of Water Island are used by many birds. Species observed at Flamingo Bay lagoon include brown pelicans, royal terns, belted kingfishers, ospreys, great blue herons, and little blue herons (FWS, 1992). Red-billed tropicbirds were observed near the southwestern cliffs of Water Island.

Several species of **reptiles** were encountered during resource surveys conducted in 1991 and 1992 (FWS, 1992). Species observed include anole and ground lizards, geckos, red-legged tortoise (introduced), and Puerto Rican racer. No Virgin Island tree boas (endangered) were encountered. The diversity of species encountered indicates that the mongoose has not been introduced on Water Island.

As with many Caribbean islands, native **mammals** are rare on Water Island. Comments received during public scoping meetings indicated that there may be a large rat population on Water Island (and where there are people, there are usually house mice). During these same meetings, the issues of feral (untamed) cats on the island and dogs brought ashore from pleasure boats were raised. The residents have concerns for native wildlife.

No population estimates exist for species inhabiting or using Water Island. Therefore, analysis of effects to wildlife assumes that any changes to wildlife population would closely correlate to effects on habitat (or vegetation). For wildlife habitat, **environmental consequences** resulting from transfer of title are assumed identical regardless of the details of the transfers.

As discussed under vegetation, some habitat would be affected under **no action** conditions as building occurs on undeveloped lots. Some additional impacts would be expected from the domestic pets associated with these additional homes. Free-ranging dogs and cats can pose a threat to wild birds, reptiles, and mammals on Water Island.

Under all **action alternatives**, certain areas would be retained in public ownership, some limitations on development would be imposed, and some land-use restrictions applied (see chapter 2). These provisions would serve to mitigate future impacts associated with development and benefit wildlife by protecting and managing their habitat.

When compared to no action conditions, any action alternative would result in improved conditions for wildlife.

Marine Resources

Islands in tropical waters are often associated with a rich and diverse marine environment. Marine resources are commonly organized around coral reefs. Fringing reefs are found near shore where rock rubble

provides suitable substrate. Bank or barrier reefs can occur some distance from shore. Between these reefs, lagoons often occur and support sea grass beds. The east and south shores of Water Island support fringing reefs but no barrier reefs or lagoons. Sea grass beds occur in Sprat Bay and off the western shores of Water Island.

Fringing Reefs

Fringing reefs require the hard surfaces of rocky shores as a substrate (Kaplan, 1982). These reefs extend from just below the low tide mark into deep water and often end abruptly where rock gives way to sand. Fringing reefs consist of a variety of hard and soft corals. The basic reef-building coral, boulder coral, is common, along with brain, elkhorn, staghorn, and other hard corals. Soft corals include sea fans and others.

Fringing reefs extend around the south and east shores of Water Island from just west of Flamingo Point east to Sand Bay (figure 5). These are diverse habitats, as exemplified by the organisms found on and associated with the reefs (table 2). Coral reefs provide habitat for numerous attached organisms that cannot survive without suitable substrate, as well as a variety of fish and invertebrates that find food and cover in these areas.

The fringing reefs associated with Water Island were damaged by recent hurricanes but are recovering (FWS, 1992).

Most adverse **environmental consequences** to marine resources come from adjacent land. Many of the marine organisms that inhabit coral reefs are attached and, therefore, cannot move to more suitable conditions. These organisms are especially at risk from sedimentation. Construction on the highly erodible soil of Water Island could mean increased sedimentation impacts to fringing reefs.

Elements common to **all action alternatives** that would retain public ownership of some lands, limit development, and restrict use on other sites would also serve to protect marine resources. For example, most restrictions occur around the shoreline of Water Island. These areas could serve as a future buffer zone to intercept sediment from upland sites before it reaches fringing reefs or sea grass beds.

Restrictions in the action alternatives—such as retaining tract D, Sprat Point, and the Coastal Barrier Units VI 26 and 27 in public ownership, and restrictions on development at other sites—would result in improved conditions for fringing reefs. When compared to no action conditions, these restrictions would mitigate future impacts associated with development and result in a net improvement in conditions for fringing reefs.

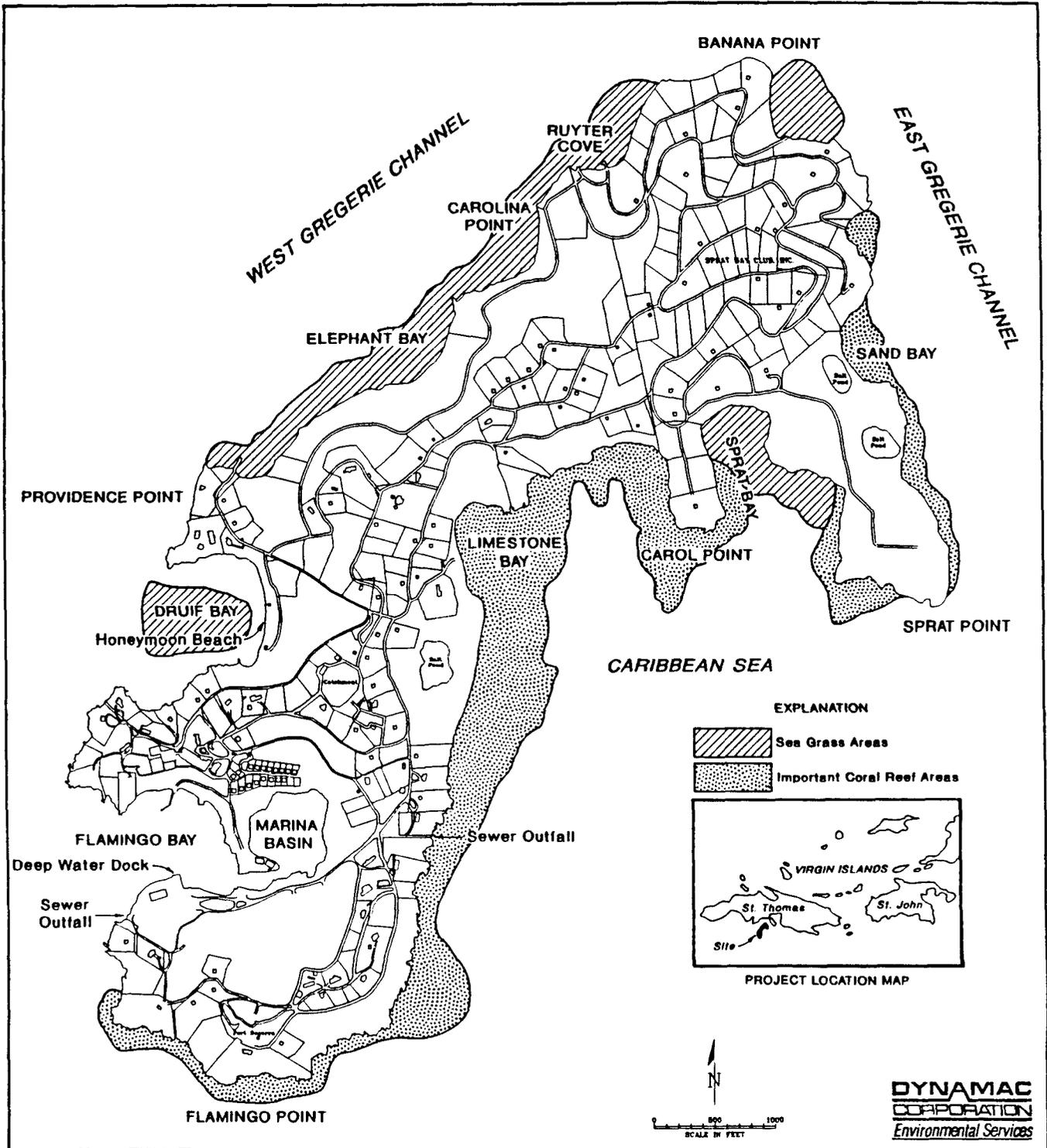


Figure 5.—The island surrounded by fringing reefs and sea grass beds.

Table 2.—Marine organisms recorded from underwater surveys just offshore of Water Island (FWS, 1992)¹

Common name	Scientific Name
Boulder coral	<i>Montastrea annularis</i>
Boulder coral	<i>Montastrea</i> spp.
Brain coral	<i>Diplora</i> spp.
Pillar coral	<i>Dendrogyra cylindricus</i>
Lettuce-leaf coral	<i>Agaricia</i> spp.
Nassau grouper	<i>Epinephelus striatus</i>
Manatee grass	<i>Syringodium filiforme</i>
Shoal grass	<i>Halodule wrightii</i>
Turtle grass	<i>Thalassia testudinum</i>
Elkhorn coral	<i>Acropora palmata</i>
Staghorn coral	<i>Acropora cervicornis</i>
Finger coral	<i>Porites</i> spp.
Yellow tail snapper	<i>Ocyurus chrysurus</i>
Blue chromis	<i>Chromis cyanea</i>
Peacock flounder	<i>Bothus lunatus</i>
Red algae	<i>Dasya</i> spp.
Milk conch	<i>Strombus costatus</i>
Green sea turtle ²	<i>Chelonia mydas</i>
Queen conch	<i>Strombus gigas</i>
White sea urchin	<i>Tripneustes esculentus</i>
Long-spined sea urchin	<i>Diadema antillarum</i>
Pencil urchin	<i>Eucidarus tribuloides</i>
Green algae	<i>Emodesmis verticillata</i>
Algae	<i>Caulerpa</i> spp.
Algae	<i>Penicillus</i> spp.

¹ This is not intended as a complete catalogue of offshore organisms but rather a listing of the more conspicuous plants and animals encountered during a limited survey. For example, the survey also refers to numerous sponges, gorgonians, jacks, grunts, trunk fish, snappers, and other organisms but gives no details.

² Federally threatened.

Sea Grass Beds

Sea grass requires areas protected from wind-driven currents and surf (Kaplan, 1988). At suitable sites, shoal grass often dominates the intertidal zone but cannot compete with, and is replaced in deeper water by, turtle grass and manatee grass. Sea grass beds are important habitat providing food, cover, and attachment sites for numerous marine organisms. For example, 113 species of algae are known to grow on turtle grass leaves along with numerous attached sponges, hydrozoans, flatworms, tunicates, and other organisms (Kaplan, 1988). These beds also function as filters, slowing currents and causing suspended particles to drop to the bottom to become sediment.

Sea grass beds are limited on the east side of Water Island (figure 5). Sparse patches of manatee and shoal grass occur in Limestone Bay (FWS, 1992). A green sea turtle (threatened), which feeds almost exclusively on sea grass, was observed in the area. Sprat Bay supports one of the most protected sea grass beds, dominated by turtle and manatee grass, around the island. FWS believes the area is an important nursery area for fish and other marine organisms. Banana Bay supports turtle and manatee grass with the beds extending into East Gregerie Channel. These beds have been damaged by boat anchor scars. A second green sea turtle was observed in Banana Bay (FWS, 1992).

Sea grass beds are more abundant on the west side of Water Island. Beds in Ruyter Cove and Elephant Bay have been damaged (anchor scars) by boat mooring activity, with most of the sea grass eliminated near shore (FWS, 1992). This activity has caused increased turbidity and lowered water quality. At Providence Point, the sea grass beds are dominated by turtle grass and, at the time of the survey, showed signs of heavy grazing by sea turtles (FWS, 1992). These beds also have been damaged by boat moorings, as have those at Druif Bay. The near shore sea grass beds at Honeymoon Beach have been eliminated by dredging to "improve" the beach.

Environmental consequences include boat anchor scars that occur in many of the sea grass beds associated with Water Island, and it is assumed that damage would continue into the future under **no action** conditions. These scars often prevent the reestablishment of sea grass. The quality of sea grass beds near Water Island is expected to continue to decrease as boats continue to use the west side of the island for mooring sites.

Under all **action alternatives**, all deeds would contain the stipulation that boats would be moored only at designated mooring sites. The type, number, and location of moorings would be determined in cooperation with the Virgin Islands Government, the National Marine Fisheries Service, and FWS. Some enforcement mechanism would need to be defined if the mooring locations do need to be limited.

Restrictions on boat moorings would decrease the rate of damage to sea grass beds and, when compared to no action conditions, would result in improved conditions for sea grass beds.

Threatened and Endangered Species

The list of threatened and endangered species that potentially inhabit the Virgin Islands is extensive. However, FWS identifies only four

endangered, one threatened, and one candidate species listed under the Endangered Species Act that may be affected by transfer of Water Island. These six species are discussed below.

The **brown pelican** (*Pelecanus occidentalis*) was listed as endangered in 1970. Pelicans are a coastal species that nest in colonies. Brown pelicans have been affected by pesticides, human disturbance, entanglement in fishing gear, habitat destruction or modification, and reduction in food.

Brown pelicans were observed in Flamingo Bay lagoon during resource surveys in 1991 and 1992 (FWS, 1992) and may use similar habitats around Water Island.

The **Virgin Island tree boa** (*Epicrates monensis granti*) was listed as endangered in 1979. On St. Thomas, the tree boa is found in dry forest characterized by steep slopes and rocky soils. Dominant vegetation includes turpentine tree and water mampoo. At lower elevations, coconut palm and sea grape are dominant plants in tree boa habitat. The Virgin Island tree boa and other reptiles on St. Thomas and surrounding islands have been affected by habitat modifications, including introduction of the mongoose and rats.

Water Island would appear to be potential habitat for the tree boa because of similarities in vegetation and the apparent absence of the mongoose. However, surveys conducted on Water Island in 1991 and 1992 failed to locate any specimens of the Virgin Island tree boa. Areas surveyed included Flamingo Bay, Flamingo Hill, Catchment Hill, Limestone Bay, Elephant Bay, Sprat Bay, Sand Bay, Carol Point, and Providence Point. Several residents claimed to have seen a "boa"-like snake.

The **hawksbill sea turtle** (*Eretmochelys imbricata*) was listed as endangered in 1970. This sea turtle is found throughout tropical waters of the Atlantic. At maturity, the hawksbill is smaller (30 to 100 pounds—13.5 to 45.5 kilograms) than the green sea turtle (120 to 200 pounds—54.5 to 91 kilograms), but adult sea turtles are often battered or covered with barnacles, making identification difficult.

The hawksbill has been exploited as a source of tortoise shell.

Nesting in United States' territory occurs in Puerto Rico, the Virgin Islands, and occasionally in Florida. Buck Island, off St. Croix, is an important nesting site in the Virgin Islands. This species requires undisturbed beaches for nesting. Any type of artificial lighting at night can distract hatchlings away from the sea. In the Virgin Islands, most beaches historically used for nesting have been developed.

The **green sea turtle** (*Chelonia mydas*) was listed in 1978, is considered endangered in Florida and the Pacific coast of Mexico, and is threatened in other parts of its range. Nesting occurs on Florida's east coast and occasionally in Puerto Rico and the Virgin Islands.

The green sea turtle requires undisturbed open beaches with a sloping platform for nesting. Lagoons supporting abundant sea grass (turtle, manatee, and shoal grass) are used by sea turtles. Green sea turtles feed almost exclusively on sea grass. Surveys in 1991 indicated that sea grass beds off Providence Point were heavily grazed by sea turtles (FWS, 1992).

Water Island residents have reported seeing sea turtles in Druif Bay, and FWS field crews sighted green sea turtles in Limestone and Banana Bays (one turtle in each bay) during surveys in 1991. The Virgin Island Division of Fish and Wildlife has reported sea turtle nesting on several beaches on Water Island (FWS, 1993).

Sea turtle populations have been affected by direct human predation for food, human encroachment on nesting beaches, and entrapment in fishing and shrimping trawls.

The **St. Thomas prickly ash** (*Zanthoxylum thomasianum*) was listed as endangered in 1985. Small populations of this small evergreen tree exist on Puerto Rico, St. Thomas, and St. John. The prickly ash occurs in the subtropical dry forest life zone in the semideciduous forest type where turpentine tree and water mampoo are dominant trees. Extensive deforestation and clearing for home building has affected this species.

Vegetation on the steep south-facing slopes of Water Island is similar to sites occupied by prickly ash on St. Thomas. However, surveys conducted in 1991 and 1992 at Sprat Point, Limestone Bay, Elephant Bay, and Flamingo Hill did not locate this plant.

The **white-cheeked pintail** (Bahamas duck) is a category 2 candidate for listing under the endangered species act. Category 2 candidate status indicates that the species is believed to be in danger, but not enough information is available for formal listing as threatened or endangered.

Habitat of the white-cheeked pintail is fresh water and saltwater ponds and lagoons. Nests are concealed in thick vegetation or under mangrove roots. These pintails inhabit the salt pond in tract D.

The **environmental consequences** of the six endangered, threatened, or candidate species treated in this document would vary under the **no action** alternative. The Virgin Island tree boa and St. Thomas prickly ash may not occur on Water Island and, thus, would not be affected under no action conditions. The brown pelican uses Flamingo Bay and

perhaps similar areas adjacent to Water Island. Habitat conditions for brown pelicans should not change under the no action alternative.

The remaining three species, the hawksbill and green sea turtles and the white-cheeked pintail, may be affected under future no action conditions. As construction continues on Water Island and more people become residents, the unrestricted mooring of additional boats would increase adverse impacts to sea grass beds. Decreases in sea grass beds mean loss of habitat for sea turtles.

The white-cheeked pintail uses salt ponds and may nest in suitable mangrove stands. The protection of salt ponds and mangroves is not guaranteed under no action conditions. Any type of development of salt ponds would adversely affect pintail habitat.

Under any of the **action alternatives**, it is the biological opinion of FWS that the transfer of title to Water Island, including the restrictions mentioned in chapter 2, is not likely to jeopardize the continued existence of the brown pelican, the Virgin Island tree boa, the hawksbill sea turtle, or the green sea turtle (FWS, 1993).

These alternatives, with the elements of protection for threatened or endangered species, would result in some improvement in the conditions for these species, when compared to no action.

Cultural Resources

An intensive cultural resources survey of Water Island was conducted by Ken S. Wild and David G. Anderson of the Interagency Archeological Services Division, NPS, Atlanta, Georgia, during September and October 1992. The survey identified 11 sites, 5 of which had been located during earlier investigations. Cultural resources which may be present at Fort Segarra, the World War II coastal defense site, were also examined during the survey, although only at the reconnaissance level. The recordation of the fort was not a primary objective of the survey.

Many of the identified sites are associated with Danish settlement of the Virgin Islands which began during the mid-1600's. Based on the results of the NPS survey, occupation of Water Island before Danish colonization was limited. Five prehistoric sites and one site with both historic and prehistoric components were identified. Cultural affiliation of the prehistoric sites was not clearly determined; chronological dates fall between A.D. 500 and 1200.

Following is a brief description of the sites identified during the NPS survey and their condition.

Carolina Point Plantation (12 VAm-3-209) was a large, early plantation complex located in the Carolina Point vicinity. Remains of five historic structures are still standing. The buildings have been tentatively identified as the great house, the servant quarters or warehouse, a stable or servant quarters, a kitchen, and a bake oven. During the 18th and 19th centuries, the plantation was owned by Jean Renaud, a free mulatto; then Peter Tamaryn, a free man of color; and Joseph Daniel, a creole of mixed racial ancestry. The plantation was occupied by individuals of both European and African descent who played important roles in the Virgin Islands. The structural remains have a high degree of integrity and are the only remains of this kind on Water Island.

The **Ruyter's Bay site** (12 VAm-3-21) is an early historic masonry well in the vicinity of the Carolina Point Plantation. The bay was probably the location of the fresh water source that gave the island its name. The well was probably constructed in the late 18th century as a means of drawing the fresh water. Remains of the well are still in place. The north side of the masonry ring surrounding the well has been broken away, and a large portion was found some 10 meters to the west of the well. The well is likely associated with the Carolina Point Plantation and should be considered part of that complex.

The **Tamarind Tree Bay site** (12 VAm-3-9) consists of traces of a slave village and a historic well. A 1779 map of the island shows that the slave village was associated with Carolina Point Plantation. The large number of historic artifacts, such as ceramic sherds and glass, suggest that a slave village or village dump was located at this site. Human remains were excavated in this area in 1934 and 1935; and in 1939, they were determined by T.D. Stewart to be African in origin and were likely the remains of slaves.

It is likely that human remains are still present in the area although none were located during the 1992 survey. Also within the site are remains of an 18th century masonry well. This well was probably used to draw water from a fresh water pond reported in the area. A prehistoric component had been reported; but the area has been severely damaged, and only one prehistoric sherd was located during the 1992 survey. Although this site is listed separately, it should be considered part of the Carolina Point Plantation complex.

At the **Elephant Bay site** (12 VAm-3-22 and 12 VAm-3-23, treated as one site by Wild and Anderson), prehistoric pottery sherds and shellfish remains from the period 200 B.C. to A.D. 1200 were located in two separate areas.

On the hill overlooking Sprat and Sand Bays, historic structural remains were located. The **Sprat Bay Structure site** (12 VAm-3-208) consists of a masonry foundation, remains of a small building, a rock pile that may be the remains of a tomb, and the foundation stones of another

building. Materials recovered from the site indicate that the site was abandoned before 1780. The site still retains a high degree of integrity. The Sprat Bay site may be associated with this site.

The **Banana Bay site** (12 VAm-3-56) is a prehistoric shell midden site dating as early as A.D. 500. All of the shells present had been punctured to extract the meat.

The **Banana Bay South site** (12 VAm-3-210) is a dark midden lens containing brick fragments and chunks of iron. Artifacts of the 18th and 20th century are located at this site.

At the **Providence Point Plantation** (12 VAm-3-211), remains of an 18th century plantation complex were found. A cistern and a bake oven were located during the survey. Both of these structures have been modified and incorporated into recently constructed buildings.

The **Landing Bay site**, (12-VAm-3-10), which had been previously recorded, includes a prehistoric component and a historic cemetery. Human remains were excavated and re-interred in 1934-35. In 1936, these human remains were re-excavated. Ceramics were reported to have been found among the human remains during the excavations. During the 1992 survey, the site was examined and the researchers concluded that it had been destroyed by modern borrowing and filling; consequently, it is considered not eligible for listing on the National Register of Historic Places.

At the prerecorded **Druif or Honeymoon Bay site** (12-VAm-3-32), a prehistoric stone axe was reported to have been located. The researchers concluded the site has been destroyed by recent development of the beach; consequently, it is considered not eligible for listing on the National Register of Historic Places.

At the **Sprat Bay site** (12-VAm-3-212), six African-Caribbean sherds were located in two shovel tests. Additional testing indicated that these were an isolated occurrence. The proximity to the Sprat Bay Structure site may have indicated an association; however, due to the absence of appreciable remains or associated features, the Sprat Bay Site is considered not eligible for listing in the National Register of Historic Places.

Fort Segarra is an underground fortifications complex that was built during and shortly after World War II. Components of the site include two gun emplacements, an underground bunker system, and a fresh water cistern.

Anderson and Wild recommended 8 of the 11 sites they investigated as eligible for listing in the National Register of Historic Places. These are the Carolina Point Plantation (12VAm3-209), Tamarind Tree Bay (12VAm3-9) Ruyter's Bay (12VAm3-21), Sprat Bay Structure

(12VAm3-208), Banana Bay (12VAm3-56), Banana Bay South (12VAm3-210), Providence Point Plantation (12VAm3-211), and Elephant Bay (12VAm3-22 and 12VAm3-23). Three sites, Landing Bay (12-VAm-3-10), Honeymoon Bay (12-VAm-3-32), and Sprat Bay (12-VAm-3-212) were recommended as not eligible for listing in the National Register. Consultation on the eligibility of these sites in accordance with the National Historic Preservation Act has been conducted. In a letter dated April 7, 1994, to Reclamation from the Virgin Islands SHPO, Roy Adams concurred with the eligibility assessments of the NPS investigators. Furthermore, the SHPO concurred with the assessment of Wild and Anderson that Fort Segarra is eligible. The SHPO also stated that "Eligible sites should be preserved in place with binding covenants, or subject to adequate data recovery prior to transfer of Water Island by the Department of Interior."

Reclamation responded to the SHPO in a letter dated July 7, 1994, in which the agency concurred with the SHPO on the eligibility of the eight sites and the noneligibility of the other three. Although Reclamation believes that Fort Segarra may well be significant, the agency recommended that further research and fieldwork be conducted to make a determination of eligibility.

In its July 7, 1994, letter to the SHPO, Reclamation committed to consultation with the SHPO on the appropriate treatment of each eligible site prior to the transfer of these tracts containing eligible resources. It is unknown what impact Hurricane Marilyn has had on the above cultural resources. The sites previously determined eligible need to be inspected to determine if their condition has been adversely affected.

The **environmental consequences** of the **no action** alternative to the 11 cultural resources sites located on the Island would be the continuation of ongoing natural and developmental impacts. These include wave action, erosion, unstructured recreation, land and beach development, road construction, and house building.

Under any **action alternative**, the impacts to eligible cultural resources sites would be assessed in consultation with the SHPO prior to title transfer of tracts containing eligible resources, and appropriate mitigation or preservation would be provided through binding covenants in the disposal contracts. These alternatives, which include requirements for protection, mitigation, or adequate documentation of cultural resources, would result in improvement in the condition of the sites, when compared to no action conditions.

Examples of options to protect or mitigate impacts include preservation in place, stabilization of structural remains, management of the sites as historic or prehistoric resources, data recovery through excavation, and/or historic documentation. Intensive additional archeological

surface and subsurface testing may be required in order to determine the boundaries, condition, and full research value of historic and prehistoric resources at the sites.

Hazardous or Toxic Wastes

The hazardous or toxic wastes that exist on Water Island can be attributed to three sources: first, the wastes associated with the operations of the Army while it occupied the island from 1944 to 1950; second, the wastes in and around the former hotel; and third, the wastes that result from discarding trash in open dumps by the residents of the island. The data used for this section are obtained from the hazardous waste site survey prepared by the Dynamac Corporation for the Bureau of Land Management, March 1994, and personal observation by a Water Island team member.

Military

The Army occupied the island for 7 years. It constructed Fort Segarra, a single concrete block building, to protect Charlotte Amalie during World War II and used the island as a base for the San Jose Project, which involved testing chemical warfare weapons. As such, the major concern in this area is not hazardous, toxic, and radiological waste (HTRW), but chemical warfare material (CWM). And, this type of material cannot be disposed of at any landfill in St. Thomas. St. Croix may have an appropriate landfill.

Fort Segarra. No confirmed hazardous materials remain on Water Island as a result of the military presence at Fort Segarra (with the exception of the water catchment discussed below). The history and operations of the fort and the San Jose Project were reviewed to determine the potential for hazardous substances remaining at Fort Segarra. The review revealed no potential for abandoned explosive munitions at the fort. According to available records, the artillery pieces intended for defense were never installed. Consequently, munitions for the guns were never brought to the island. In addition, there is no evidence that the fort was used to store hazardous materials or was within a test area established during the San Jose Project.

One of the ammunition bunkers constructed for the fort had been converted to a racquetball court by the island inhabitants. Two paint containers were found in this bunker. The second ammunition bunker was empty.

Catchment. The water catchment was originally constructed by DOD to collect drinking water for Fort Segarra. It was used by some of the residents of the former hotel villas to collect their drinking water supply. The catchment is located on the west side of the central ridge of Water Island, east of Druif Bay (see figure 1, shown earlier). The 90,000-square-foot (8,361-square-meter) catchment is constructed with a corrugated transite surface (asbestos containing material) supported approximately 2 feet off the ground surface by 2 by 4 timbers. A 350,000-gallon (1,324,750-liter) cistern at the base of the catchment was used to store the drinking water collected. The transite surface could contain 20 to 40 percent by volume of asbestos.

The physical integrity of the transite before Hurricane Marilyn was fairly good, and the asbestos did not appear friable. The transite panels now, however, are broken in many locations with some pieces of abestos material found along and on the roads.

San Jose Project Test Areas. Chemical munitions testing was conducted at only four of the eight test sites the Army established on Water Island in conjunction with the San Jose Project (figure 6). These were test sites 4, 5, 6, and 8. A total of five tests were conducted at these sites that involved the static firing of bombs filled with distilled mustard (test areas 4, 5, and 6) and smoke pots filled with the nerve agent tabun (test area 4). In addition, two surveillance tests to determine how the chemical agents react when exposed to the tropical environment were conducted at the chemical munitions storage area (test area 8).

Test area 1 (Ruyter Cove) contained a small open dump consisting mainly of construction and domestic trash. The possibility exists that hazardous wastes may be contained in this dump. An apparently abandoned 55-gallon drum was also noted in the vicinity of the dump. Other possible hazardous wastes at this location consisted mainly of marine flotsam that had washed up on the beach in Ruyter Cove.

Test area 2 is adjacent to the dock on Providence Point. The area was densely vegetated and did not exhibit any obvious signs of contamination or contain hazardous substances. However, several bags of household refuse were observed at this location which could contain possible household hazardous waste.

Honeymoon Beach in Druif Bay, which was constructed by the former master lessee, is the location of test site 3. Rocks cleared during the construction of the beach form a clearing in the test site. Several of these rocks were covered by a clear substance which had an oily sheen. The origin and identity of the substance could not be determined. This sheen, along with the fact that the vegetation has not regenerated in the area, could represent possible contamination.

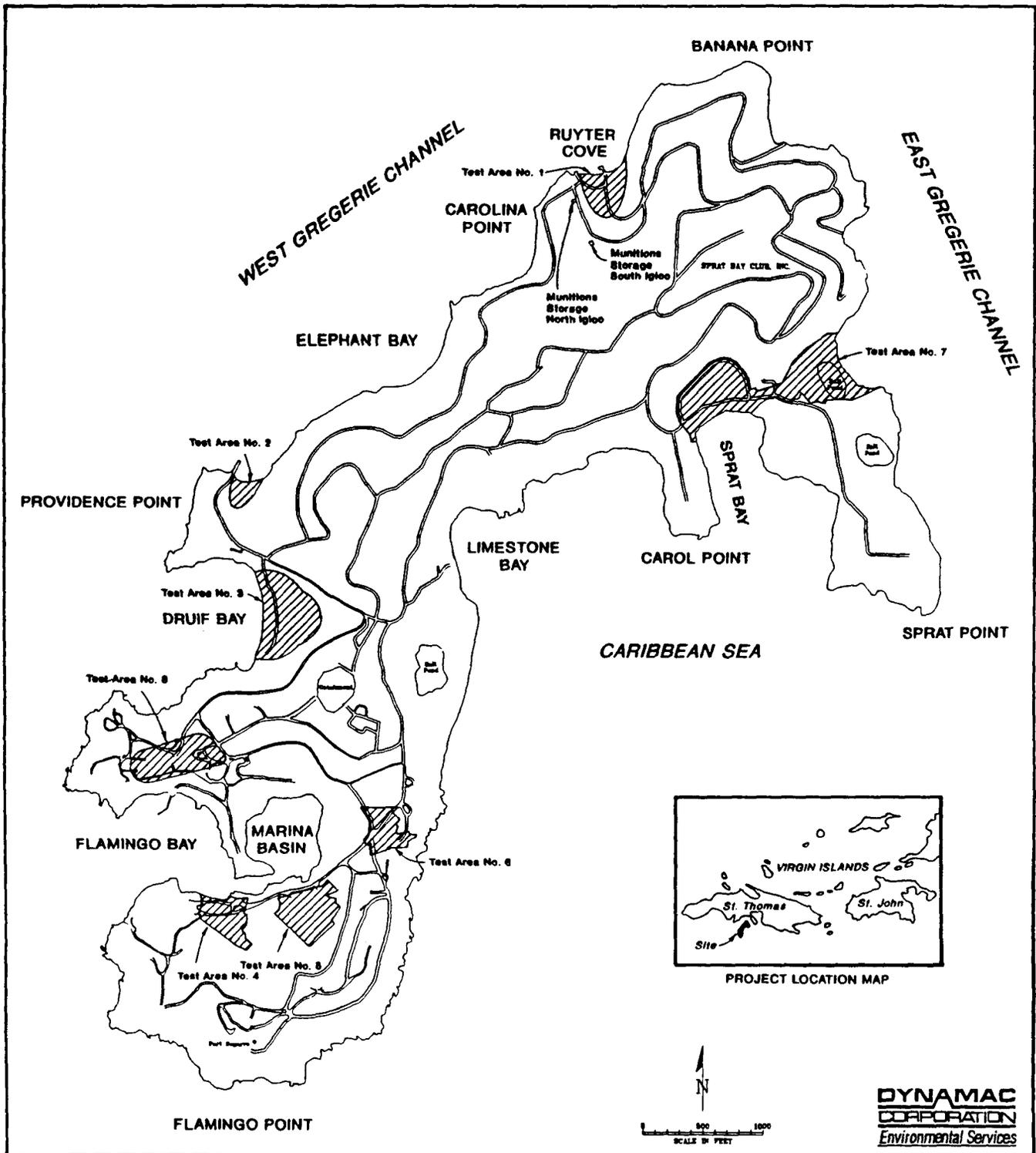


Figure 6.—San Jose Project test areas and possible hazardous waste sites.

Test area 4 was in the southwest end of Water Island. A large portion of the test area was excavated when Water Island, Inc., dredged the entrance to Flamingo Bay Marina. Presently, the southern end of the site is used as an open dump by the residents of the island. The dump contains household trash, abandoned automobiles, construction debris, appliances, a tanker trailer, paint cans, car batteries, gas cans, an approximately 3,000-gallon (11,355-liter) tank full of an unknown liquid, and solvent containers. It can be assumed that hazardous waste has been deposited at the dump site.

Test area 5 was located east of test area 4. The area appeared to have undergone extensive excavation and grading. The site was littered with various types of construction debris, such as corrugated metal and wood products. The site also contains the burn pit excavated by the former master lessee to dispose of debris generated by Hurricane Hugo in 1989. Water was standing in the bottom of the pit; however, the water quality has not been ascertained. There were no signs of obvious contamination (i.e., stressed vegetation, barren spots, or stains). A car battery was the only indication of potentially hazardous substances at the site.

Test area 6 was in the southeastern portion of the island along the area known as Limestone Bay. The site extends from the shoreline to the ridgeline of the island. Housing development has occurred along the ridgeline. Automobile batteries were the only obvious sign of potentially hazardous wastes recorded at this site.

Test area 7 is in the northeast quadrant of the island and extends from the shoreline of the West Gregerie Channel through a saddle on Sprat Point to the beach at Sprat Bay. The shore in Sprat Bay has been converted into a beach and picnic area with a tennis court by Sprat Bay Incorporated, the former sublessee of the northern end of the island. The only obvious sign of contamination in this area is from diesel fuel emanating from the derelict vessel, the *Amalie Queen*, which is aground on the shoreline of Sprat Point.

The area of the hotel bar, dining room, and hotel support buildings is the location of test area 8. Because of the hotel construction, the entire area has undergone considerable reworking, including clearing, excavation, and construction activities. Consequently, very little remains from the original activities of the Army. There were no obvious signs of hazardous substances or contamination that could be attributed to their activities. However, this area does contain numerous sources of hazardous waste and obvious signs of contamination that can be attributed to the hotel operations. These are discussed in the next section.

Master Lease Holdings

The master lease holdings on Water Island during its term included the Sea Cliff Resort Hotel and associated grounds shown in figure 7. The hotel and grounds include the hotel proper and support buildings, some of the villas, Honeymoon Beach, boat house, warehouse, and landfill—everything except subdivided and subleased lots. The marina buildings and concrete docks are included as part of these holdings. The structural damage sustained during Hurricane Hugo presents numerous physical hazards. The buildings that housed the plumbing and electrical departments are located near the hotel kitchen. The immediate area is littered with debris, including refrigerators, air conditioners, plumbing supplies, and electrical supplies. Potential hazardous waste consists of paint products, both spilled and contained in paint cans that are becoming badly weathered, and a full 55-gallon (208-liter) drum, possibly containing solvent.

Several potential sources of hazardous substances were observed in the area adjacent to the hotel kitchen. This area is paved over with asphalt. These included four 55-gallon (208-liter) drums, batteries, four above-ground storage tanks (AST) (two used for propane and two used for diesel fuel), and a 310-cubic-foot (8.78-cubic-meter) compressed gas cylinder (probably propane).

The drums are exposed to the elements and are in poor condition. The asphalt surface around the drums is heavily stained by a suspected petroleum product. Two of the AST's were used to store diesel fuel for the hotel emergency generator. The smaller tank was used as a permanent storage tank for diesel fuel. This AST was in good condition and did not appear to be leaking. The larger of the diesel fuel AST's, located on the service road to the kitchen, was brought in after the hurricane when the generator was used full time to supply the hotel with electrical power. This tank was also in good condition; however, the fuel line from the tank had been cut, and the asphalt in the area of the cut was stained. A discarded fuel filter, also at this location, could have accounted for the staining noted. It was not determined whether any diesel fuel remained in these tanks. The two remaining AST's and the 310-cubic-foot cylinder were used to supply propane to the hotel kitchen. These were in good condition; however, it is not known whether they still contain propane. In the generator room, several large batteries, probably used to start the generator, were strewn about.

The grounds surrounding the hotel were littered with miscellaneous debris, including furniture, air conditioning units, abandoned vehicles, automobile batteries, gas cylinders, and mechanical equipment. In addition, there are several electrical pole transformers which appeared to be out of service. These appeared to be in good condition, but they may contain polychlorinated biphenols (PCB's).

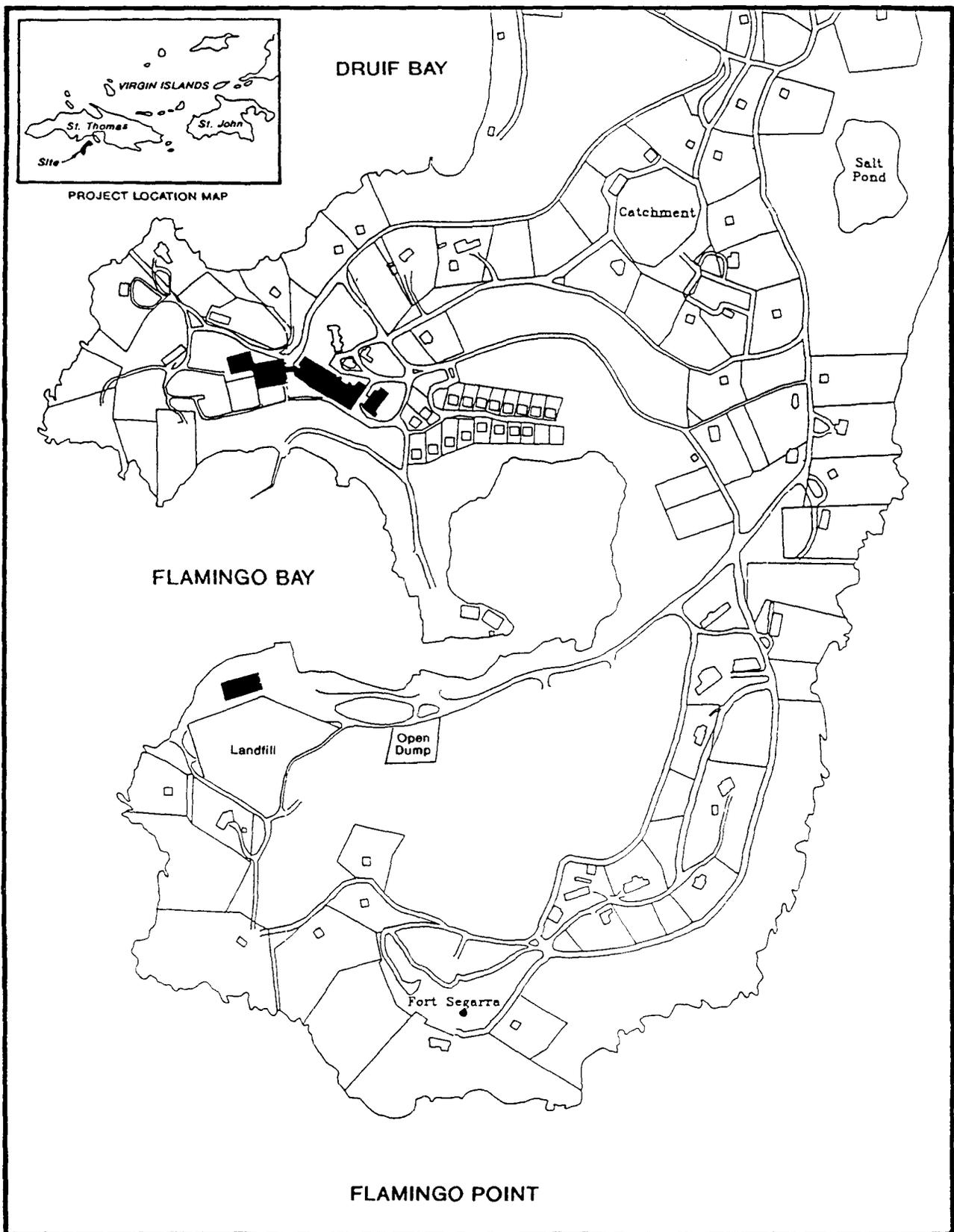


Figure 7.—Master lease holdings during its term include the hotel, warehouse, etc.

The lower generator building is located near the hotel boat landing. This generator was probably used to power the hotel elevator. Inside the building was a full 55-gallon (208-liter) drum of some unknown substance and a fuel tank for diesel fuel.

The marina area contained several potential sources of hazardous substances. Three 55-gallon (208-liter) drums were approximately 10 feet (3 meters) from the water. At least one of these was leaking onto the ground, forming a pool of what appeared to be used motor oil. The marina service area was littered with various debris, including gas cylinders, engine parts, cans of two-cycle oil, marine batteries, and another 55-gallon oil (208-liter) drum.

There were three AST's in the marina area. Two were used to supply propane for the hotel. These were ordered out of service by the U.S. Coast Guard before Hurricane Hugo and probably do not now contain any product. The third AST was brought in to supply gasoline for boats after the hurricane destroyed the original tanks. All of these tanks appeared to be intact. One underground storage tank was observed in this area, which was probably the septic tank for the hotel sewage system.

The marina area and docks were further damaged by Hurricane Marilyn. The dock area is the one place where most people congregate on a day-to-day basis, other than the ferry dock.

Warehouse. The warehouse is located on the south side of Flamingo Bay, adjacent to the deep water dock (figure 7). It also was heavily damaged by Hurricane Hugo. The contents of the warehouse included furniture, appliances, building materials, drums, and mechanical equipment. A cistern manufacturing enterprise was operating in the warehouse. In the area surrounding the warehouse, gas cylinders, batteries, mechanical equipment, automotive and marine batteries, automotive parts, an electrical transformer, 55-gallon (208-liter) drums, abandoned automobiles, and a semitrailer were observed. (This trailer apparently belongs to the person(s) manufacturing the cisterns; the contents are unknown.) Some soil staining in the area of the cistern manufacturing operation was noted. Several potential sources of hazardous substances were observed in the warehouse and surrounding grounds.

Landfill. A landfill exists just south of the warehouse, where two military bombs were discovered during mucking operations by the master lessee in 1966. The area was given a risk assessment code 1 by Ebasco (the consultant who performed the study) in 1991 because of the possibility of munitions being present. The landfill was fenced as a result. The area inside the enclosure contained abandoned vehicles and some discarded construction material.

Sublessee Holdings

In general, the former sublessee holdings did not contain obvious signs of contamination or potential sources of hazardous substances. The largest potential source of hazardous substances is the large volume of discarded automobile and marine batteries on the island. In addition, the illegal dump sites around the island could contain hazardous substances. A potential threat to health and the environment was a leaking electrical transformer observed on lot 13. This transformer could contain PCB's.

The **environmental consequences** would be essentially the same under either the **no action** alternative or any of the **action alternatives**. The Corps would continue to investigate whether hazardous materials remain on Water Island as a result of the activities of the Army, as described under the description of the *no action* alternative. If chemical residues or suspect munitions are found, the Army would develop a protocol to remove the wastes and proceed with the removal.

No plan now exists to remove or remediate any other solid waste materials on Water Island resulting from civilian activities. These wastes include those at the former hotel and those in the open dumps on the island.

Under the negotiated direct sale, option 1F, the Corps would continue the work described above. This alternative would result in the requirement to remediate the hazardous and solid wastes that are present.

Socioeconomic Resources

This section reiterates the historical perspective and summarizes existing demographic and socioeconomic conditions on Water Island, which is the principal area where consequences of the proposed actions would occur. When available, 1994 data were used; however, in most cases, 1990 census data were the most recent data available. Data from 1980 also were used to provide a historical perspective and to aid in identifying trends in the overall social analysis. Data before 1980 for Water Island are not available from the U.S. Department of Commerce, Bureau of the Census; and, thus, no reference is made to census data before 1980.

The socioeconomic study focuses not only on the fact that Water Island residents might experience some level of social impact as a result of the proposed alternatives, but how the impacts are experienced by the various groups residing on the island. These social groups may be defined by occupation (e.g., professional specialists, retail or wholesale

tradesmen, craftsmen, etc.), or by common lifestyles, values, and beliefs (e.g., recreationists, environmentalists, retired persons, etc.). These social groups also share the manner in which they may be affected by implementing a proposed action. The kind and severity of impacts and effects experienced by the residences of Water Island is dependent on the islanders' values and perceptions.

Historical Background

On December 10, 1952, Interior leased Water Island in its entirety, effective January 1, 1953, to a private party to construct a resort complex. The lease was issued so that Water Island might be developed in such a manner that it would contribute effectively to the economy of the Virgin Islands. Development of the area as a tourist resort appeared to be the most effective use at that time. The latest holder of the lease is the Water Isle Hotel and Beach Club, Ltd., a Delaware corporation with its principal place of business in Illinois.

The master lease was for a period of 40 years (two 20-year terms), and the lease was scheduled to expire on December 31, 1992. The master lessee elected to terminate the lease effective December 27, 1992.

Water Island Demographics

The former master lessee and its predecessor granted more than 140 separate subleases, and many of the former sublessees have built homes on Water Island. The eastern one-third of Water Island was leased in 1956 to a single party which has, in turn, subdivided the land and issued sub-subleases to individuals. The general sublease plan is shown in figure 1.

Population. The population of the study area (Water Island) is quite small and is racially and ethnically homogeneous.

As shown in table 3, Water Island had a population of 172 in 1994, the same total as the population in 1990. Of the 172 residents, 78 are permanent year-round residents; 94 are part-time residents or absentee owners who consider themselves residents of Water Island. Although the population was 172 in both 1990 and 1994, the annualized rate of increase from 1980 to 1990 was 1.24 percent. For comparison, during the same time period on St. Thomas, the annual rate of increase was 0.82 percent. The population on Water Island is relatively evenly dispersed across the entire island. Approximately 93.0 percent of the island population is white, and 7.0 percent of the population is black. About 3.5 percent of the island residents are of Hispanic origin. On the

Table 3.—Population, race and Hispanic origin, and place of birth

Population	1980	1990	1994
Total	152	172	¹ 172
Median age	38.7	42.1	NA
Race			
Black	16	12	NA
White	130	160	NA
Other races	6	0	NA
Hispanic origin			
Puerto Rican	0	2	NA
Other Hispanic	9	4	NA
Not of Hispanic origin	143	166	NA
Place of birth and nativity			
Born on island of residence	8	8	NA
Born on different U.S. Virgin Island	0	0	NA
Born in the United States	103	127	NA
Born in another U.S. outlying area	2	5	NA
Born abroad of American parents	27	2	NA
Foreign born	16	30	NA

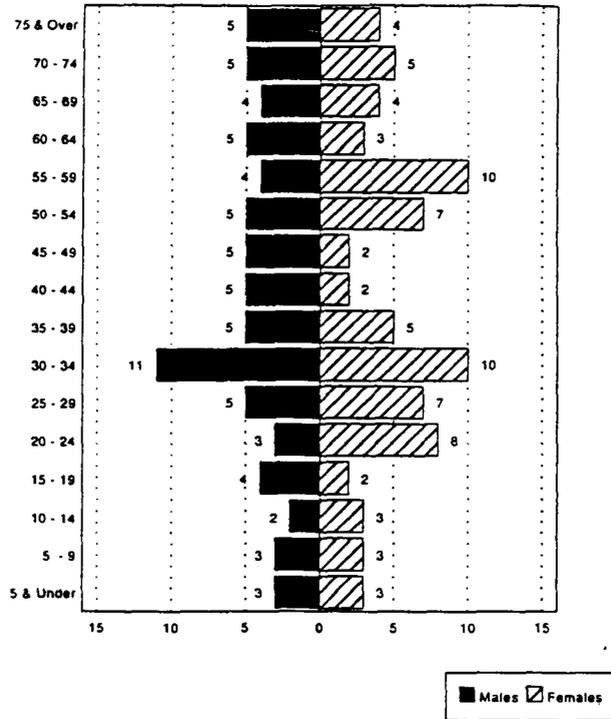
Source: 1980 and 1990, U.S. Bureau of the Census; 1994, Water Island Civic Association.

¹ Of the 172 residents, 78 are permanent year-round residents; 94 are part-time residents or absentee owners who consider themselves residents of Water Island.

island of St. Thomas, 82.0 percent of the population is black, 14.8 percent of the population is white, and 3.2 percent of the residents are of other races. About 6.6 percent of the population is of Hispanic origin.

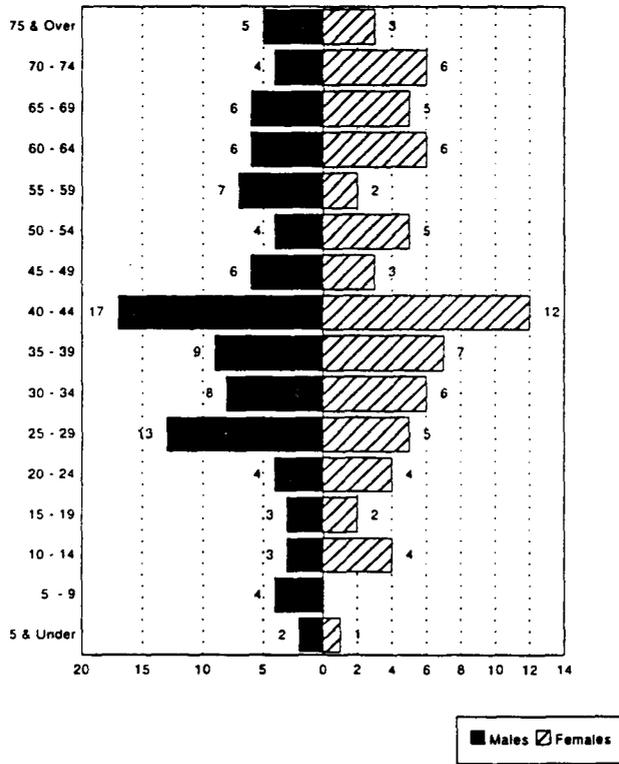
Also, as can be seen again in table 3, a relatively small portion of the residents (8 persons, 4.7 percent of the population) were born in the Virgin Islands. Nevertheless, 160 persons (95.3 percent) have opted to migrate to the Virgin Islands, specifically Water Island.

The age and sex distribution of the Water Island population for both 1980 and 1990 are shown in figures 8 and 9, respectively. The population is disproportionately older than in other locations. As illustrated in the age/sex diagram for 1980, the largest number of females are in the 30 to 34 and 55 to 59 age groups, with 10 persons each. Whereas, the greatest number of males are in the 30 to 34 age group with 11 persons. The median age of all islander residents in 1980 was 38.7. In 1990, the greatest number of females was in the 40 to 44 age group with a total of 12 persons. The largest number of males was also in the 40 to 44 age group with 17 persons. The second largest



SOURCE: U.S. BUREAU of the CENSUS

Figure 8.—1980 age/sex population; population 152, median age 38.7.



SOURCE: U.S. BUREAU of the CENSUS

Figure 9.—1990 age/sex population; population 172, median age 42.1.

group of males was in the 25 to 29 age group with 13 persons. In 1990, the median age of the population was 42.1, an increase of about 3.4 years over the decade. Also, in 1980, there were slightly more females on the island than males—51.3 percent females compared to 48.7 percent males. However, in 1990 the male population outnumbered females by a significant percentage—58.7 to 41.3 percent, respectively.

Housing. As shown in table 4, the total number of housing units¹ on Water Island in 1980 was 133, compared to 165 in 1990. The number has increased to 168 in 1994. In both 1980 and 1990, there were slightly more renter-occupied housing units compared to owner-occupied units. Also, in both 1980 and 1990, there were a relatively high number of housing units used either for seasonal, recreational, or occasional use.

The median value of a housing unit on Water Island has more than doubled from 1980 to 1990. In 1980, the median value was \$82,100;² by 1990, the value increased to \$191,100. This doubling in value has also occurred for housing units on St. Thomas. In 1980, the median value was \$94,100; in 1990, the value had increased to \$206,600. Rent for a housing unit has also more than doubled both on Water Island and on St. Thomas.

Table 5 illustrates the approximate timeframe when the housing structures on Water Island were constructed. As can be seen, the highest construction activity occurred between 1960 and 1969. During this decade, more than double the housing units (all types) were built compared to any other 10-year period. The combined 1980-84 and 1985-88 periods are when the second greatest construction activity occurred.

¹ A housing unit is a house, an apartment, a mobile home or trailer, a group of rooms or a single room occupied as separate living quarters or, if vacant, intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from outside the building or through a common hall.

The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements. For vacant units, the criteria of separateness and direct access are applied to the intended occupants whenever possible. If that information cannot be obtained, the criteria are applied to the previous occupants.

Both occupied and vacant housing units are included in the housing unit inventory, except that recreational vehicles, boats, vans, tents, and the like are included only if they are occupied as someone's usual place of residence. Vacant mobile homes on the dealers, sales lots, or in storage yards are excluded from the housing inventory.

If the living quarters contain 9 or more persons unrelated to the householder or person in charge (a total of 10 unrelated persons), they are classified as group quarters. If the living quarters contain eight or fewer unrelated persons or persons in charge, they are classified as housing units.

² The median value of a housing unit is owner specified in responding to the questionnaire provided by the U.S. Department of Commerce, Bureau of the Census.

Table 4.—Housing vacancy status

Vacancy status	1980	1990	1994
Total housing units	133	165	168
Owner occupied units	38	38	NA
Median number of persons per unit	1.91	2.02	NA
Renter occupied units	40	48	NA
Vacant units	55	79	NA
For sale	3	3	NA
For rent	4	22	NA
For seasonal, recreational, or occasional use	42	32	NA
Other	5	21	NA
Boarded up	0	2	NA
Occupied housing units			
Water Island			
Median value (dollars)	¹ 82,100	¹ 191,100	NA
Median contract rent (dollars)	¹ 287	¹ 513	NA
St. Thomas			
Median value (dollars)	¹ 94,100	¹ 206,600	NA
Median contract rent (dollars)	¹ 291	¹ 612	NA

Source: 1980 and 1990, U.S. Bureau of the Census; 1994, Water Island Civic Association.

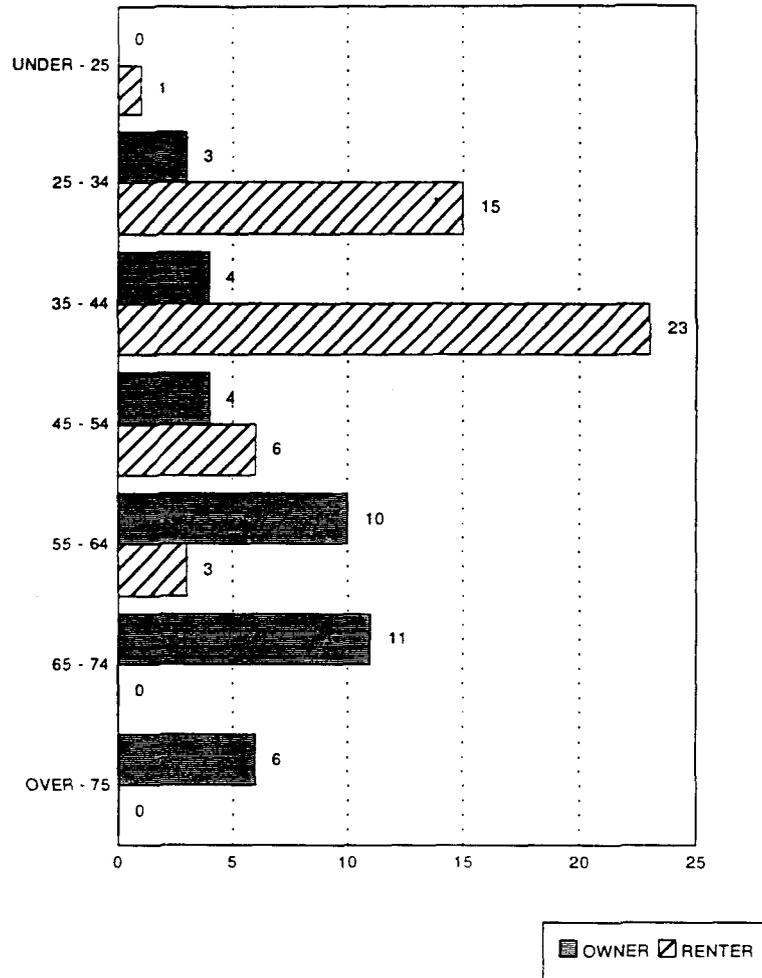
¹ The prices shown are for white householders.

Table 5.—Approximate year housing unit was constructed

Year built	All housing units	Owner-occupied unit	Renter-occupied unit
1989 to April 1990	4	0	0
1985 to 1988	19	4	4
1980 to 1984	17	6	5
1970 to 1979	13	6	5
1960 to 1969	77	14	18
1950 to 1959	11	3	5
1940 to 1949	19	5	6
1939 or earlier	5	0	5

Source: U.S. Bureau of the Census.

Figure 10 demonstrates the approximate ages of the individuals residing in renter-occupied housing, compared to the ages of individuals residing in owner-occupied housing. As can be seen, there is a significant difference in the average age of these two islander resident groups. In owner-occupied housing, the number of residents in the 65 to 74 age group is almost as great as all of the owner residents 54 years and younger. Whereas, the majority (81.3 percent) of the renter residents are under the age of 44.



BUREAU OF THE CENSUS

Figure 10.—Age of householders in 1990.

Employment. As illustrated in table 6, the composition of the labor force has changed somewhat between 1980 and 1990, especially in the construction and manufacturing sectors. In 1980, only two island residents indicated they were employed in construction, and the same is true with manufacturing. In 1990, these employment sectors had increased significantly—18 persons in construction and 14 persons in manufacturing. The other employment sectors remained relatively constant.

Table 6.—Employment by sector, Water Island residents

	1980	1990	1994
Agriculture	0	0	0
Mining	0	0	0
Construction	2	18	18
Manufacturing	2	14	14
Transportation	9	13	13
Commerce and utilities	1	1	1
Trade	15	13	13
Financial, insurance, and real estate	8	14	14
Services	31	27	27
Public administration	3	5	5

There is little change from 1990 to 1994. The only significant difference would be in the financial, insurance, and real estate (F.I.R.E.) sector. In 1990, 14 persons were employed in F.I.R.E., whereas, only three persons were employed in this sector in 1994.

Social Factors

In general, social factors were selected because they are relevant to the type of impacts being assessed, can be measured or described, and have been identified by people potentially experiencing the impact to their quality of life. Social factors discussed are stress, satisfaction of lifestyle, autonomy, and community cohesion.

Stress. Stress has been defined as an adaptive response to a threatening situation (Dudley and Welke, 1977) and has been demonstrated to produce a wide range of responses in people; it may result in either adaptive or maladaptive behavior (Dohrenwend, 1961; Selye, 1965; Levine and Scotch, 1970). However, sustained stress at high levels almost always has deleterious effects and has been associated with "physical dysfunction, disease, mental disorder, and socially pathological behavior" (Vinokur and Selzer, 1975).

How much stress is produced by a pending action would depend on, in part, (1) the perception of the affected persons of the fairness of the process, (2) the timeframe necessary to complete the process and associated transactions, and (3) whether or not pending actions would necessitate some of the island residents having to relocate to a new community. In general, the more extensive the changes resulting from a pending action, the greater would be the amount of stress produced. According to Vinokur and Selzer (1975), "excessive changes make

adjustment difficult and consequently produce stress." The additional uncertainty caused by litigation between the hotel and Interior added another dimension of stress.

Satisfaction with Lifestyle. Longevity of residency on the island varies considerably. Many of the homeowners and a relatively small number of renters have dwelled on the island for many years. Whether residents have resided on the island for a long time or a relatively short time, most residents are committed to the aesthetics of the area and the lifestyle it affords them. Many of the residents have spoken of how much they value the area and of their commitment to a rural, independent lifestyle. They enjoy the area for its isolation and peacefulness and for the privacy they have, living on Water Island.

Residents spend a great deal of time out-of-doors. The area is very beautiful, and the people who live there have a deep appreciation of nature. The beaches and ocean are important features of most residents' lifestyle, and they are their primary sources of recreation. Residents enjoy boating and picnicking. Many simply like to sit on their patios or decks to enjoy the cool breezes, the aesthetics, and the company of their friends.

Many residents reported having moved to the area to "get out of the rat race"—seeking alternatives to the fast-paced lifestyle they experienced in urban areas. They wished to escape many of the problems generally associated with urban centers, including crime, air pollution, noise, drug abuse, and overcrowding.

Autonomy. Residents of Water Island are an independent-minded population. This is evident in their choosing to live on a relatively isolated island that lacks nearly all of the services found in more populated areas. Water Islanders' autonomy is evident in the way they perceive themselves; residents view themselves as independent people capable of handling their own affairs. For example, there are absolutely no medical facilities or staff on the island; the closest medical facilities and staff are on the island of St. Thomas. Therefore, in cases of medical emergency, other family members or neighbors assist with the immediate first aid and transport the ailing individual by boat to Crown Bay on St. Thomas, where they are met with emergency medical technicians and an ambulance and then taken to the St. Thomas Hospital.

Fire protection and a visible police presence are also lacking on Water Island, although the island is under the administrative jurisdiction of the V.I. Government.

This autonomy is also evidenced in the ways residents have paid for and built their homes. Without fee title to the property, it has been difficult

or impossible to acquire financing for construction. Also, because of the remoteness of the island, obtaining building materials and supplies has proposed considerable problems and associated expenses.

Community Cohesion. For purposes of analysis for the report, community cohesion was viewed in terms of (1) use of local facilities, (2) personal or community identification, and (3) social interaction.

Use of local facilities, one dimension of cohesion, reflects the degree to which residents share social space. Few shared structural facilities exists on Water Island, especially since 1989 when Hurricane Hugo destroyed the only hotel (social center) on the island. Residents on the island use common boat docks and associated vehicle parking areas, a control mail pickup facility, and a developed beach (Honeymoon Beach). Residents' use of space is largely shaped by their middle-class backgrounds. Clear distinctions are made between private and public space.

There is considerable diversity in the degree to which individuals living on water Island identify with their community. Some identify very strongly with the community, and some residents prefer to remain relatively isolated from their neighbors. In general, year-round homeowner-occupants identify with the community more strongly than do part-time homeowner-occupants, or those renting a housing unit. Also, community identification increases with length of residency.

Informal support networks are minimally developed. Although people see each other frequently, their interaction is primarily a consequence of their proximity. Most interactions are informal and spontaneous and do not fit into well-developed patterns. However, many of the homeowners (both owner-occupied and absentee owners) and some of the persons leasing undeveloped lots are members of the Water Island Civic Association. This association has existed for several years and helped to build and maintain the roads and boat docks on the island.

Environmental Consequences

Opportunities to sell property, to finance new construction or existing site improvements (securing mortgages, etc.), and to plan estates (allocating inheritable assets) are all being affected according to representatives of Water Island residents because of uncertainties of ownership. Future investment decisions, including expenditure of funds for normal maintenance and infrastructure operations (road maintenance, trash collection, etc.), are also being affected.

Thirty-six (36) former sublessees who signed and returned the Interior contract dated December 24, 1992, and who placed a deposit (earnest money agreement) in escrow with Interior on or before the expiration

date, January 15, 1993, would have those contracts honored. Upon completion of NEPA compliance, the 36 former sublessees could exercise their option and purchase their property at the appraised price stated in their contract.

About 99 of the former island sublessees would continue to make lease payments on their respective lots; however, these same former sublessees would not have an option to purchase the property they were leasing and continue to make payments on. These former sublessees without an executed contract appear to be experiencing some combination of confusion, resentment, and hostility. The additional uncertainty caused by litigation between the hotel and Interior adds another dimension of stress.

Table 7 illustrates the comparison of proposed alternatives to the no action alternative. For assessing the differences between the no action alternative and the other alternatives, the following descriptions are used: "—" = no impact, ■ = slight decrease, ■■ = moderate decrease, ■■■ = substantial decrease, and ■■■■ = extreme decrease. The empty boxes (□) are improvements with the same values per box; i.e., □□□□ = extreme improvement.

For purposes of conducting the social analysis on the potential alternatives, affected individuals have been placed into the following groupings:

1. Former sublease holders with a developed structure on the leased land and who have an earnest money agreement with Interior.
 - a. Owner-occupied housing unit.
 - b. Absentee-owner of housing unit.
2. Former sublease holders with a developed structure on the formerly leased property and no earnest money agreement with Interior.
 - a. Owner-occupied housing unit.
 - b. Absentee-owner of housing unit.
3. Former subleaseholder of primarily undeveloped land (no structure on the formerly leased property).
4. Renters of a developed structure without regard to whether there is an earnest money agreement on the structure or not.
5. The former master leaseholder of properties on the island. Legal action is pending with this group and, therefore, is not treated in the social analysis.

Table 7.—Social well-being of persons with vested interest in Water Island¹

Alternative/affected groups	Social factors			
	Stress	Lifestyle	Autonomy	Community cohesion
No action alternative				
1a—Former lessee with contract, owner-occupied house	■■■■	■	■	■□
1b—Former lessee with contract, absentee-owner of house	■□	—	—	—
2a—Former lessee without contract, owner-occupied house	—	—	—	—
2b—Former lessee without contract, absentee-owner of house	—	—	—	—
3—Former lessee, no house	—	—	—	—
Offer land for sale to highest bidder, 1A				
1a—Former lessee with contract, owner-occupied house	■	■■	■■	■■■■
1b—Former lessee with contract, absentee-owner of house	—	—	—	■■
2a—Former lessee without contract, owner-occupied house	■■■■	■■■■	■■■■	■■■■
2b—Former lessee without contract, absentee-owner of house	■■■■	■■■	■■■	■■■
3—Former lessee, no house	■■■	■	■	■■
Offer land for sale to former sublessees, 1B				
1a—Former lessee with contract, owner-occupied house	■	■	—	■■
1b—Former lessee with contract, absentee-owner of house	■	—	—	■
2a—Former lessee without contract, owner-occupied house	□□□	□□	□□	□□□
2b—Former lessee without contract, absentee-owner of house	□□□	—	—	□
3—Former lessee, no house	□□	□	□	□
Offer land for sale to former sublessees, voiding 36 contracts, 1C				
1a—Former lessee with contract, owner-occupied house	□□	□□	□	□□□□
1b—Former lessee with contract, absentee-owner of house	□	—	—	□
2a—Former lessee without contract, owner-occupied house	□□□	□□	□□	□□□□
2b—Former lessee without contract, absentee-owner of house	□□□	—	—	□□
3—Former lessee, no house	□	—	—	□

¹ "—" = no impact, ■ = slight decrease, ■■ = moderate decrease, ■■■ = substantial decrease, and ■■■■ = extreme decrease; □ = slight improvement, □□ = moderate improvement, □□□ = substantial improvement, and □□□□ = extreme improvement.

Table 7.—Social well-being of persons with vested interest in Water Island¹

Alternative/affected groups	Social factors			
	Stress	Lifestyle	Autonomy	Community cohesion
Offer land for sale to V.I. Government, 1D				
1a—Former lessee with contract, owner-occupied house	■	■	■	■
1b—Former lessee with contract, absentee-owner of house	■	—	—	■
2a—Former lessee without contract, owner-occupied house	■	■	■	■
2b—Former lessee without contract, absentee-owner of house	■	■	■	■
3—Former lessee, no house	■	■	■	■
Offer land for sale via a lottery, 1E				
1a—Former lessee with contract, owner-occupied house	■	■	■	■
1b—Former lessee with contract, absentee-owner of house	—	—	—	■
2a—Former lessee without contract, owner-occupied house	■	■	■	■
2b—Former lessee without contract, absentee-owner of house	■	■	■	■
3—Former lessee, no house	■	■	■	■
Offer land for sale in negotiated direct sale of entire island, 1F				
1a—Former lessee with contract, owner-occupied house	—	■	■	■
1b—Former lessee with contract, absentee-owner of house	—	—	—	—
2a—Former lessee without contract, owner-occupied house	■	■	■	■
2b—Former lessee without contract, absentee-owner of house	■	■	■	■
3—Former lessee, no house	■	■	■	■
Turn island over to V.I. Government, 2A				
1a—Former lessee with contract, owner-occupied house	■	■	■	■
1b—Former lessee with contract, absentee-owner of house	—	—	—	■
2a—Former lessee without contract, owner-occupied house	■	■	■	■
2b—Former lessee without contract, absentee-owner of house	■	■	■	■
3—Former lessee, no house	■	■	■	■

¹ "—" = no impact, ■ = slight decrease, ■■ = moderate decrease, ■■■ = substantial decrease, and ■■■■ = extreme decrease; □ = slight improvement, □□ = moderate improvement, □□□ = substantial improvement, and □□□□ = extreme improvement.

Table 7.—Social well being of persons with vested interest in Water Island¹—Continued

Alternative/affected groups	Social factors			
	Stress	Lifestyle	Autonomy	Community cohesion
Turn island over to former sublessees (via life estate), 2B				
1a—Former lessee with contract, owner-occupied house	■■■	■	■	■■■
1b—Former lessee with contract, absentee-owner of house	■■■	—	—	■■■
2a—Former lessee without contract, owner-occupied house	■■■	■	■	■■■
2b—Former lessee without contract, absentee-owner of house	■■■	—	—	■■■
3—Former lessee, no house	■■■	—	—	■■■
Combination, offer land for sale and turn over part to the V.I. Government, 5 (Preferred)				
1a—Former lessee with contract, owner-occupied house	□□	□□	□	□□□□
1b—Former lessee with contract, absentee-owner of house	□	—	—	□
2a—Former lessee without contract, owner-occupied house	□□□	□□	□□	□□□□
2b—Former lessee without contract, absentee-owner of house	□	—	—	□□
3—Former lessee, no house	□	—	—	□

¹ "—" = no impact, ■ = slight decrease, ■■ = moderate decrease, ■■■ = substantial decrease, and ■■■■ = extreme decrease; □ = slight improvement, □□ = moderate improvement, □□□ = substantial improvement, and □□□□ = extreme improvement.

Renters of a housing unit on Water Island, subgroup 4 in the affected groups are not included in these analysis. In a review of the existing conditions, it is apparent that the majority of renters are (1) younger people, (2) have resided on the island for a considerably lesser time, (3) are more mobile, and (4) have a considerably lesser financial interest in the proceedings. Therefore, they have not been included in the analysis.

In reviewing table 7, it is apparent that, of the alternatives considered in the social analysis, offering the land for sale to the former sublessees and voiding the 36 contracts, option 1C, has the fewest adverse social impacts and associated consequences. Option 1B, offer land for sale to the former sublessees, would have the next fewest adverse impacts, followed by the no action alternative. All of the other alternatives have moderate to substantial adverse impacts.

The basic premise of "offering the land for sale to the former sublessees at fair market value" is the concept most preferred by the majority of the former lessees. However, one of the assumptions built into all the alternatives—no action included (except option 1C)—is that "the existing

executed contracts . . . would be honored." This assumption poses significant adverse social consequences. Some of these consequences are:

1. According to those interviewed by the investigators, many of the 36 individuals or entities who signed a contract and placed an earnest money agreement with Interior are unhappy with the appraised value of the land. Also, it is their opinion that they were not provided adequate time to review the contract and validate, refute, or negotiate the quoted price. In general, they feel that because of sunken costs of their homes or land leases, etc., they were coerced into entering into the contractual agreements to protect their vested interest. It is their concern that if they are bound to these contracts, while other sublease holders (99 ±) are provided an option to purchase their land at a later date, they (99 ±) would be afforded a different, better deal, with a considerably more realistic timeframe within which to negotiate the transaction.
2. The former lessees who do not have an executed contract, but expressed an interest in purchasing property (99±), feel they have been unjustly treated. Essentially, they feel they were closed out because they exercised good judgment and sought legal counsel, and the timeframe was totally unrealistic. Also, they are concerned that the Federal Government could require a higher price now than was suggested back in 1992, or a higher price than was offered to the 36 who signed the initial contracts. Also, it is their opinion and concern, that due to inflation and additional improvements on the island, the appraised value of the land could increase. (The devastation of Hurricane Marilyn has modified these beliefs.)

There are many unresolved issues and concerns of a social nature surrounding the 1992 offer to purchase. These issues and concerns are extended to each of the alternatives under consideration (except option 1C) by the fact that Interior would honor the 36 signed contracts.

Any alternative other than 1C that might be selected should be modified to allow for equal opportunity among all former sublessees (the 99 without a contract and the 36 with a contract). In other words, each former sublessee should have an opportunity to review the requested price, ask questions, and negotiate a fair market price advantageous to both the seller and the buyer.

Appropriate procedures would have to be developed to resolve disputes that could not be settled by mutual agreement.

Indian Trust Assets

Reclamation policy is to protect American Indian Trust Assets from adverse impacts resulting from its programs and activities when possible. Indian Trust Assets are property interests held in trust by the United States for the benefit of Indian tribes or individuals. Although no concise legal definition of Indian Trust Assets exist, courts have traditionally interpreted them as being tied to property. Lands, minerals, and water rights are common examples of trust assets.

No adverse impacts to Indian Trust Assets are anticipated from the proposed action. American Indians have not been known to visit or live in the U.S. Virgin Islands Territories.

Environmental Justice Implications

The proposed action does not itself involve facility construction, population relocation, health hazards, hazardous waste, property takings, or substantial economic impacts. Implementing the proposed action would, in fact, eliminate some health hazards and improve the economic situation on the island. The destroyed asbestos catchment is being investigated for cleanup as a hazardous waste. None of the alternatives analyzed in this environmental assessment would have adverse human health or environmental effect on minority and low income populations as defined by environmental justice policies and directives.

International Impacts

The proposed action is not expected to have any adverse international impacts. If any impacts occur, they would be improvements to the Territorial Virgin Islands. Compared to no action, the economic impacts of rebuilding the homes and the probability of rebuilding a hotel with associated visitors from the international community would be beneficial.

Unavoidable Adverse Impacts

The proposed action of transferring title to Water Island is desired and needed by all residents on Water Island and by the Virgin Islands Government and other Virgin Islanders. The process of transferring title and the selling price, however, may not be satisfactory to all concerned.

To effect the transfer of Water Island, the sales price must be reasonable and acceptable to both the Water Island interests and the larger public interest that Interior represents.

Although a group of Sprat Bay residents prefer to deal directly with Interior for title to their property, Interior's position has always been that it would sell to the former holders of subleases. Sprat Bay sub-lease holders obtained their leases from the Sprat Bay Corporation or from an individual or entity who obtained their lease from the Sprat Bay Corporation. Recognizing that the Sprat Bay Corporation sublease enjoys equal standing with all other subleases, it is, therefore, Interior's position that it will honor the sublease and offer to sell the entire Sprat Bay portion (less those areas set aside to be held in public ownership) to the Sprat Bay Corporation. Individuals who have obtained their sub-leases from another must negotiate with the Sprat Bay Corporation to resolve their differences and purchase their individual lots.

Other members of the Virgin Island community have expressed a desire to purchase lots on Water Island through an auction process. The first opportunity to purchase a lot by anyone not formerly holding a sublease would be after all former sublease holders have had an opportunity to purchase their respective lots.

Unavoidable adverse impacts could occur to those individuals unable to purchase their lots for economic or other reasons and to others who have to wait and negotiate with the V.I. Government to purchase a lot.

Comparison of Alternatives

A summary comparison of the alternatives and impacts is shown in table 8. The alternative impacts are shown as changes from the no action alternative. Under the no action alternative, the minimal protection of threatened and endangered species and cultural resources would not be increased. Former Water Island leaseholders would continue to experience adverse social impacts. Although economic impacts were not specifically identified, the lack of title to land creates unidentified economic impacts.

Under either alternative 1 (offering the land for sale to various individuals or groups) or alternative 2 (turn the island over to the V.I. Government or the lessees in a life estate), a slight improvement to vegetation, wildlife, marine resources, threatened and endangered species, and cultural resources would occur because certain actions would be taken to further protect these resources. The Army is attempting to locate and remove chemical warfare material, hazardous, or toxic wastes, which would be an improvement.

Table 8.—Summary of the environmental consequences by alternative¹

Environmental factors	Offer the land for sale to:						Turn island over to:		Preferred	
	No action alternative	High bid 1A	Lessee 1B	Lessee, void contracts 1C	V.I. Govt. 1D	Via lottery 1E	Negotiate direct sale 1F	V.I. Govt. 2A		Lessee (life estate) 2b
Water resources	—	—	—	—	—	—	□	—	—	—
Vegetation	potential ■	□	□	□	□	□	□	□	□	□
Wildlife	potential ■	□	□	□	□	□	□	□	□	□
Marine resources	potential ■	□	□	□	□	□	□	□	□	□
Threatened and endangered species	potential ■	□	□	□	□	□	□	□	□	□
Cultural resources	potential ■	□	□	□	□	□	□	□	□	□
Hazardous or toxic wastes	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■
Social well-being	□■	■■■	□	□□	■■■	■■	■■	■■■	■■	□□

¹ "—" = no impact, ■ = slight decrease, ■■ = moderate decrease, ■■■ = substantial decrease, and ■■■■ = extreme decrease; □ = slight improvement, □□ = moderate improvement, and □□□ = substantial improvement.

Only under alternative 1F, negotiating a direct sale with a group, would water resources experience any impact; and this impact is slightly positive. The assumption is made that the hotel would be rebuilt and a different water system would be included that would also provide water to the villas.

The real differences among the alternatives are found in the social factors area. Only by offering the land for sale to the former lessees are improvements derived. Alternative 1B allows the 36 former lessees with contracts to execute those contracts, which the individual may feel is fair or unfair. Other former lessees would be allowed to purchase their land, but the terms are not known.

Alternative 1C would allow a negotiation process among all the former lessees—those with and those without signed contracts. This open negotiation process provides moderate improvements through negotiation of a fair market price advantageous to both the seller and the buyer.

Impacts of the combination alternative would be similar to the impacts of alternative 1C. The existing contracts of the 36 would be honored, with the price renegotiated to account for existing conditions. Other former lessees would be offered the opportunity to purchase their respective lots at a price advantageous to both the seller and the buyer.

Chapter 4

Consultation and Coordination

This chapter includes information on consultation and coordination activities to date and future planned activities. Public involvement activities will continue during the negotiation and action phase. The segment on public involvement also serves as the public involvement and scoping summary report for this proposed action.

Public Involvement and Scoping Summary

Public involvement is a process by which interested and affected individuals, organizations, agencies, and governmental entities are consulted and included in the Department of the Interior's decisionmaking process. In addition to providing information to the public regarding the study, Reclamation solicited the public's input concerning the public needs, desires, and concerns. Scoping is designed to explore the breadth and depth of issues to be addressed in the environmental process, to ensure that important considerations are not overlooked, and to discover aspects which might otherwise go unrecognized. Both formal and informal input have been encouraged and used.

Reclamation held two public meetings to gather the comments and concerns about the proposed transfer of Federal jurisdiction. One meeting was held Tuesday, March 22, 1994, on Water Island's Honeymoon Beach; and another was held Wednesday, March 23, 1994, on St. Thomas in the Virgin Islands Department of Planning and Natural Resources Conference Room.

A press release was issued and an ad placed in the local St. Thomas newspaper announcing the meetings. In addition, an announcement was mailed to all individuals formerly having a lease or sublease on Water Island (based on the most recent list provided) and to others known to be interested in the island's disposition. Written comments were encouraged.

About 60 people attended the scoping meetings on Water Island, and about 30 attended the St. Thomas meeting. (Several attended both meetings.) At each of the scoping meetings, participants were asked to register, were informed where to send written comments, and were briefed about the purpose of the meeting. Reclamation representatives explained the purpose and the need for the study; a Reclamation representative served as a facilitator, and participants were requested to

identify issues or concerns that were important to them regarding the proposed action. A court reporter recorded the comments verbatim to facilitate recollection and understanding of those concerns.

The concerns, comments, and issues resulting from the scoping process are shown below. The comments received during the scoping sessions and by mail generally fell into three areas of concern—love of the island with the desire to own the land previously leased, services provided or available, and future land use and ownership. The general impression appeared to be that the meetings were informative, and the participants appreciated the opportunity to provide comments and to be heard. Reclamation, in turn, also appreciated the welcome and the opportunity to receive comments and concerns.

It should be noted that the following comments may represent one person or several people's viewpoint.

Love of the Island and the Desire to Own Land

- We have fallen in love with this lovely island. The people are special. As soon as the lease matter is settled, the better it'll be for us.
- The residents desire to receive fee simple ownership for their lots.
- Residents want to keep the island as it is for their grandchildren to enjoy.
- People who have homes should be permitted to buy them. Let the hotel be rebuilt. For a person to obtain title to a vacant lot, he should be required to build on it.
- Concerns exist about workers showing up on a lot where the lessee has not been notified.
- The interest of the Department of the Interior, the hotel, and the former sublessees should be appraised. The earlier appraisal was performed through the National Park Service in Atlanta, Georgia, who knew nothing about the situation.

Services Provided or Available

- Sewage is being pumped into the ocean west of Water Island in Honeymoon Bay, and sewage is being pumped into Jersey Bay east of Water Island. Sewage needs to be treated and disposed of so it doesn't pollute Honeymoon Beach and the ocean near St. Thomas.

- Environmental problems should be modified in the minds of people who come to Water Island. The island is entirely isolated except for telephone and electricity—virtually self-sufficient.
 - Abandoned cars clog up everything and fill the dump; gasoline, oil, and rubber can burn. No fire protection is provided.
 - Many potholes in the roads collect stormwater and provide an ideal mosquito breeding ground. No Government funds or Government aid provide funds for a road grader.
 - Household garbage is removed at residents' expense. The V.I. Government provides no services. Household waste is growing in an unauthorized dump near the warehouse. Other household waste is tossed at will, with no dumpster available.
 - Residents need a ready and unencumbered access to the Crown Bay area for boat docking, particularly during emergencies.
 - No service station is available for gasoline or mechanical service. Gasoline stored in jerry jugs in the homes is unsafe.
- The serious environmentalist has two basic objectives: survival of life on the planet and a quality existence for man. Any issue that affects the quality of life is legitimately considered an environmental issue. The majority of the environmental issues represent the kinds of problems individuals in our society cannot address alone and which normally are supplied by the Government. The organizational framework to address these matters on Water Island has been missing or deficient. In part, the authority for managing practical problems was supplied for a time by the master leaseholder.

A partial inventory of the kinds of problems that affect the quality of life on Water Island that must be considered environmental problems follow:

- Access between Water Island and St. Thomas is haphazard, temporary, with insufficient guarantee of landing arrangements for private boats or ferry with the Port Authority, St. Thomas marinas.
- Contamination and deterioration of water quality surrounding Water Island is an established fact. Sewage has been dumped into the ocean from homes without septic tanks, live-aboard yachts, the hotel and guest houses, and outfall pipes operated by Public Works. Staph infections among Honeymoon Bay users are common. No mechanism exists to pump and to dispose of septic tank contents, and soil constraints limit septic tank usage.

- Residents do not have equipment nor professional help to fight fires. No freshwater source is available.
- Children play in the severely damaged hotel. Squatters tap into power lines. Along with the litter and debris, a large rat population exists.
- Mail is distributed by volunteers but is not delivered consistently.
- Air quality is frequently degraded by cruise ships moored or passing upwind, belching smoke, by aircraft overflights, and occasionally by smoke from the Water and Power Authority plant and sometimes St. Thomas landfill fires.
- Noise pollution has been a problem, from night clubs at the Sub Base, from Frenchman's Reef, and from party boats with amplified music (often through the night).
- The island has feral cats. Dogs are brought ashore to relieve themselves on the beaches. Residents have no authority to limit domestic animals, including domestic birds.
- The intermittent discussion of the need for surveillance, access, and management of the natural areas need fleshing out and implementation.

Future Land Use

- The people on Water Island feel they will be used and dumped on by the V.I. officials who are perceived to be poor politicians—basically, they feel the V.I. officials only want tax money.
- Some believe a hotel can never make a profit here because it is on an island off an island and too difficult to operate.
- Hopefully, the former master leaseholder or Interior will clean up the debris left from the hurricane.
- Residents are very concerned about old cars or wrecks and trash removal; very concerned about boats in Honeymoon and Flamingo Bay; and very concerned about chemicals left on Water Island.
- The hurricane-damaged hotel is the single, large, environmental hazard to health and safety on the island, along with the outbuildings.
- The salt pond on tract D is used by ducks, stilt birds, herons, and an osprey; and it should be allowed to perform its natural function.

- The residents want to read and understand reports written about the island before action is taken.
- When the United States Government decides to turn the island over to the Virgin Islands Government, the residents would like to think the island will have some of the characteristics it had when they took it over—reasonably clean.
- The original developer planned all activities with the environment in mind. All development was performed by private enterprise. They planted 800 coconut trees, put in docks and roads, and built the beach and hotel—the focal point of the island. Every house was a part of the hotel and entitled to the services. The island cannot be economically self-sufficient without a hotel—probably 300 rooms would be necessary to make it self-sufficient.
- Island residents request Interior designate an agent to ensure these functions are filled officially. Residents request Interior, in turning over jurisdiction to the Virgin Islands Government, to follow the wise course recommended by Representative de Lugo concerning the adoption of a detailed plan for Water Island. Residents should be given formal access to the planning process with full opportunity to provide input and to confer at length with the appropriate public officials.
- Over a period of 40 years, only about 300 people own homes and homesites on Water Island. In other words, they are not fighting to move over there; the fundamental trouble is that it's underdeveloped. Too few people live there to make it self-supporting.
- Water Island is the fourth largest of the Virgin Islands and the only virgin island. Water Island has never been farmed. The V.I. Government will ruin the island. We want this to stay a virgin island.
- The chemical weapons that were stored on Water Island is a concern. What measures are being taken by the Corps?
- There is confusion over administrative jurisdiction and ownership. Some of the residents are in favor of turning over the administrative jurisdiction of Water Island from the Department of the Interior to the local Virgin Islands Government. But the V.I. Government has no ownership claim. Proposals to turn over ownership of the vacant land previously leased by the hotel is not the best use of that land. The local government has neither the expertise nor the money to develop it. [Editor's note: The Virgin Islands Government has administrative jurisdiction of Water Island, providing fire and police protection when called.]

- Delegate to Congress de Lugo and Senator Johnston asked the Department of the Interior to come up with a plan for the future of Water Island, but it has never been done. [Editor's note: A Commerce Department plan was prepared in 1980.]
- The 40 acres on Spray Bay ought to be set aside as a wildlife preserve and given to the local government.
- The botanical garden is the only one in St. Thomas or St. John. It has been offered to the V.I. Government free if they will maintain it.
- The three salt ponds on the island have been fished out. The Water Island Mariculture Foundation ought to be allowed to restock them with conch, fish, shrimp, and lobsters.
- The archeological survey and fish and wildlife survey are suspect. The endangered species of snakes that occur don't come out at night until after 4:30 p.m., the time FWS representatives left. Two species of endangered plants were found—it wasn't known if they are classified "endangered" on the Federal level.
- The Water Island Civic Association is a voluntary organization with "no teeth." They would like to have some authority (management responsibility) so they could manage Water Island in a more efficient way than it is now.

Public Involvement Following Draft EA Release

The draft environmental assessment was released in August 1995 with about 30 days allowed for comments. Hurricane Marilyn hit the Virgin Islands on September 15, 1995. The comment period was extended because of this emergency. On October 27, 1995, Office of Insular Affairs Director Allan Stayman forwarded a letter to all who received a copy of the draft environmental assessment. The letter contained a proposed action, an alternative that varied slightly from the alternatives described in the draft environmental assessment.

Interested individuals were requested to review the proposed action, provide comment, and invited to attend public meetings on Water Island and St. Thomas on December 12 and 13, 1995. Although Water Island did not have electricity and phone service, the Department did not want to delay concluding this process because residents, in most cases, could not rebuild their homes without title to their land.

Public Meetings

During the week of December 10, 1995, representatives from the Office of Insular Affairs, the Solicitor's Office, and the Bureau of Reclamation met with the Governor and members of his staff, members of the V.I. Legislature, WICA representatives, Sprat Bay Corporation representatives, and others to move negotiations forward, to hear concerns, and to conclude the environmental assessment process.

More than 75 people attended each of the public meetings on Water Island and on St. Thomas. Representatives from the Governor's Office, the V.I. Legislature, congressional delegate Frazer's Office, Federal Emergency Management Agency, Small Business Administration, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Bureau of Reclamation, Office of the Solicitor, and the Office of Insular Affairs (including the Director) were present. A tape recording of each meeting was transcribed and sent to those requesting a copy of the transcript. Written comments were received from about 80 individuals or groups.

This final environmental assessment was revised based on the comments received in writing and during the public meetings. The comments are on file in the Bureau of Reclamation's Technical Service Center in Denver, Colorado.

Summary of Comments

Reclamation received and incorporated comments into the analysis from the time the draft environmental assessment was released. All comments were read carefully and considered during the preparation of the final environmental assessment. The results were used to develop the following summary.

A few comments indicated the environmental assessment was without compassion and concern for the people. However, NEPA requires environmental compliance documents be written from a factual standpoint as public disclosure documents without bias.

Several comments were received about the document content, including the accuracy of certain statements. Those comments were addressed by revisions, additional information, or deletions from the environmental assessment.

The other issues that produced the most comments concerned the:

- Pritchett appraisals, litigation, timeframe of offer, and rights of residents or former sub-lease holders. These issues are outside the scope of this document and were not addressed, other than to recognize that these items are a source of stress experienced over the last few years.

- Support for a preferred alternative.
- Services that would be provided once taxes are paid to the V.I. Government. For example, would residents have fire and police protection?
- Environmental protection of the green areas—areas set aside to protect fish and wildlife resources—and orderly development of the island.

Agency Consultation

Public involvement activities included the studies on endangered species and fish and wildlife resources performed by FWS, an archeological inventory and assessment of cultural resources by the National Park Service, and an inventory of hazardous waste by the Corps of Engineers and a Bureau of Land Management contract.

Fish and Wildlife Service

The Office of Territorial and International Affairs requested that FWS conduct a resource survey of Water Island to determine the fish, wildlife, and habitat resources present and to make recommendations on how to protect these resources into the future. FWS conducted the survey and provided documentation of results in two forms. The first report identified resources discovered during surveys in 1991 and 1992 (FWS, 1992) and has been heavily cited in this environmental assessment. FWS also provided a memorandum (dated January 8, 1993) to the Office of Territorial and International Affairs in which was contained a biological opinion of nonjeopardy. In part, the memorandum stated (page 7):

... it is the Biological Opinion of the Service that the sale of Water Island as proposed, including the restrictions mentioned in the proposal of retention of lands in Federal ownership, is not likely to jeopardize the continued existence of the brown pelican, the Virgin Island tree boa, the hawksbill sea turtle or the green sea turtle.

The above mentioned restrictions have been incorporated as common elements to all action alternatives (chapter 2, pages 13-16).

Reclamation personnel have accompanied FWS biologists on an inspection of Water Island and have continued to consult with FWS's Caribbean Field Office (Boqueron, Puerto Rico) during preparation of the draft environmental assessment.

Copies of the draft environmental assessment have been sent to the FWS's Caribbean Field Office and to the National Marine Fisheries Service (St. Petersburg, Florida) for review.

State Historic Preservation Office

The National Historic Preservation Act requires that Federal agencies consider the effects that their projects have upon cultural resources. Section 106 of this act provides the structure for Federal agencies to allow the Advisory Council on Historic Preservation to comment on specific undertakings. The initial role for consultation has been delegated to the State Historic Preservation Office.

SHPO has numerous roles. Among them, it reviews projects, ensures that inventories have been adequate to discover potentially eligible properties, concurs with an agency's determinations of eligibility for the inclusion of a property in the National Register of Historic Places, and comments on the adequacy of treatment plans.

Consultation with SHPO has been initiated for this program. Reclamation and the SHPO have concurred on the eligibility of eight sites located by NPS investigators. Due to possible damage inflicted by Hurricane Marilyn, the condition of the sites needs to be checked. Additional consultation will be required prior to title transfer to determine appropriate mitigation treatments for eligible sites.

List of Environmental Commitments

The environmental commitments would be as generally described in chapter 2 and as recommended in FWS's no jeopardy opinion. A list of lot restrictions slightly modified in this final environmental assessment based on public comment and FWS consultation is located in attachment C.

Regardless of the alternative selected, any solid waste and hazardous materials located on the island would eventually be removed and disposed of in a permitted landfill on the island of St. Croix or other appropriate landfill.

Significant cultural resources would be addressed before disposal. Subject to consultation with SHPO, the sites eligible for the National Register of Historic Places would be preserved in place with binding covenants or subjected to adequate data recovery before the transfer of title to Water Island. If the sites are preserved in place, the entity to manage those lands would be identified before transfer of title.

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Attachment A

U.S. Fish and Wildlife Service

Biological Opinion



United States Department of the Interior

TAKE
PRIDE IN
AMERICA

FISH AND WILDLIFE SERVICE
Caribbean Field Office
P.O. Box 491
Boqueron, Puerto Rico 00622

Mr. Geoparty
Mr. [unclear]
Mr. [unclear]

January 8,

Ms. Stella Guerra, Assistant Secretary
Office of Territorial and International Affairs
U.S. Department of the Interior
Office of the Secretary
Washington, D.C. 20240

RECEIVED

JAN 23 1993

Dear Ms. Guerra:

This represents the Biological Opinion of the U.S. Fish and Wildlife Service (Service), in accordance with Section 7 of the Endangered Species Act (Act) of 1973, as amended, for the disposal of Water Island, U.S. Virgin Islands. An administrative record of this consultation is on file at the Caribbean Field Office in Boqueron, Puerto Rico. Comments under the Fish and Wildlife Coordination Act are also provided herein.

Project Description and Consultation History

Water Island is the fourth largest island of the U.S. Virgin Islands and is located in Charlotte Amalie Harbor, St. Thomas, U.S. Virgin Islands. The island was purchased by the U.S. Army from the East Asiatic Company in 1944, but in 1952 was transferred to the Department of the Interior (Department). The Department subsequently leased the island to Water Island, Inc., and it was thereafter subdivided and subleased. A hotel/resort complex has been built, although not in use since the passage of Hurricane Hugo in 1989. As many as 230 subleases have been let, ranging in size from 0.5 to more than 2 acres, and numerous homes have been built.

The forty-year Water Island master lease, initiated January 1, 1953, terminated December 31, 1992. The Department of the Interior has decided to dispose of the island by offering it for sale. The proposal for the island has been described in the following manner by the Office of Territorial Affairs in a memorandum of December 6, 1992.

Most of the land is likely to be disposed of to the current holders of subleases. Portions of the Island may be sold or transferred to other parties including the Virgin Islands, the current holder of the master lease, or other parties. The proposal states that, in order to protect animal and plant resources of the island, including endangered species, certain lands can be retained by the United States,

Morgan
cc: *Mr. [unclear]*

transferred to the Virgin Islands, or subjected to strict conservation easements. These lands would include:

- a. A tract consisting of approximately forty acres at Sprat Point can be retained and administered as a wildlife refuge. It is anticipated that the National Park Service would administer this land.
- b. The waste dump at the southern end of the island will be retained in Federal ownership and administered by the Corps of Engineers for the foreseeable future.
- c. In addition to Sprat Point, Tracts D and F shall be retained in Federal ownership or subjected to a permanent non-development easement.
- d. The United States will retain a non-development easement of 4 meters (13 feet) surrounding the marina basin off Flamingo Bay.
- e. To the extent feasible, lands included in Coastal Barrier Units VI-26 and VI-27 will be retained in Federal ownership.

The Caribbean Field Office, Boquerón, Puerto Rico, conducted natural resource surveys of Water Island. Field work was conducted from October 28 through November 1, 1991 and April 2 through 9, 1992. A preliminary report was submitted to the Director, Fish and Wildlife Service, in February, 1992, and a final report on May 22, 1992. This final report contained a description of the natural resources on Water Island, including threatened and endangered species, and conservation recommendations designed to minimize impacts to these resources. Threatened and endangered species considered in the surveys were the brown pelican (Pelecanus occidentalis), the Virgin Island tree boa (Epicrates monensis granti), the hawksbill sea turtle (Eretmochelys imbricata), the green sea turtle (Chelonia mydas), and the St. Thomas prickly ash (Zanthoxylum thomasianum). The Service received a request from the Office of Territorial and International Affairs for formal consultation on December 6, 1992, which outlined the above-described proposal for disposal of the island. The document determined that although a small incidental take of the brown pelican, nesting habitat for sea turtles, and possibly the boa might occur, with the implementation of the proposed restrictive conditions no adverse effect was anticipated.

Background

The Virgin Island tree boa (Epicrates monensis granti) was designated as an endangered species in 1979. On St. Thomas, the boa is found in xeric forest habitat characterized by steep slopes with poor rocky soils (Nellis et al., 1983). Dominant species in the vegetation are Bursera simaruba and Pisonia

subcordata. Near the sea, Cocos nucifera and Coccoloba uvifera are abundant. The boa is also found on low-profile islets such as Cayo Diablo, where the tallest vegetation is C. uvifera reaching approximately 5 meters in height. The introduction of the mongoose in the late 19th century, as well as the introduced rats may have had an adverse impact on this and other species of reptiles. In addition, the present destruction and modification of habitat on St. Thomas is impacting the species.

The St. Thomas prickly ash (Zanthoxylum thomasianum) is a small evergreen tree endemic to Puerto Rico and two of the U.S. Virgin Islands. Several plants are known to survive in three populations on Puerto Rico, approximately 250 from a single large population on St. Thomas, and at least 50 exist on St. John. The species was designated as endangered on December 20, 1985, and is endangered primarily due to the extensive deforestation which has occurred throughout its range and the subsequent clearing of second-growth forest in the Virgin Islands for the construction of private homes. The prickly-ash occurs in the subtropical dry forest life zone in the semideciduous forest type. Species having thorns or spines are common and those which are not deciduous have succulent or coriaceous leaves. Bursera simaruba (turpentine tree) and Pisonia subcordata (water mampoo) are dominant trees.

The brown pelican (Pelecanus occidentalis) was listed as endangered in 1970 under the Endangered Species Conservation Act of 1969, later replaced by the Endangered Species Act of 1973. Pelicans are also protected by the Migratory Bird Treaty Act. The Caribbean brown pelican (Pelecanus occidentalis occidentalis) is the smallest of three subspecies occurring in the continental United States, Puerto Rico and the U.S. Virgin Islands. In addition to the adverse impacts of chlorinated pesticides, particularly DDT, other factors adversely affecting abundance and reproductive success in the Caribbean include poaching, human disturbance, entanglement in fishing gear, habitat destruction or modification, and reduction in food availability.

The hawksbill sea turtle (Eretmochelys imbricata) was listed in 1970. The hawksbill is found throughout the world's tropical waters. However, nesting within the United States territory occurs in Puerto Rico, the U.S. Virgin Islands and very infrequently in Florida. The two most important known nesting areas in the U.S. Caribbean are Mona Island in Puerto Rico and Buck Island in the U.S. Virgin Islands. The hawksbill requires relatively undisturbed beaches for nesting, and illumination of beaches at night can distract hatchlings away from the sea. Poaching, particularly for exploitation for the shell, continues to contribute to the decline of the species. In the Virgin Islands, development has occurred at most nesting beaches, and only the relatively undeveloped off-shore cays and small islands provide a refuge for undisturbed nesting.

The green sea turtle (Chelonia mydas), listed in 1978, is considered endangered in Florida and the Pacific coast of Mexico, and threatened elsewhere. The population has been estimated at no more than 600,000 adults worldwide. Nesting in the continental United States is limited to 300 to 800 nests annually on Florida's east coast and occasional nesting occurs in Puerto Rico and the U.S. Virgin Islands. Open beaches with a sloping platform and minimal disturbance are required for nesting. The green sea turtle is attracted to lagoons and shoals with an abundance of marine grass and algae. Factors contributing to the decline of the species include overutilization as a food source by humans, loss of nesting habitat due to human encroachment, entrapment in fishing and shrimping trawls, among others.

Water Island lies within the subtropical dry forest life zone (Ewel and Whitmore 1973). Mean annual rainfall in this life zone ranges from a minimum of approximately 600 mm to a maximum of 1100 mm. Although vegetation in this life zone vary depending on soil type and other factors, forests are usually deciduous to semi-evergreen seasonal and have species which are small-leaved, succulent or coriaceous, spiny, and of hardwood. The major soil association on Water Island is Cramer gravelly clay, a well-drained, highly erodible, shallow soil found over volcanic rock. Volcanic rock outcrops and cliffs are found along most of the south coast of the island. Jacanas sand is found in the small pocket beaches of Sprat Bay, Druif Bay, Flamingo Bay, and Elephant Bay. Limestone rock outcrops and soils are found primarily in Limestone Bay.

Vegetation in many areas of Water Island has been disturbed as a result of military activities, residential and tourist development, road construction, and the introduction of exotic species, however, several areas remain relatively undisturbed. Vegetation on the south-facing steep slopes of Limestone Bay (Tract D) is thorn scrub typical of a subtropical dry life zone regime. Trees were generally no taller than 3 to 5 meters and coppicing was common. The dominant species included Randia aculeata (Christmas tree), Pisonia subcordata (water mampoo), and Cassine xylocarpa (spoon-tree). Other associated species were Hylocereus trigonata (strawberry pear), Pilosocereus royenii (dildo cactus), Erithalis fruticosum (black torch), Bursera simaruba (turpentine tree), and Capparis flexuosa (caper tree). The rare endemic small tree Malpighia woodburyana (considered endangered by the Virgin Island Division of Fish and Wildlife) was observed on this steep hillside.

Upland vegetation on Sprat Point is thorn and cactus scrub and evergreen woodland. Dominant species in the cactus and thorn scrub include the emergent trees Bursera simaruba and Pisonia subcordata and the cactus Pilosocereus royenii. Forming a continuous canopy are Randia aculeata, Cassine xylocarpa, Exostema caribaea (West Indian quinine bark), Tabebuia

heterophylla (white cedar), Plumeria alba (nosegay tree), and Capparis flexuosa. Other cactus species present in the area, particularly on the steeper slopes included Melocactus inornatus (barrel cactus), Opuntia repens (jumping cactus), and Hylocereus trigonata. A relatively rare cactus, Mammillaria nivosa (snow cactus), was observed growing in the rocks and crevices of the cliffs. Again the rare endemic Malpighia woodburyana was observed on the westernmost hill of the Point.

The evergreen littoral woodland fringes the coastline and includes the dominant species Morinda citrifolia (Indian mulberry), Thespesia populnea (cork tree), Conocarpus erectus (button tree), and Coccoloba uvifera (sea grape). Hippomane mancinella, the poisonous manchioneel tree, and the coconut palm (Cocos nucifera) were found on many beaches. Other associated species included Ipomea pes-caprae (bay hops), Suriana maritima (bay cedar), and Sporobolus virginicus (sea-shore rush grass).

The northern slopes of the island are gentler and somewhat more protected (Tract F). Vegetation is taller, particularly in the ravines where trees were as tall as 40 to 50 feet. Some overstory trees were observed to have diameters of up to 2 feet. Dominant species include Bursera simaruba, Pisonia subcordata, and the teyer palm, Coccothrinax alta. Other associated species included Cassine xylocarpa, Erythroxylum brevipes (brisselet), Citharexylum fruticosum (old woman's bitter), and Euphorbia petiolaris (manchineel berry). On these slopes the teyer palm was, in several locations, observed to form almost monospecific stands.

Although habitat on Water Island, particularly that of the steeper south-facing slopes, is similar to that in St. Thomas where the prickly ash (Zanthoxylum thomasianum) is located, surveys of the island did not locate the species. Areas covered in the surveys included Sprat Point, Limestone Bay, Elephant Bay, and Flamingo Hill.

Wetlands on Water Island include several salt ponds located around the island. Salt pond vegetation consists of salt tolerant plants such as black (Avicennia nitida), white (Laguncularia racemosa) and red (Rhizophora mangle) mangroves. Herbaceous vegetation includes Batis maritima, Sesuvium portulacastrum, and Heliotropium curasavicum.

Development on Water Island has eliminated several salt ponds. The pond in Flamingo Bay has been dredged and converted into a poorly maintained marina basin. A thin mangrove fringe currently borders part of the marina. The salt pond in Druif Bay was filled as part of the Honeymoon Beach development project. Several small ponds adjacent to the current dock landing (Phillip's Landing) at Providence Point and the loading dock in Ruyter Bay have also been impacted by filling and

encroachment. Mangrove vegetation still exists but most of it has been filled. The larger salt ponds of Limestone Bay, Sand Bay and Revenge Beach are still intact. Although these ponds suffered the impact of Hurricane Hugo, mangrove vegetation is slowly coming back. These ponds continue to provide valuable fish and wildlife habitat. White-cheeked pintails, a candidate species for federal listing, was observed in the ponds at Sprat Point.

Numerous Anolis lizards, the ground lizard Ameiva exsul, as well as geckos (Sphaerodactylus spp.) were observed, evidence of a rich reptile fauna in the absence of mongoose, apparently not present on Water Island. The introduced red-legged tortoise Geochelone carbonaria is relatively abundant on the island. Several specimens of the Puerto Rican racer snake Alsophis portoricensis were seen scurrying through the vegetation.

Although the vegetation on Water Island is similar to tree boa habitat on St. Thomas, and despite the apparent absence of the mongoose, daytime and nighttime surveys conducted in the areas of Flamingo Bay, Flamingo Hill, Catchment Hill, Limestone Bay, Elephant Bay, Sprat Bay, Sprat Point, Sand Bay, Carol Point and Providence Point did not locate the Virgin Island tree boa. Nevertheless, several residents interviewed insisted upon having seen a "boa"-like snake.

Little documentation is available concerning the use of the island's beaches for nesting by sea turtles. However, Sprat Bay, Druif Bay, and Banana Bay possess characteristics typical of beaches utilized by the hawksbill and green turtle for nesting. Personnel from the Virgin Island Division of Fish and Wildlife have reported turtle nesting on several beaches of Water Island. Evidence of foraging by green sea turtles was observed during marine surveys just west of Providence Point and a green sea turtle was observed in Banana Bay. In addition, residents mentioned the frequent sighting of sea turtles in Druif Bay.

Brown pelicans, a federally-listed species, royal terns (Sterna maxima), belted kingfishers (Ceryle alcyon), ospreys (Pandion haliaetus), great blue herons (Ardea herodias), and little blue herons (Egretta caerulea) were seen utilizing the Flamingo Bay Lagoon. Several individuals of the red-billed tropicbird (Phaeton aethereus) were observed circling and landing (presumably nesting) near the southwestern cliffs of Water Island.

Project Impacts

Although little information is available concerning the proposal for disposal of the island it is the Service's understanding that the Office of Territorial and International Affairs proposes to sell the majority of the island to the current lessees. Tracts D

and F and Sprat Point will be retained in federal ownership or subjected to a permanent non-development easement. This will assist in the protection of potential habitat for the tree boa as well as protect locally-listed species of plants. Nevertheless, the continued development of the island will result in the consequent destruction and modification of dry forest habitat. Upland development will have an adverse impact on adjacent sea grass and coral reef systems due to the increase in run-off and sedimentation.

Development of coastal areas may result in adverse indirect and cumulative impacts to sea turtle nesting habitat in a variety of ways. One of the most obvious impacts of development is artificial lighting. Post-emergent hatchling death rates may be extremely high due to disorientation and landward movements of the hatchlings. Nesting may be inhibited by human disturbance such as lighting, construction, etc., particularly by the hawksbill turtle. Nesting sites may be degraded or lost due to beach topographic changes resulting from erosion control structures and coastal development. Beach nourishment projects may trap hatchlings. Vehicular traffic on beaches, as well as recreational use of horses, may collapse nests or create depressions which entrap seaward bound hatchlings. Increased human presence at the nesting beaches may result in the increased possibility of poaching of both adults and eggs and the capture of hatchlings.

Biological Opinion

This Opinion considers the impacts of sale and development only on sea turtle nesting beaches and not on adjacent seagrass beds and coral reefs which may serve as foraging habitat. The Office should consult with the National Marine Fisheries Service in order to evaluate impacts to sea turtles in the water. The hawksbill and green sea turtles may be adversely affected from the sale of the island and subsequent development of the coastal areas through impacts to nesting habitat from increased densities of introduced predators, increased potential for poaching, lighting, and other human related impacts. However, it is the Biological Opinion of the Service that the sale of Water Island as proposed, including the restrictions mentioned in the proposal of retention of lands in Federal ownership, is not likely to jeopardize the continued existence of the brown pelican, the Virgin Island tree boa, the hawksbill sea turtle or the green sea turtle.

Incidental Take

Section 9 of the Act prohibits taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct) of listed species without a special exemption. Under the terms of Section 7(b)(4) and

Section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered taking within the bounds of the Act provided that such taking is in compliance with the incidental take statement. This does not eliminate the need for compliance under the Migratory Bird Treaty Act. The Service anticipates that, although the sale of the island will not result in direct impacts to nesting beaches, the subsequent development and increased human use of the coastal areas may result in the take of all hawksbill and green sea turtle nests and adults found on these beaches within the proposed project area. .

Reasonable and Prudent Measures

The Service considers the following reasonable and prudent measures necessary and appropriate to minimize the take of hawksbill and green sea turtles and their nesting habitat in the proposed project area.

1. Lot numbers 71, 208-210, 221-230, 234, 270, and 279 and Tract C will contain restrictions on the nature of outdoor lighting, particularly with respect to location and intensity). Any additional development on lots numbered 208-210, 230, 234, 270, and 279 would be precluded by a non-development easement.
2. Any additional development on Tract C should incorporate measures to minimize impacts to sea turtles, in addition to lighting restriction, such as set-backs from the beachfront vegetation.
3. In order to minimize impacts to nests, the introduction non-native animals such as mongoose and the use of vehicles on beaches should be prohibited.

Terms and Conditions

In order to be exempt from the prohibitions of Section 9 of the Act, the following terms and conditions, which implement reasonable and prudent measures described above, must be complied with.

1. Lighting restrictions to prevent disorientation of adults and hatchlings should be developed and approved by the Service, in conjunction with the Virgin Island Division of Fish and Wildlife, for lots 71, 208-210, 221-230, 234, 270, and 279. These should be included as conditions on deeds of sale. Existing lighting should be reviewed, and if necessary replaced with shielded lighting, and the placement of all new lights should be reviewed and approved by the Service and the VI Division of Fish and Wildlife.

2. Perpetual non-development easements, if the area is not yet developed, should be placed on lots 208-210, 230, 234, 270, and 279.
3. Additional development on Tract C should be evaluated in order to incorporate restrictions such as set-backs in addition to lighting restrictions.
3. All deeds will be conditioned to prohibit any party from introducing non-native animals such as mongoose, deer, and pigs to the island, in order to minimize impacts from predation on reptiles, including sea turtles.
4. All deeds will be conditioned to prohibit the use of off-road vehicles, beach cleaning equipment, or recreational use of horses on beaches. Domesticated animals such as dogs and cats and animals such as wild pigs and deer should be kept off the beach.

Upon locating a dead, injured, or sick endangered or threatened species specimen, initial notification must be made to the nearest Fish and Wildlife Service Law Enforcement Office. The Caribbean Field Office (809/851-7297) should be notified as well. Care should be taken in handling sick or injured specimens to ensure effective treatment and care in handling dead specimens to preserve biological materials in the best possible state for later analysis of cause of death. In conjunction with the care of sick or injured endangered species or preservation of biological materials from a dead animal, the finder has the responsibility to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed.

If, during the course of the action, the amount or extent of the incidental take limit is exceeded, the Federal agency must reinitiate consultation with the Service immediately to avoid violation of Section 9. Operations must be stopped in the interim period between the initiation and completion of the new consultation if it is determined that the impact of additional taking will cause an irreversible and adverse impact of the species, as per Section 402.14(1). The Federal agency should provide an explanation of the causes of the taking.

Conservation Recommendations

Section 7(a)(1) of the Endangered Species Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. The term conservation recommendations has been defined as suggestions of the Service regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical

habitat or regarding the development of information.

1. As stated by the Office of Territorial Affairs, Sprat Point, Tract D and Tract F will remain in federal ownership. In order to avoid adverse impacts to the vegetation, the Service should be consulted on any proposed recreational or other projects for these areas. The Service recommends that in addition, Lot 78, 100 and 112 be retained in Federal ownership or retain a non-development easement.
2. All deeds should be conditioned and approved by the Service and the VI Division of Fish and Wildlife, to require that boats of the owners, lessees, visitors and clients be moored only at designated mooring sites in order to minimize impacts to the seagrass beds of Druif, Flamingo, Elephant and Ruyter Bays. The type, number and location of these moorings will be determined in cooperation with the Virgin Island government, the Fish and Wildlife Service, and the National Marine Fisheries Service. Anchoring or mooring in other areas should be prohibited.
3. In order to reduce erosion into sensitive adjacent marine environments where sea turtles forage, the government will retain a non-development easement if the tract had not been developed by December 31, 1992, or a condition that no additional development or removal of vegetation cover shall occur if the tract had been developed by that date on those portions of Tract B indicated in cross-hatching (see Figure 1), lots 1 through 10, 20 through 29, 111, 61 through 63, the unnumbered lot between 63 and 86, 86, 87, 94, 95, the unnumbered parcel adjoining lot 201 on the north and west, lot 201 through 220, 231 through 233, and 278.
4. To protect wetlands utilized by the candidate species, the white-cheeked pintail, the government shall maintain a non-development easement of 4 meters around all salt ponds.
5. Designated Coastal Barriers should be retained in Federal ownership.

In order for the Service to be kept informed of actions that either minimize or avoid adverse effects or benefit listed species or their habitats, the Service is requesting notification of the implementation of any conservation recommendations.

This concludes formal consultation on this action. Reinitiation of formal consultation is required if the amount or extent of

incidental take is exceeded, if new information reveals effects of the action that may impact listed species or critical habitat in a manner or to an extent not considered in this opinion, if the action is subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in this opinion, or if a new species is listed or critical habitat designated that may be affected by the action.

Sincerely,



Susan R. Silander
Acting Field Supervisor

Enclosure

ss

cc:

FWE, FWS, Atlanta

Director, FWS, WDC

Division Endangered Species, WDC

Sea Turtle Coordinator, FWS, Jacksonville

NMFS, St. Petersburg

Attachment B

Letters from and to
State Historic Preservation Officer

D-5841

Mr. Roy E. Adams
Commissioner/SHPO
Government of the Virgin Islands of the United States
Department of Planning and Natural Resources
Nisky Center, Suite 231
No. 45A Estate Nisky
Charlotte Amalie, St. Thomas VI 00802

Subject: Section 106 Compliance in Advance of the Transfer of Water Island, US Virgin Islands

Dear Mr. Adams:

The Department of the Interior's (Interior) Office of Territorial and International Affairs (OTIA) has requested that the Bureau of Reclamation (Reclamation) prepare an Environmental Assessment (EA) of the impacts of transferring title of Water Island from the public domain. Under the agreement between the two agencies signed on 24 September 1993, Reclamation would compile data from work completed by other agencies and coordinate and/or obtain any additional data needed to complete the EA. One specified responsibility is assuring compliance with all legislative and regulatory requirements concerning cultural resources.

In 1992, recognizing the need to begin the cultural resources compliance process, Interior requested that the National Park Service (NPS) conduct a complete cultural resources survey of Water Island to locate and evaluate all cultural resources. The results of that survey are reported in *An Archeological Inventory and Assessment of Cultural Resources on Water Island, U.S. Virgin Islands* by Mr. Ken S. Wild and Dr. David G. Anderson dated 10 December 1992. The authors provide their professional opinion on the eligibility of the located sites for listing on the National Register of Historic Places.

Soon after Reclamation began work on the EA this spring, Ms. Bobbie Ferguson of Reclamation's Denver Office contacted Dr. Elizabeth Righter of your office and Mr. John Ehrenhard and Dr. David Anderson of the Interagency Archeological Services of the NPS in Atlanta to discuss the status of consultation on the cultural resources defined by the NPS survey.

Both sources indicated that Dr. Righter had been involved in the cultural resources investigation and had informally reviewed the NPS report, but that no formal consultation had been completed by Interior. At the request of Interior counsel, Reclamation made a commitment to complete consultation on behalf of Interior.

In your April 7, 1994, letter of comment, you affirm the information discussed in the telephone conversations referenced above and concur with the recommendations of the NPS investigators that the Carolina Point Plantation (12VAm3-209), Tamarind Tree Bay (12VAm3-9), Ruyter's Bay (12VAm3-21), Sprat Bay Structure (12VAm3-208), Banana Bay

(12VAm3-56), Banana Bay South (12VAm3-210), Providence Point Plantation (12VAm3-211) and Elephant Bay (12VAm3-22 and 12VAm3-23) sites are eligible for listing on the National Register of Historic Places and that "eligible sites should be preserved in place with binding covenants, or subjected to adequate data recovery prior to the transfer of Water Island by the Department of the Interior."

We concur that the Carolina Point Plantation, Tamarind Tree Bay, and Ruyter's Bay sites should be treated as one site and with the recommendation of the NPS researchers and your office on the eligibility of the aforementioned sites for listing on the National Register of Historic Places. Please see below for a discussion of Fort Segarra.

We have reviewed the recommendations for treatment of the eligible sites and offer the following general information which we believe important in future discussions of appropriate treatment for each site which will be adversely affected by the transfer of the title of Water Island by Interior.

As part of the EA, Reclamation has drafted alternatives by which OTIA can accomplish its objective of transferring title of Water Island. Common to all the alternatives is a discussion of the status of land use after transfer of title. Cultural resources sites on Water Island fall within three broad land use categories: lands that will be retained in public ownership under the Fish and Wildlife Service no jeopardy opinion, lands proposed to contain protected areas where no additional development or removal of vegetation cover will occur, and lands which will have no use restrictions.

Lands to be retained in public ownership include the Elephant Bay sites (12VAm3-22 and 12VAm3-23), the Sprat Bay Structure site (12VAm3-208), and the Sprat Bay site (12VAm3-212).

Lands within proposed protected areas include the Banana Bay site (12VAm3-56) and the Banana Bay South site (12VAm3-210). The Carolina Point Plantation (12VAm3-209) and the Ruyter's Bay site (12VAm3-21) lie partially within a proposed protected area.

Lands which will have no use restrictions include the following sites: the Tamarind Tree Bay site (12VAm3-9), Providence Point Plantation (12VAm3-211), Landing Bay Site (12VAm3-10), and the Druif or Honeymoon Bay site (12VAm3-32). The Carolina Point Plantation and the Ruyter's Bay site lie partially within this unprotected area.

Potential impacts to sites in the different land use categories will clearly be different. For sites which lie within lands in the public domain or those covered by restrictive covenants, a cultural resource management plan for investigation or preservation of the sites can be developed and integrated with the environmental protection plan. The potential impact to cultural resource sites on land with no use restrictions clearly is greater than to the sites within the areas subject to restricted use and the likelihood of long-term management is greatly reduced.

As NPS investigators Mr. Wild and Dr. Anderson indicated in their report and in telephone conversations with Ms. Ferguson, virtually no fieldwork or archival research to determine the types, numbers, and condition of cultural resources at the Fort Segarra

complex was conducted at the time of the cultural resources survey. While we believe that the Fort may well be significant, we believe that additional archival research for and fieldwork at the Fort Segarra complex is necessary to determine its eligibility for listing on the National Register of Historic Places prior to defining a need for preservation or data recovery.

The OTIA office in the Virgin Islands indicates that neither the Army's Archives nor the Navy Facility Engineering Command, Real Estate Dispersal Records, have plans for Fort Segarra. If such records cannot be located, it would severely hamper an effort to document the Fort as a Historic American Engineering Record property, should it be determined significant.

We are discussing the need for this work with Interior to determine how they wish to complete testing and evaluation and will notify you of the decision.

Thus, we believe that the appropriate treatment for the sites which have now been designated as eligible for listing on the National Register of Historic Places will depend on their location as well as future ownership. When the preferred alternative is selected in the EA process (expected in July) and additional identification and evaluation work is completed for Fort Segarra, we will consult with you in detail on the effects of that alternative and on the appropriate treatment of the historic properties which will be adversely affected.

At that time a treatment plan, the elements of which will be completed prior to the transfer of title of Water Island, can be developed.

To assure that cultural resources will receive appropriate treatment, while the process is underway, the following have been included in the draft EA: a description of the identified cultural resources, a discussion of the general impacts of the identified alternatives, and a commitment to complete all cultural resources requirements prior to transfer of title. We look forward to future consultation.

Sincerely,

Edward Friedman, Ph.D.
Federal Preservation Officer

cc: Ms. Claudette Lewis, Assistant Director, SHPO, Government of the Virgin Islands of the United States, Department of Planning and Natural Resources, Nisky Center, Suite 231, No. 45A Estate Nisky, Charlotte Amalie, St. Thomas, VI 00802

Dr. Elizabeth Righter, Chief Archaeologist, SHPO, Government of the Virgin Islands of the United States, Department of Planning and Natural Resources, Nisky Center, Suite 231, No. 45A Estate Nisky, Charlotte Amalie, St. Thomas, VI 00802

(Copies continued to person on attached sheet.)

Mr. Paul Hartwig, National Park Service, Southeast Regional Office, PO Box 2416,
Tallahassee, FL 32316

Mr. John Ehrenhard, National Park Service, Interagency Archeological Service
Division, 75 Spring Street SW, Atlanta, GA 30303

Dr. David Anderson, Archaeologist, National Park Service, Interagency Archeological
Services Division, 75 Spring Street, SW, Atlanta, GA 30303

Ms. Janice Adams, Archaeologist, Corps of Engineers, Jacksonville District, Planning
Division, Environmental Branch, PO Box 4970, Jacksonville, FL 32232-0019

Mr. Robin Friedman, Senior Attorney Advisor, Associate Solicitor, General Law,
Department of the Interior, 1849 C Street NW, Washington, DC 20240

Mr. Edgar Johnson, Virgin Islands Desk Officer, Territorial and International
Affairs, M.S. 4328, U.S. Department of the Interior, Washington, DC 20240

bc: D-5800 (Hamilton), D-5841 (Ferguson/Clark), D-5930 (Ries)

WBR:DCLARK:dw:7/7/94:303-236-8401
(WP:DISK:C:CLARK:SHPO)



GOVERNMENT OF THE VIRGIN ISLANDS OF THE UNITED STATES

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DEPARTMENT OF PLANNING AND NATURAL RESOURCES

NISKY CENTER, SUITE 231
NO. 45A ESTATE NISKY
CHARLOTTE AMALIE, ST. THOMAS, V.I. 00802
TDD-(809)777-8413

April 7, 1994

Ms. Loretta Spaulding
D-5930
Bureau of Reclamation
P.O. Box 25007
Denver, Colorado 80225

Re: Section 106 Compliance in Advance of the Transfer of Water
Island, US Virgin Islands.

Dear Ms. Spaulding:

In response to a flyer received on 8 March 1994, which announced a "scoping" meeting for the public, to be held on Water Island on March 22, 1994, the Division for Archaeology and Historic Preservation (DAHP) would like to comment. In compliance with the National Historic Preservation Act (P.L. 89-665, as amended), and other enabling legislation, the DAHP requests that formal consultation take place with this office; and that, prior to the transfer of Water Island by the Department of Interior (DOI) requirements for consideration of impacts to archaeological and historic resources be fully satisfied.

In October of 1993, the Chief Archaeologist in the DAHP assisted archaeologists from the National Park Service with an archaeological survey and inventory of historic and prehistoric cultural resources of Water Island. Subsequently the National Park Service submitted a draft report of findings to the DAHP; but a copy of the report and a formal request for concurrence by the State Historic Preservation Officer (SHPO) was not received from the DOI. This step in Section 106 compliance should take place. After review of the draft cultural resources report by the SHPO, and concurrence with findings and recommendations, consultation should take place to establish measures to insure proper protection of resources Eligible for the National Register of Historic Places. Such measures should be implemented prior to the land transfer.

In their draft report, the National Park Service identifies eight cultural resource sites which appeared to satisfy Criteria of Eligibility for the National Register of Historic Places. The National Park Service report makes specific management

recommendations for each of the potentially eligible sites.

The DAHP (SHPO) concurs that the following sites are Eligible for the National Register of Historic Places and in conformity with identified historic and prehistoric contexts of the Statewide Comprehensive Historic Preservation Plan and its goals and objectives. Eligible sites should be preserved in place with binding covenants, or subjected to adequate data recovery prior to the transfer of Water Island by the Department of Interior.

1. Carolina Point Plantation (12VAm3-209) with historic resources at Tamarind Tree Bay (12VAm3-9) and Ruyter's Bay (12VAm3-21):- The DAHP concurs with findings of the draft cultural resources report and its management recommendations. The most appropriate management of the Carolina Point Plantation historic complex is preservation in place, stabilization of the structural remains and management of the site as an historic resource, visitor attraction and historic park. The bounds of the site should be mapped and the area containing historic resources should be set aside in perpetuity for preservation, stabilization, research and interpretation. No ground disturbance should be permitted to take place in any section of this historic area until full archaeological investigation and any necessary data recovery have taken place in that section of the resource. Related historic wells at Tamarind Tree Bay and Ruyter's Bay should be preserved, along with any undisturbed accompanying archeological deposits. Resources at Ruyter's Bay and Tamarind Tree Bay may be treated as satellite or thematic sites, adjunct to the main Carolina Plantation site. Intensive additional archaeological testing will be required in order to determine the condition and full research value of historic resources at Tamarind Tree Bay. An ongoing program of testing and data recovery could be implemented at Tamarind Tree Bay as part of the preservation and interpretation recommended for the Carolina Point Plantation,
2. Sprat Bay Structure (12VAm3-208):- The DAHP concurs with National Park Service findings and recommendations for this site. Preferred recommended management is the same as that as for Carolina Point Plantation. In order to establish the boundaries of the area to be preserved, an intensive surface and subsurface testing program should be conducted over the entire area of historic use. Some areas of the site, such as the slope which contains discarded historic refuse, may be subjected to data recovery, while the structural remains and their immediate environs should be preserved, stabilized, properly managed and interpreted.
3. Banana Bay (12VAm3-56):-We concur with the recommendations in the draft cultural resources assessment report.

4. Banana Bay South (12VAm3-210):- We concur with the recommendations in the draft cultural resources assessment report.
5. Providence Point Plantation (12VAm3-211):- We concur with the recommendations in the draft cultural resources assessment report.
6. Elephant Bay (12VAm3-22 and 12VAm3-23):-The most appropriate management of this resource would be intensive Phase II testing of the site to identify undisturbed portions of the resource. Based on findings of the Phase II investigations, preservation in place or full data recovery should take place in the undisturbed sections of the site.

With regard to Fort Segarra and the three identified sites that were not found to be potentially eligible for the National Register of Historic Places, we concur with findings of the National Park Service archaeologists.

We anticipate that full compliance with Section 106 of the National Historic Preservation Act of 1966 (P.L. 89-665, as amended) and other enabling legislation will be completed prior to the transfer of Water Island by the Department of Interior.

As a final comment on the draft cultural resources report, site numbers at Ruyter's Bay and Tamarind Tree Bay should be changed to reflect their historic significance.

Sincerely,



Roy E. Adams
Commissioner/ SHPO

cc: Ms. Claudette Lewis, Assistant Director
Ms. Elizabeth Righter, Chief Archaeologist
Mr. Paul Hartwig, National Park Service, Southeast
Regional Office

Attachment C

Water Island Restrictions
on Specific Properties

Water Island

Restrictions on Specific Properties

All lots with restrictions as specified in the U.S. Fish and Wildlife Service no jeopardy opinion are listed in this attachment. The first four items further define the shorter phrases **shown in bold** actually listed with the individual lots and tracts of land.

1. Lands to be retained in **public ownership** to protect threatened and endangered species and marine resources. No development would occur on these lands.
2. **Nondevelopment easement**, if not developed, or **protective covenant** that no additional development or removal of vegetation cover to prevent erosion.
3. **Lighting restrictions** developed and approved by the FWS, in conjunction with the Virgin Islands Division of Fish and Wildlife. Existing lighting would be reviewed and, if necessary, replaced with shielded lighting. Placement of all new lights would be reviewed and approved by FWS and the Virgin Islands Division of Fish and Wildlife.
4. **Cultural resources** are present and must be protected.

The following three paragraphs are restrictions that would be included in all deeds.

All deeds would be conditioned and approved by FWS and the Virgin Islands Division of Fish and Wildlife to require that boats of the owners, lessees, visitors, and clients be moored only at designated mooring sites to minimize impacts to the seagrass beds of Druif, Flamingo, Elephant, and Ruyter Bays. The type, number, and location of these moorings would be determined in cooperation with the Virgin Islands Government, FWS, and the National Marine Fisheries Service. Anchoring or mooring in other areas would be prohibited.

All deeds would be conditioned to prohibit introduction of non-native animals, such as mongoose, deer, and pigs, to the island to minimize impacts from predation on reptiles, including sea turtles. This restriction also pertains to feral predators (domestic pets gone wild) affecting vegetation.

All deeds would be conditioned to prohibit the use of off-road vehicles, heavy duty mechanical beach cleaning equipment, or recreational use of horses on beaches. All domesticated animals would be kept off the beach. This requirement prevents turtle eggs from being raked up or disturbed and destroyed by compacting the sand.

Properties with specific restrictions

The following property restrictions are MANDATORY.

Department of Defense waste dump (designated "landfill" on map) at the southern end of the island—public ownership for the foreseeable future.

Marina basin off Flamingo Bay—nondevelopment easement of 13 feet (4 meters) surrounding the marina, beginning with the upper limit of the wetlands to protect the mangroves.

Salt ponds, any—nondevelopment easement of 13 feet (4 meters), beginning with the upper limit of the wetlands to protect the candidate species known to inhabit the ponds.

Tract B—nondevelopment easement or protective covenant (to be kept in public domain).

Tract C—Incorporate restrictions, such as setbacks, in addition to lighting restrictions

Tract D— public ownership, permanent nondevelopment easement; makes up most of Coastal Barrier Unit VI-27 (two lots not included because lots already developed)

Tract F—public ownership, permanent nondevelopment easement—cultural resources

Lot 71— lighting restrictions

Lot 112— recommended for public ownership, no development—cultural resources MUST BE protected; has a contract to purchase

Adjoining Lot 201, unnumbered parcel on the south and west—recommended for nondevelopment easement or protective covenant—cultural resources MUST BE protected.

Lot 201— recommended for nondevelopment easement or protective covenant—cultural resources MUST BE protected.

Lot 205— recommended for nondevelopment easement or protective covenant—cultural resources MUST BE protected.

Lot 206— recommended for nondevelopment easement or protective covenant—cultural resources, if present, MUST BE protected.

Lot 208— mandatory nondevelopment easement if not developed—nondevelopment easement or protective covenant—lighting restrictions—cultural resources

Lot 209— mandatory nondevelopment easement if not developed—nondevelopment easement or protective covenant—lighting restrictions

Lot 210— mandatory nondevelopment easement if not developed—nondevelopment easement or protective covenant—lighting restrictions

Lot 221— lighting restrictions

Lot 222— lighting restrictions

Lot 223— lighting restrictions

Lot 224— lighting restrictions

Lot 225— lighting restrictions

Lot 226— lighting restrictions

Lot 227— lighting restrictions

Lot 228— lighting restrictions

Lot 229— lighting restrictions

Lot 230— nondevelopment easement if not developed—lighting restrictions

- Lot 234— nondevelopment easement if not developed—lighting restrictions
- Lot 270— nondevelopment easement if not developed—lighting restrictions
- Lot 279— public ownership, no development—nondevelopment easement or protective covenant—lighting restrictions—makes up all of Coastal Barrier Unit VI-26—cultural resources

The above listed lots with a nondevelopment easement may construct passive recreation facilities, such as trails, etc. If such development is expected, consult with FWS in designing the plans.

Lighting restrictions are a performance based restriction meaning that lights are not to be directly visible from any beach.

The following property restrictions are RECOMMENDATIONS; however, FWS and Reclamation have agreed that the following nondevelopment easement or protective covenant means that should a building be constructed, **only** the vegetation within the footprint of the building is to be disturbed.

Parcel 111—nondevelopment easement or protective covenant

- Lot 1—nondevelopment easement or protective covenant
- Lot 2—nondevelopment easement or protective covenant
- Lot 3—nondevelopment easement or protective covenant
- Lot 4—nondevelopment easement or protective covenant, has signed contract
- Lot 5—nondevelopment easement or protective covenant
- Lot 6—nondevelopment easement or protective covenant
- Lot 7—nondevelopment easement or protective covenant
- Lot 8—nondevelopment easement or protective covenant, has signed contract
- Lot 9—nondevelopment easement or protective covenant, has signed contract
- Lot 10—nondevelopment easement or protective covenant
- Lot 20—nondevelopment easement or protective covenant, has signed contract
- Lot 21—nondevelopment easement or protective covenant
- Lot 22—nondevelopment easement or protective covenant
- Lot 23—nondevelopment easement or protective covenant
- Lot 24—nondevelopment easement or protective covenant
- Lot 25—nondevelopment easement or protective covenant
- Lot 26—nondevelopment easement or protective covenant
- Lot 27—nondevelopment easement or protective covenant
- Lot 28—nondevelopment easement or protective covenant
- Lot 29—nondevelopment easement or protective covenant
- Lot 61—nondevelopment easement or protective covenant
- Lot 62—nondevelopment easement or protective covenant
- Lot 63—nondevelopment easement or protective covenant
- Between 63 and 86, unnumbered lot—nondevelopment easement or protective covenant
- Lot 73—nondevelopment easement or protective covenant - cultural resources
- Lot 74—nondevelopment easement or protective covenant - cultural resources
- Lot 78—public ownership, no development (confirmed, this is a recommendation)
- Lot 86—nondevelopment easement or protective covenant

Lot 87—nondevelopment easement or protective covenant
Lot 94—nondevelopment easement or protective covenant
Lot 95—nondevelopment easement or protective covenant
Lot 100—restricted to no further development, has a signed contract
Lot 202—nondevelopment easement or protective covenant
Lot 203—nondevelopment easement or protective covenant
Lot 204—nondevelopment easement or protective covenant
Lot 207—nondevelopment easement or protective covenant
Lot 211—nondevelopment easement or protective covenant
Lot 212—nondevelopment easement or protective covenant
Lot 213—nondevelopment easement or protective covenant
Lot 214—nondevelopment easement or protective covenant
Lot 215—nondevelopment easement or protective covenant
Lot 216—nondevelopment easement or protective covenant
Lot 217—nondevelopment easement or protective covenant
Lot 218—nondevelopment easement or protective covenant
Lot 219—nondevelopment easement or protective covenant
Lot 220—nondevelopment easement or protective covenant
Lot 231—nondevelopment easement or protective covenant
Lot 232—nondevelopment easement or protective covenant
Lot 233—nondevelopment easement or protective covenant
Lot 268—nondevelopment easement or protective covenant
Lot 278—nondevelopment easement if not developed

Attachment D

Letter from

Director, Office of Insular Affairs

October 27, 1995



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

OCT 27 1995

All Interested and Concerned Parties:

As you are aware, when this Administration took office in January 1993, it stated that it was going to conduct a thorough review of the Water Island situation before undertaking any further actions towards the disposition of the island. We appreciate your patience during what has become a lengthy and unsettling period. We have, over the past two and one-half years, received many inquiries about the Department's policy towards Water Island. These inquiries have focused upon the 36 outstanding sales contracts for the sale of subleased tracts executed at the close of the prior Administration and upon the treatment to be accorded to those sublessees who did not accept the offer to purchase tendered at that time. These inquiries intensified after Hurricane Marilyn as many sublessees expressed an understandable reluctance to make the substantial expenditures needed to repair their houses without having some knowledge of the policy the Department intends to pursue with respect to the disposition of Water Island.

By way of brief background, the government has recently concluded a lengthy arbitration with the former master lessee, Water Isle Hotel and Beach Club Ltd. The litigation between Water Isle and ourselves, however, remains pending in the Court of Federal Claims. In August 1995, the Bureau of Reclamation released a draft environmental assessment and invited your comments. In addition, the Department has exchanged letters with Governor Schneider which, in general, look towards the transfer of jurisdiction and unencumbered property to the Virgin Islands, subject to protection of the rights of the parties with interests in Water Island.

On October 2, 1995, the Bureau of Reclamation informed you that the comment period on the Draft Environmental Assessment was extended to November 17, 1995. The environmental assessment describes various alternatives for accomplishing our goal of transferring title from the Department of the Interior to other entities or individuals, but it does not present a proposed action.

Based on the comments we have received to date, and in order to expedite the decision process, the Department has a proposed action. Your review and comment on this proposal is requested by November 17, 1995, to coincide with the Bureau of Reclamation's extension of the comment period. This will allow us to complete the environmental assessment and facilitate the speedy resolution of the uncertainty Water Island residents have lived with for many years. In addition, we propose to have a public meeting in December 1995, to discuss the proposed action.

Proposed Action

Consistent with the draft environmental assessment, "Elements Common to All Action Alternatives" (pp12-18), the action includes the following threshold components: a) the outstanding sales contracts will be honored; b) endangered species will be protected as provided by the "no jeopardy" opinion of the Fish and Wildlife Service; c) cultural resources will be addressed in consultation with the State Historic Preservation Officer; and, d) the hazardous waste study at the dump site will be completed and any cleanup action found required will be performed. In addition, under the proposed action the Department stands ready to allow all sublessees on Water Island to acquire fee title to their respective tracts.

1. We will honor the outstanding signed purchase contracts for any sublessee with a contract who wishes to proceed. We are also prepared to extend the offers to sell made by the prior Administration to those sublessees who did not accept the offer at that time. We are prepared to renegotiate the price to the extent necessary to account for changed conditions resulting from hurricane Marilyn; any restrictions imposed by the biological, hazardous waste, or cultural resources findings of the environmental assessment; and issues concerning the 1991 appraisal such as the passage of time.
2. The Federal Government will continue to be responsible for the dump until it is cleaned up or declared by the Corps of Engineers to be free of chemical ordnance. At that time it will be turned over to the Virgin Islands Government.
3. The former hotel tract and related properties will be turned over to the Virgin Islands Government which, in consideration for receiving the tracts, would be responsible for cleaning them up. Properties not subleased and not required for conservation or preservation purposes will also be turned over to the Virgin Islands Government. The net proceeds, less hotel clean-up costs, resulting from any subsequent sale or lease of these hotel-related or non-subleased properties by the Virgin Islands would be placed in a trust fund to provide services to Water Island, including ferry service. If such a fund is adequately capitalized, then any additional net proceeds would be returned to the Federal treasury. The various green areas identified in the draft EA will be subject to a conservation easement to be negotiated between the Department and the Virgin Islands Government.

We are prepared to establish an administrative negotiation process to deal with each sublessee on a tract by tract basis as set forth above. However, we strongly recommend that the sublessees, other than Sprat Bay, organize themselves to present a proposal for the purchase of the subleases exclusive of Sprat Bay. We are prepared to negotiate a sale on such a basis for these sublessees at a price to be determined between the sublessees and ourselves. We would entertain a proposal from the sublessees which would provide that the Federal Government receive reasonable and defensible compensation for its land. In order to negotiate the sale of the subleased property as a unit, we would like to see a proposal covering at least 95 percent, and preferably all, of the outstanding subleases exclusive of Sprat Bay. This approach, providing for a block sale of these subleases would, we believe, be advantageous to all parties; but it will require cooperative action

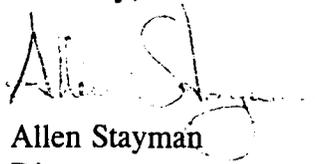
among the sublessees. Such cooperation would, in any event, be desirable for the future of Water Island. If we successfully negotiate with the sublessees as a group, the money the Department currently is holding in escrow will, of course, be returned to the individuals with outstanding contracts.

In adopting the above proposed alternative, our goal would be to proceed by offering the sublessees the opportunity to acquire title to their tracts at a reasonable price in order to resolve the entire Water Island situation promptly and without the delays and uncertainties that would result from litigation. Although a small number of sublessees are currently pursuing litigation with the object of requiring the government to purchase their improvements, we advise that the Department recognizes no legal or equitable entitlement in the sublessees to have the United States purchase their alleged possessory interest in the improvements on their tracts. As an alternative to litigation we wish to encourage all the sublessees to work with us and use this opportunity to acquire legal title to their properties.

We propose meeting in the Virgin Islands on December 12 and 13, 1995, with all the parties affected by this proposal (the Virgin Islands Government, the sublessees, other Federal agencies, and other interested parties) to discuss the issues further and to work towards putting this matter to rest.

Our aim in the above proposal is to work with you and to reach a disposition of this matter which is fair to all concerned. We look forward to hearing from you and to meeting with you. Please forward your comments to: Roberta Ries; Activity Manager; Bureau of Reclamation, D-8650; P.O. Box 25007; Denver, CO 80225; (509) 575-5848, ext. 265.

Sincerely,



Allen Stayman
Director
Office of Insular Affairs

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