

RHODE ISLAND COASTLINE  
COASTAL STORM RISK MANAGEMENT  
Draft Feasibility Study

APPENDIX G: Real Estate Plan



January 31, 2022



**US Army Corps  
of Engineers®**  
New England District

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# RHODE ISLAND COASTLINE COASTAL STORM RISK MANAGEMENT

## Draft Feasibility Report Appendix G: Real Estate Plan

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## LIST OF ACRONYMS AND ABBREVIATIONS

BCERE	Baseline Cost Estimate for Real Estate
CRMC	Coastal Resources Management Council
FRM	Flood Risk Management
HQ	Headquarters, US Army Corps of Engineers
LER	Lands, Easements, and Rights of Way
LERRD	Lands, Easements, Rights-of-Way, Relocations, and Disposal Areas
NACCS	North Atlantic Coast Comprehensive Study
NFS	Non-Federal Sponsor
PED	Preconstruction Engineering and Design
PPA	Project Partnership Agreement
REP	Real Estate Plan
ROE	Right of Entry
ROE-C	Right of Entry for Construction
ROE-S	Right of Entry for Survey and Exploration
TSP	Tentatively Selected Plan
URA	Uniform Relocation Act
USACE	U.S. Army Corps of Engineers

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## 1.0 Statement of Purpose

Statement of Purpose – The Real Estate Plan (REP) is prepared in support of the Draft Integrated Feasibility Study/ Environmental Assessment for the Rhode Island Coastline Coastal Storm Risk Management Project. Historical storms, including Superstorm Sandy in 2012, have impacted the coastal areas of the State of Rhode Island. The entire Rhode Island coastline has become increasingly vulnerable to coastal storm impacts as a result of increasing storm frequency and intensity as well as rising sea levels. These impacts increase the risk of damage to infrastructure, businesses, and private residences, including the risk of injury and loss of life. The purpose of this feasibility study is to identify, evaluate, and consider all avenues to reduce coastal storm risk within the study area with the final goal of designing and implementing a recommended plan for reducing that risk. The study encompasses large areas vulnerable to coastal storm risk. The study has identified those areas and investigated a combination of structural and non-structural solutions that are both readily implementable and environmentally safe.

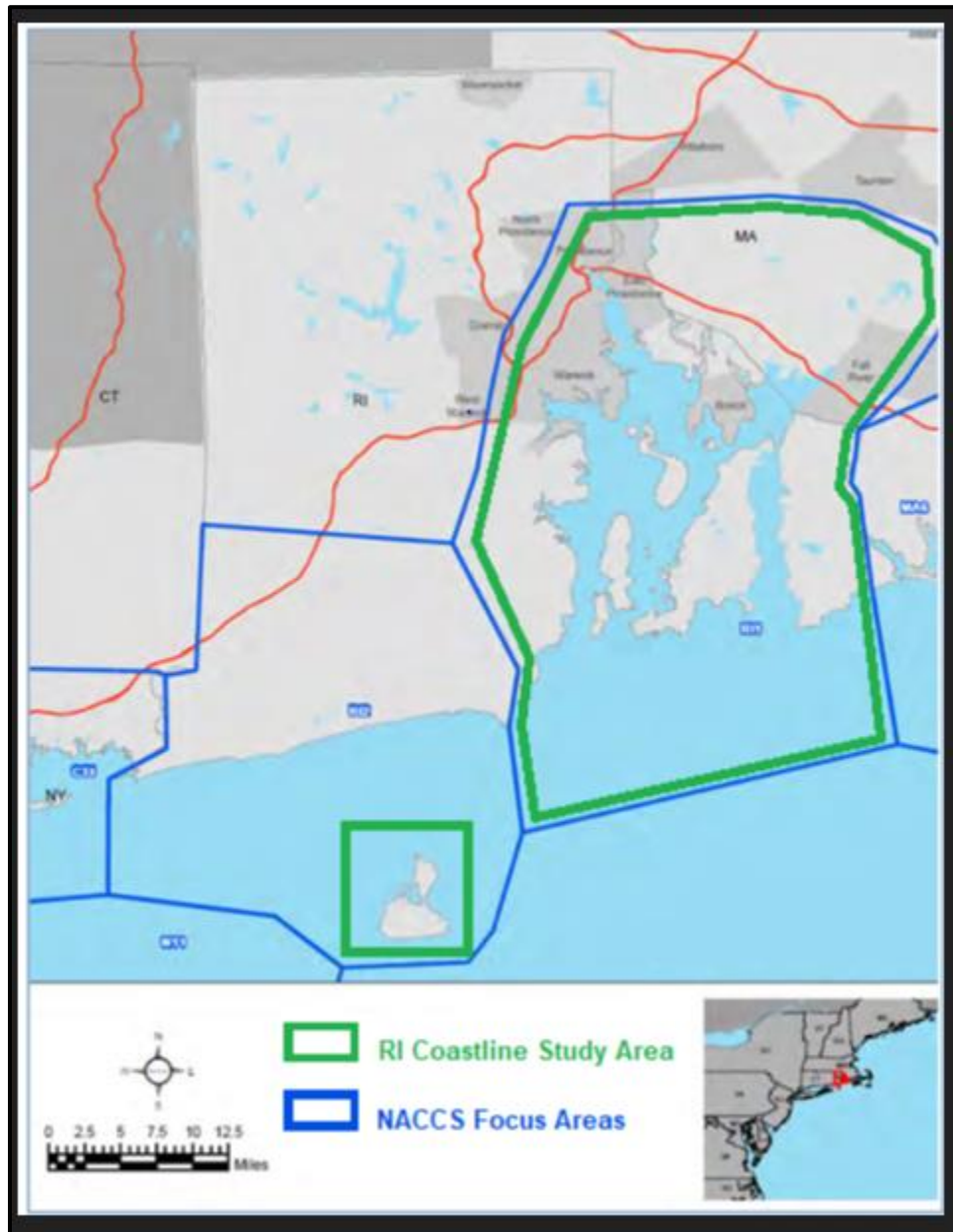
## 2.0 Project Summary

a) Project Authorization – The study is authorized by resolution adopted by the Senate Public Works Committee dated 12 September 1969, resolution adopted by the Senate Committee on Environment and Public Works dated August 2, 1995 and by PL 84-71. The cost-sharing requirements of the study are specified in Section 105(a) of the Water Resources Development Act of 1986, Public Law 99-662, as amended (33 U.S.C. 2215(a)).

b) Non-Federal Sponsor (NFS) – The Non-Federal sponsor for the study is the Rhode Island Coastal Resources Management Council (RI CRMC). In 1971, the Rhode Island General Assembly passed legislation that created the Coastal Resources Management Council, recognizing the importance that the coastal resources provide to the social and economic welfare of the state, and charged the RI CRMC with the responsibility for the preservation, protection, development and where possible the restoration of the coastal areas of the state via the implementation of its integrated and comprehensive coastal management plans. The RI CRMC will also serve as the non-federal sponsor (NFS) for the construction of the study’s Recommended Plan defined at a 50% (Federal) and 50% (non-Federal) cost-share. In accordance with a Project Partnership Agreement (PPA) between the RI CRMC and the Department of the Army (the “Government”), the RI CRMC will be responsible for performing or ensuring the performance of the Lands, Easements, Right-of-Ways, Relocation, and Disposal Area (LERRD) requirements for the study’s Recommended Plan as outlined in this Real Estate Plan (REP).

c) Proposed Project – The U.S. Army Corps of Engineers (“USACE” or “Corps”) conducted the feasibility study to evaluate Federal participation in coastal storm risk management in the Rhode Island Coastal Area. A North Atlantic Coast Comprehensive Study (NACCS) conducted by the USACE in 2015, identified areas at risk in the Narragansett Bay that are vulnerable to erosion, wave attack,

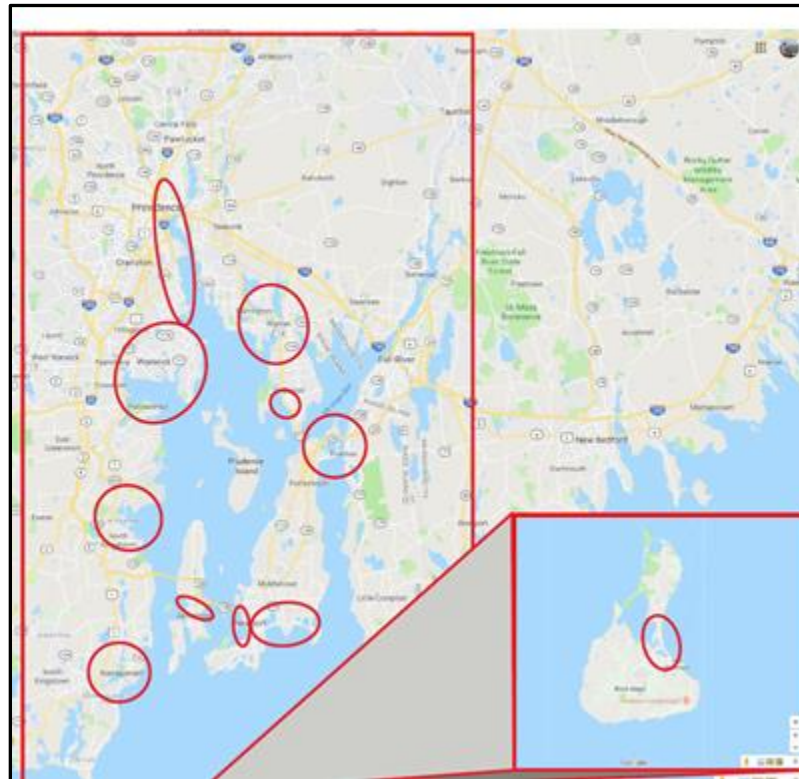
and inundation from coastal storms including hurricanes and nor'easters (see **Figure 1**). Measures were formulated to reduce risks to residents, businesses, and industry that are critical to the nation's economy.



**Figure 1:** NACCS Focus Area

The area includes approximately 457 miles of Narragansett Bay coastline and comprises portions of 19 municipalities. There are more than 650,000 people residing in the 19 towns included in the study area. Approximately 75% of the state's population resides in a 40 mile long urban/suburban corridor along the shores of Narragansett Bay. The focus area of this study is the Rhode Island coastline from a western limit of Point Judith on Block Island to an eastern limit of the Massachusetts State line. The circled areas in **Figure 2** show focused study

areas of this study. The project focused on the past, current, and future coastal storm risk management and resilience planning initiatives in accordance with current USACE guidance, regulation, and policy. The study included plan formulation, and engineering analyses with decision criteria to identify the most opportune set of coastal storm risk management strategies to support community resilience. GIS data, engineering models, biological surveys, economic inventory, and public input were used to formulate plans that could reduce the coastal flood risk and improve resilience to future storms.



**Figure 2:** Rhode Island Coastal Study Area

d) The REP is presented in support of the study, and describes the real estate required to implement the project. The purpose of the REP is to identify the land, easements, rights-of-way, relocation, and disposal areas (LERRD) necessary to support construction, operation, and maintenance of the recommended project elements described in the feasibility report, and to outline the costs and real estate considerations associated with project implementation.

e) This report is preliminary and written to the level of detail of the main report and is intended for planning purposes only. Other details may be added.

### **3.0 Real Estate Requirements**

Recommended Plan: The Recommended Plan identifies only nonstructural flood risk management measures. Nonstructural flood risk management measures are techniques for reducing accountable flood damage to existing structures within a floodplain. These techniques consist of treatments to floodproof non-residential



structures or raise/elevate residential structures. Floodproofing consists of constructing or installing features designed to allow water to flow in and out of a structure but prevent the contact of water to essential utilities or mechanicals of the structure (e.g., filling a basement or elevating or protecting the HVAC system). Elevations involve raising the lowest finished floor of a building to a height that is above the flood level (i.e., raising a home).

The tentatively selected plan (TSP) is an entirely nonstructural plan that was developed from the entire study area. The aggregate for the 100-year floodplain of the initial inventory included approximately 12,000 structures with a total estimated value of structures and content of \$3.6 billion. The study team developed a baseline inventory for the recommended plan by including those structures that experienced high first floor flood damage and with a minimum threshold of \$125,000 in overall damages. The baseline inventory total of 1033 structures consisted of 757 residential structures and 276 non-residential structures. From the baseline inventory 31 community groups were established based on three (3) criteria, i.e., town boundaries, modeled areas, and structure groups. Costs and benefits were developed for each community group. All community groups with a Benefit-Cost Ratio (BCR) >0.9 were included in the recommended plan.

To be as inclusive as possible and reduces the greatest amount of flood risk in the study area, two (2) refinements were made to plan. These refinements resulted in the inclusion of an additional 39 structures to the TSP. This plan will be referred to as NS-A.1. The first refinement added non-residential structures from four (4) community groups (Barrington, Bristol Downtown, Narragansett and Shawomet). Although these groups had an overall BCR less than 0.9 when both elevations and floodproofing were considered, the BCR for non-residential floodproofing alone was greater than 1.0. As a result of this refinement, twenty-five non-residential properties were added to TSP.

The second refinement included the addition of certain outlier properties. As previously described, 74 structures were not located near any other structures, and, therefore, were not part of any community group. These “outliers” were initially removed from consideration. Of the 74 outliers, 14 had a BCR greater than 0.9. These 14 structures were added to the TSP plan.

The structures included in the TSP total 533 with 323 for residential elevations and 210 for non-residential floodproofing. The net benefit for this plan would be \$3,340,000 with a benefit cost ratio of 1.5.

The Federal Emergency Management Agency describes critical infrastructure as structures owned and managed by both the public and private sector to include structures that improve living conditions and commerce, including schools, hospitals, roads, bridges, dams, sewers, and energy systems. Over 73 critical infrastructure facilities were identified in the study area within the 100-year floodplain. The list was refined down to 51 structures and/or sites to be considered for flood risk management measures. After the Tentatively Selected Plan (TSP)

has been approved, additional analysis of these critical infrastructures will be evaluated for floodproofing.

Flood-proofing non-residential structures and elevating residential structures will be offered to property owners on a voluntary basis and implemented only with the property owner's consent.

Real Estate Requirements: Since there is currently no USACE policy identifying the real estate requirements to secure the rights or interest in lands to facilitate an elevation or floodproofing treatment, the proposed legal mechanism for the phase to determine eligibility of structures would be through the use of a standard Right of Entry for Survey and Exploration (ROE-S). The proposed legal mechanism for the implementation phase to undertake the residential elevation or non-residential floodproofing measures would be through the use of a [non-standard] Right-of-Entry for Construction (ROE-C) and accompanying [non-standard] Flood Risk Management (FRM) Agreement. The FRM Agreement would outline the nonstructural treatment, identify restrictions owner must take or abstain from to ensure the long-term performance of the nonstructural treatment, and contain restrictions and covenants that would run with the land. Any proposed use of an ROE and FRM Agreement for the project will require HQ USACE approval.

Up to 533 ROE-C and FRM Agreements may be necessary if all property owners elect to have the non-residential flood-proofing (210) or residential elevations (323) performed on their structures. The ROE-S for the evaluation phase, and the ROE-C and FRM Agreement for the implementation phase, will be executed between the property owner and the NFS. If a property owner elects not to have the nonstructural flood risk management treatment performed on their structure and an ROE is not obtained, eminent domain will not be pursued.

In accordance with the executed PPA, the NFS will be responsible for acquiring or ensuring the acquisition of all the LER required for the construction, operation, and maintenance of the Recommended Plan. **Table 2** identifies the number of Rights-of-Entry required in each community group to assess each structure's capability for flood risk management measures.

Since the report was prepared during a feasibility level study, the required real estate interests presented are preliminary estimates based only on existing, readily available Geographic Information System (GIS) data. The LER requirements are subject to change with plan optimization during the Recommended Plan's PED phase when final plans, specifications, and detailed drawings are prepared.

**Table 2:** Rights-of-Entry Required for Each Community Group and Outliers

Community Group	Town	Elevation	Floodproof	Total
Barrington	Barrington	0	11	11
Block Island	Block Island	2	10	12
Bristol Downtown	Bristol	0	8	8
Downtown Warwick	Warwick	5	12	17
East Greenwich	East Greenwich	0	10	10
Fort Ave	Cranston	9	3	12
MB Narragansett	Narragansett	0	3	3
Newport Downtown	Newport	85	38	123
Newport North	Newport	3	8	11
Potowomut	Warwick	5	0	5
Quonset Airport	North Kingstown	0	9	9
Sakonnet North	Tiverton	8	0	8
Sakonnet	Little Compton	3	2	5
Shawomet	Warwick	0	3	3
Shore Acres	North Kingstown	7	0	7
Warren	Warren	64	49	113
West Passage	North Kingstown	9	0	9
Wickford	North Kingstown	113	40	153
Outliers		10	4	14
<b>Total</b>		<b>323</b>	<b>210</b>	<b>533</b>

#### 4.0 Appraisal Estimate

In accordance with USACE Real Estate Policy Guidance Letter No. 31, CEMP-CR, 11 Jan 19, subject: Real Estate Policy Guidance Letter No. 31-Real Estate Support to Civil Works Planning (hereinafter referred to as “PGL 31”), a land value cost estimate, or a “rough order of magnitude” estimate would be obtained for the Recommended Plan, if necessary.

Administrative costs (e.g., appraisals, surveys, title, attorney fees, etc.) that would be incurred by both the USACE and the NFS to facilitate flood proofing and elevations were developed.

#### 5.0 Real Estate Owned by the Non-Federal Sponsor

The Rhode Island Coastal Resource Management Council owns no LER required for the Recommended Plan.

## **6.0 Non-Standard Estates**

Since there is currently no USACE policy identifying the real estate requirements for non-structural plans, the proposed use of a non-standard ROE for Construction and Flood Risk Management Agreement for the recommended plan will require HQ USACE coordination and approval prior to their use for the selected plan. The drafting of those agreements will be coordinated with the NFS prior to their submittal to HQ USACE.

## **7.0 Existing Federal Projects**

Currently On-going Federal Rhode Island Projects are listed below but none will affect or impact the recommended plan:

Pawcatuck River Coastal Storm Risk Management Feasibility Study

Point Judith Hurricane Barrier

Interim Hurricane Survey of Westerly, Rhode Island

Misquamicut Beach, Shore Protection and Flood Damage Reduction Reconnaissance Report, Westerly, Rhode Island

The Rhode Island South Coast Habitat Restoration Feasibility Report and Environmental Assessment

Other Constructed Federal projects:

Sand Hill Cove Beach, Narragansett

Misquamicut Beach, Beach Erosion Control Project

Ninigret Pond, Habitat Restoration Project

## **8.0 Federally Owned Land**

The Recommended Plan includes no Federally-owned lands as part of its LER requirements.

## **9.0 Navigational Servitude**

There are no project elements proposed within the waters of the Rhode Island Coastal Area. The project serves no navigation purpose. The USACE New England District Office of Counsel determined that navigation servitude is not available for the recommended plan.

## **10.0 Real Estate Maps**

Real estate maps are provided in **Attachments 1 thru 3**.

## 11.0 Induced Flooding

The proposed project includes non-structural solutions only and will not induce flooding in new areas or increase flooding in existing flood-prone areas.

## 12.0 Baseline Costs Estimates for Real Estate (BCERE)

The recommended plan will incur administrative costs related to preparing and executing real estate agreements (ROE-S, ROE-C and FRM Agreements) with eligible property owners. The cost estimate for the NFS's acquisition of LERRDs required for the recommended plan includes administrative costs to provide the necessary agreements with property owners and other incidental costs. There may be additional land costs if the participating landowners need to be compensated for the restrictions and covenants contained in the FRM Agreement. If this is the case, appraisals will be required to determine the amount of compensation due. The BCERE contains estimated costs to procure appraisals but does not contain these possible additional land costs. The BCERE does not include relocation benefits that might be due to tenants.

**Table 2:** Provides a Summary of the BCERE.

Project Cost Account	Federal Cost	Non-Federal Cost	Total BCERE
01-Lands and Damages	\$1,200,000	\$4,920,000	\$6,120,000
02-Relocations (Utility/Facility)	TBD	TBD	
Total BCERE	\$1,200,000	\$4,920,000	\$6,120,000

## 13.0 Public Law 91-646 Relocations

Public Law 91-646 provides uniform equitable treatment of persons and businesses displaced by a Federal or Federally assisted project. Along with the PPA, it requires the non-Federal sponsor to provide assistance and certain benefits to be paid to all persons and businesses that are displaced and must be relocated from their residence or place of business due to a Federally funded project.

Participation in a nonstructural plan is voluntary. Property owners who elect to participate are not considered displaced persons and are not eligible to receive relocation assistance benefits (per 49 C.F.R. Section 24.2.a(9)(ii) (E) and 49 C.F.R. Section 24.101(a)(2)). However, tenants who must temporarily relocate because property owners elect to participate are eligible for relocation assistance benefits. There is no estimate at this time of how many tenant-occupied properties may be among those residences identified for elevation. United States Census data for Rhode Island indicates a 64.5% home ownership rate statewide with local variations. Therefore, based on statistics, approximately 111 residential structures identified for elevation in the recommended plan may be occupied by tenants who

would be eligible for relocation assistance. Relocation assistance costs are not included in the estimated BCERE provided in Table 2 above.

If socioeconomic concerns suggest that relocation benefits should be offered to owners in the voluntary program, the Army Corps of Engineers, New England District could submit a request to Army Corps headquarters to grant a waiver to the relocation regulations. If granted, the waiver would allow the Corps to extend benefits to owners who are voluntarily participating.

The recommended plan proposes flood-proofing of non-residential buildings. Public records indicate that most of these structures are occupied by one or more businesses. At this time, the floodproofing scope of work is not expected to interrupt business operations in a manner that would require a temporary business relocation. A detailed assessment during the Preconstruction Engineering and Design (PED) phase will determine impacts to businesses and business relocation eligibility.

#### **14.0 Mineral and Timber Activity**

There is no present or anticipated mining and drilling activity in the vicinity of the project that may affect project purposes and the operation thereof. There are no known present or anticipated timber harvesting activities within the LER required for the Recommended Plan.

#### **15.0 Assessment of Non-Federal Sponsor Acquisition Capability**

The NFS's assessment of their real estate acquisition capabilities is provided in **Exhibit " "**. The NFS has been identified as capable of performing or ensuring the performance of its real estate responsibilities. They possess the professional capability to acquire the real estate for the Recommended Plan and has sufficient general and legal authority to do so. The NFS intends to enter into a partnership agreement with local municipalities to assist with real estate acquisition, and if necessary, can obtain outside contracting services for further assistance. The Sponsor has been advised of Public Law 91-646 requirements and the requirements for documenting expenses for credit purposes.

#### **16.0 Land Use Zoning**

No application or enactment of local zoning ordinances is anticipated in lieu of or to facilitate the Recommended Plan's LERRD requirements.

#### **17.0 Real Estate Acquisition Schedule**

A projected project schedule has been developed based on the assumption that Federal and non-Federal funds will be available. The tentative schedule for project completion is represented as follows:

**Table 3:** Estimated Milestone Dates

<b>Real Estate Acquisition Schedule</b>	
<b>Acquisition Schedule</b>	<b>Date</b>
Project Partnership Agreement (PPA)	December 2023
Obtain Corps HQ Approval of ROE and FRM	TBD
Issue Solicitation	October 2024
Notice to NFS to Proceed with Acquisition of ROE and FRM Agreements	TBD
NFS Authorization for Entry for Construction	TBD
Start Construction	TBD

### **18.0 Utility and Facility Relocations**

There are no utility or facility relocations anticipated or currently required within the proposed project footprint. However, when review of critical infrastructure is complete requirements for relocation may be identified.

### **19.0 Hazardous, Toxic, and Radioactive Waste**

An Environmental Assessment will be required for the Feasibility Phase. The project is expected to have no beneficial or adverse impacts on the environment. Environment effects, as a result of the proposed alternatives would be short term and localized with no work to be performed in water.

### **20.0 Project Support.**

Generally, there is local support for a project that reduces flood risk and damage. There is no anticipated opposition for the recommended plan since it consists of a non-structural plan that is 100% voluntary.

### **21.0 Non-Federal Sponsor Risk Notification**

By letter dated January 6, 2022, a formal written notice was provided to the Sponsor on the risks associated with acquiring the real estate for the Recommended Plan in advance of signing a PPA. Those risks include, but may not be limited to, the following:

- 1) Congress may not appropriate funds to construct the Recommended Plan;
- 2) The Recommended Plan may otherwise not be funded or approved for construction;

3) A PPA mutually agreeable to the Sponsor and the Government may not be executed and implemented;

4) The Sponsor may incur liability and expense by virtue of its ownership of contaminated lands, or interests therein, whether such liability should arise out of local, state, or Federal laws or regulations including liability arising out of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended;

5) The Sponsor may acquire interests or estates that are later determined by USACE to be inappropriate, insufficient, or otherwise not required for the Recommended Plan;

6) The Sponsor may initially acquire insufficient or excessive real property acreage, which may result in additional negotiations and or benefit payments under P.L. 91-646 as well as the payment of additional fair market value to affected landowners which could have been avoided by delaying acquisition until after PPA execution and USACE's Notice to Proceed with Real Estate Acquisition (NTP); and

7) The Sponsor may incur costs or expenses in connection with its decision to acquire or perform LERRD in advance of the executed PPA and USACE's NTP Letter, which may not be creditable under the provisions of Public Law 99-662 or the PPA.



## 22.0 Other Pertinent Information

There are no other relevant real estate issues.

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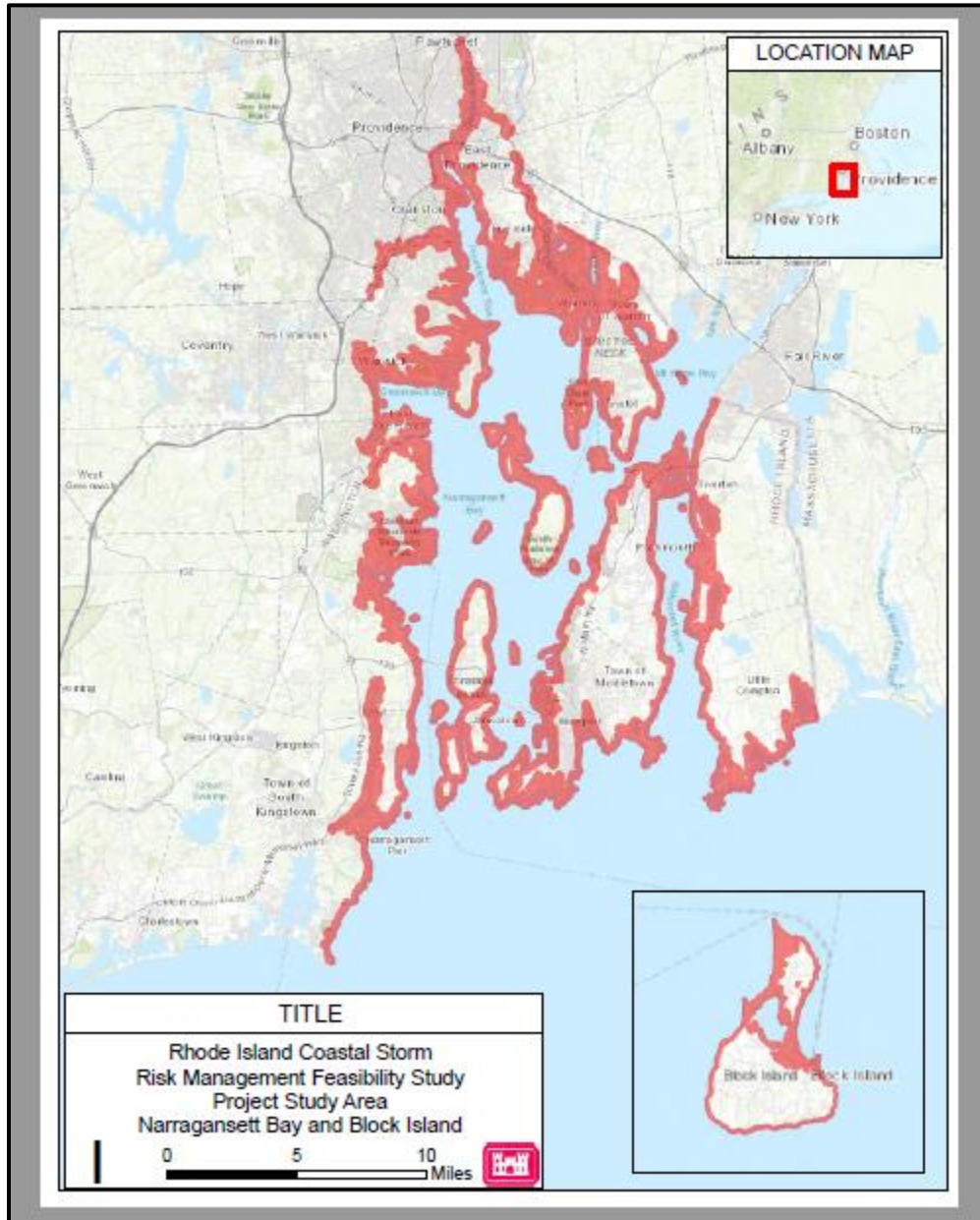
Timothy W. Shugert  
Chief, Real Estate Division

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# ATTACHMENT 1 REAL ESTATE MAPS

# REAL ESTATE MAPS

## LOCATION OF STUDY AREA RHODE ISLAND COASTAL



# NONSTRUCTURAL ALTERNATIVE PLAN A.1 – LOCATION OF STRUCTURES INCLUDED IN THE TSP

