

Stavros Management Plan

2009



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Stavros Reservation: Basic Management Plan

Location: Island Road, Essex, MA

Acreage: 74 acres (property guide)

Completed by: Adam Kurowski, assisted by Wayne Mitton, Nathan Mineo, Franz Ingelfinger, Jim Younger, Ramona Latham, and Peter Madsen

Date: Approved by the FOC September 24, 2009

Supporting Reports and Materials: Property Guide; Trail Map and Guide, 1995; NHESP Priority Habitats of Rare Species GIS data.

I. Introduction

- a. Brief description of property: While the majority of the Stavros Reservation is salt marsh, Whites Hill, the highest point on the property, is an elevated coastal drumlin. Mr. James Stavros described Whites Hill as the crown jewel of Essex and it offers some of the best views in Essex County. Several Trustees' properties are visible from this location including Castle Hill, Crane Beach, the Crane Wildlife Refuge, and Halibut Point. A stone building is all that remains of an observation tower that was built on Whites Hill, in the 1880's. Access from Island Road is easy and provides visitors with a half mile trail that crosses an open field, gently climbs Whites Hill, and loops back down the hill through a thicket.

Stavros Reservation is nearly surrounded by land that is protected by conservation restrictions, including the John Wise Avenue CR, Cape Ann Golf Course CR, and the Richard Farm CRs. These Trustees' owned CRs combine to protect approximately 190-acres of land. Regionally, a large portion of this coastal marsh area is protected open space and includes Crane Beach and Castle Hill to the north and Crane Wildlife Refuge at the southern extent, which connects to the eastern boundary of Stavros, as shown on the Open Space Context Map.

Stavros Reservation is a C-type management property. C-type management properties are characterized by low visitation, modest resource significance and management complexity. Typically, these properties are an important local resource, but will not likely engage a broad range of visitors and volunteers. Stavros Reservation is temporarily being managed by Appleton Farms staff, due to a hiring freeze and a reduction of staff within the Cape Ann Management Unit. For the purpose of this plan, Cape Ann Management Unit staff provided plan guidance. Additional resources, including funding, staff and volunteer time, may be necessary to implement some of the recommendations in this plan.

- b. Acquisition history: Original acreage a gift of Mary F. Stavros in 1982. Additional land purchased in 1985.

- c. Donor's wishes or other clear guiding principles: Mary Stavros expressed her desire that no smoking or drinking would be permitted on the property.¹
- II. Summary of Preliminary Management Goals
 - a. Maintain to the standards of a C-type management property.
 - b. Improve visitor services by updating and replacing signs and bulletin board sign.
- III. Legal and Management Considerations
 - a. Wetlands Protection Act
- IV. Property Description:

A. Historic and Cultural Resources

Significant Historic Features:

- Fieldstone base of a former fifty-foot-high, three-level tower constructed in the 1880s by Mr. E. Sargent for Lamont G. Burnham, atop Whites Hill.
- Inscription with dedication to James Stavros.

Threats to Historic Features:

- See Structural Resources section

Opportunities:

- Monitor inscription for damage by erosion, vandalism, and vegetation growth. Periodic monitoring can be completed by staff or trail steward.

B. Natural Resources

Significant Natural Features:

- Like many of The Trustees Northeast Region's properties that flank the 20,000 acre Great Marsh, Stavros Reservation is primarily salt marsh (33 acres). Whites Hill (22 acres), the physical centerpiece of the property, is a successional woodland of cherry, cedar, oak, maple, grey birch, and white pine. In many areas cherry dominates the canopy. The understory is a mix of native and non-native shrubs including staghorn sumac, northern arrowwood, red osier dogwood, Morrows honeysuckle and glossy buckthorn. Stavros has a decidedly shrubby feel and provides habitat for a number of bird species dependent upon early-successional habitats including mockingbirds, grey catbirds, eastern towhees, and indigo buntings. Three small clearings punctuate the wooded upland: a 1-acre field at the property's entrance and two vistas on the northern slope of Whites Hill. Maintained by late-season mowing, these fields provide habitat for invertebrates. Seeps emerge mid-slope along the northern face of Whites Hill and impact a recently created trail.

¹ Correspondence from Thomas A. Ellsworth to Davis Cherrington, November 1985.
EZ Management Plan

- A small grove of devil’s walking stick (*Aralia spinosa*) is located along the path to Whites Hill. Native to Eastern North America, but not Massachusetts, several states list devil’s walking stick as a native alternative to invasive plants. Devil’s walking stick is not considered invasive by the Massachusetts Invasive Plant Advisory Group.
- NHESP Priority Habitats of Rare Species (2008) data shows that Common Tern habitat exists along the salt marsh in the northern portion of the property.
- Part of the Great Marsh Ecosystem, Stavros Reservation’s salt marshes provide habitat for a myriad of species including blue heron, glossy ibis, common and snowy egret, greater and lesser yellowlegs, sharp-tailed sparrows, and various species of waterfowl.

Threats to Natural Features:

- Several species of non-native invasive plants are well established on Whites Hill—control efforts should focus on excluding oriental bittersweet from the woodland canopy and controlling glossy buckthorn’s encroachment into open fields.
- Sea level rise

Opportunities:

- Improve field habitats by controlling non-native plants along field margins.
- Permit bow hunting on the property to help control the local deer population.

C. Scenic Resources

Significant Scenic Features:

- View from Whites Hill with views of Castle Hill, Crane Beach, the Crane Wildlife Refuge, and Halibut Point; View of salt marshes and open water.

Threats to Scenic Features:

- Forest succession of the wooded area between the fields and salt marsh—specifically the upper field, would obscure current view.

Opportunities:

- Selective clearing can be done to maintain view. Maintenance Foreman, Ecologist, and Regional Director should collaborate to conduct cost-benefit assessment of trees to be cleared.

D. Structural Resources

Significant Structural Features:

- The fieldstone base of a former fifty-foot-high tower constructed in the 1880s by Mr. E. Sargent for Lamont G. Burnham, sits atop Whites Hill. The tower base is square in configuration; the stone walls climb approximately 20' high and are battered (slope inward). The base is protected with a hip roof clad in asphalt shingles and the stone pointing is

in good condition. One locked door permits access into the structure.

Structure	Size	Current Use	Current Condition (ranking)
Tower	50 sf	Visitor support	Good

Threats to Structural Resources:

- The roof soffits, fascia, and framing are in need of repair and were scheduled to be addressed as part of a collaborative effort with Cape Ann Management staff and the Director of Structural Resources. If this work is not completed in summer 2009, it must be addressed by a contractor using capital construction dollars.
- Weathering of the mortar joints in of the former tower

Opportunities:

- Repair the tower’s roof soffits, fascia, and framing.
- Improve new trail that leads from summit by building a boardwalk. The trail traverses a low-lying area that is consistently wet.

E. Opportunity for Engagement and Visitor Services

Current Volunteer Engagement:

- Volunteer days occur throughout the Cape Ann Management Unit and the management unit is working to increase volunteer work days, though little attention is being paid to Stavros Reservation. The Landmark School has been engaged to help with property management. A trail steward exists and visits the property a few times per month to cut overgrown branches, pick up trash, and also report larger issues to the appropriate staff. Also, local neighbors are available to discuss issues, if needed.

Opportunities:

- Engage the community members to assist with general property management. Volunteers could be used to assist with the tasks found in the Recommended One-time Actions and Routine Management Program.

Visitor Engagement:

- Education staff is working on a visitor engagement plan that should be available within the next year. Self-guided interpretive walks are available using information provided at bulletin board, related to the former orchard, tower base a the summit, scenic views, upland landscape, local CR and surrounding open space facilitated by TTOR. The Cape Ann Management Unit Interpreter has provided guided interpretive walks in the past.

Opportunities:

- Update trail map and bulletin board materials.

Visitor Service:	Does it Exist?	Specific Description: age, condition, actively updated?
1. Approach signs that lead visitors to the property	N	There is no need for an approach sign at this time; however it is a long term goal.
2. Entrance and trailhead signs.	Y	Entrance sign in good condition, but set back a good distance from road. Other signs need replacement.
3. Kiosk or Bulletin Board meets standards.	Y	Bulletin board structure needs maintenance.
4. Up-to-date Map on bulletin board and website.	Y	No map on website. Bulletin board map is in poor condition.
5. Trails are clearly marked	Y	
6. Adequate parking area.	Y	The pull off on the side of the road is sufficient for the amount of visitation the property receives. Opportunity for off-road parking if needed in the future.

V. Current Resources Available for Management

- a. Staff and Volunteers: Superintendant, Maintenance Foreman, Cape Ann Interpreter, (full-time) and a few volunteer groups on occasion. Stavros Reservation is temporarily being managed by Appleton Farms staff, due to a hiring freeze and a reduction of staff within the Cape Ann Management Unit.
- b. Equipment: Maintenance headquarters is at Coolidge Reservation; chainsaws, hand tools, lawn mowers, tractors, and trucks have all been used in the past at Stavros. Equipment is dedicated for the unit but can be used at any property or by another unit, if needed.
- c. Operating budget: The FY2010 budget is \$262. This budget allows for minimal management and repairs. Revenue generated through membership total \$479.
- d. Other (partners, etc.) None exist at this time.

VI. Recommended One-time Actions

Rec#	Type	Resource Protection Action	Description/ Rationale	Phase	Rank	1° staff	2° staff	Phase 1 Staff Hours	Phase 2 Staff Hours	Phase 3 Staff Hours	Total Plan Staff Needs	Vol. Op?	Total Phase 1 Cost	Total Phase 2 Cost	Total Phase 3 Cost	Total Plan Costs all Phases	Budget Source	Operating	Supplemental	Capital	Targetted Funding Source	Notes	Status	
1	SR	Repair the tower's roof soffits, fascia, and framing.		1	N	PM	DSR	40			40		\$0	\$0	\$0	\$0	O						If this work is not completed in summer 2009, this must be addressed by a contractor using capital construction dollars.	NS
2	GM	Install boardwalk at wet area along trail.		1	N	PM		160			160	yes	\$1,000	\$0	\$0	\$1,000	O	\$1,000						NS
3	NR	Control non-native plants along field margins.		1	N	S		20			20	yes	\$0	\$0	\$0	\$0	O							NS
4	NR	Complete administrative tasks associated with initiating bow hunting privileges and find hunter.		1	N	EC	S	16			16		\$0	\$0	\$0	\$0	O					FOC approval of regs, permission not needed from town, post the property, find and screen hunter (TTOR member).	NS	
5	VM	Post trail map on website.	Currently, no map for property on website.	1	N	E&O	GIS	2			2		\$0	\$0	\$0	\$0	N					GIS Dept. has completed map.	IP	
TOTAL								238			238		\$1,000	\$0	\$0	\$1,000		\$1,000	\$0	\$0				

Key:

Type: GM – General Management, HR - Historical and Cultural Resource Management, NR – Natural Resource Management, SR – Structural Resource Management, VM - Visitor Management

Phase: 1 – 2009 through 2011, 2 – 2012 through 2014, 3 – 2015 through 2017

Rank: C - Critical, N – Needed, D - Desired

Staff: DSR – Director of Structural Resources, E & O - Education & Outreach, EC – Ecologist, GIS – GIS Department, S – Superintendent

Budget Source: C – Capital, N – Not Applicable, O – Operating, S - Supplemental

Status: IP – In Progress, NS – Not Started

VII. Routine Management Program

Line #	Task	Action Type	Acceptable Performance Level (APL)	Acceptable Frequency	Less Than Annual	Season	Who?	Volunteer Op?	Total Hours Needed to Reach APL	Add'l Funds Needed to Reach APL	Notes
1	Find and screen bow hunter(s).	NR	Adequate	Annually	no	F, W	EC	no	2	\$0	Hunter(s) must be TTOR member. Purpose: reduce deer population and negative impacts of overbrowsing.
2	Mow fields	NR	Adequate	twice per year	no	S, F	PM	no	12	\$0	3 fields
3	Monitor inscription for damage by erosion, vandalism, and vegetation growth.	HR	Adequate	As needed	no	All seasons	PM	yes	2	\$0	Task can be completed by trail steward.
4	Inspect tower	SR	Adequate	Annually	no	Sp, S, F	S	yes	2	\$0	
5	Selective clearing to maintain view at summit.	SC	Adequate	every 5-10 years	yes	F, W	PM	yes	16	\$0	Prerequisite is a cost-benefit discussion with property manager, ecologist, and regional director. Goal to maintain/improve view with minimal negative environmental impact.
6	Replace general property signs and bulletin board sign.	VM	Adequate	As needed	yes	As needed	PM	no	8	\$0	Currently all signs besides the hanging sign are outdated and need replacement.
7	Mow trail and summit lawn.	GM	Adequate	Once every other week	no	Sp, S, F	PM	no	3	\$0	Mowing is needed along trail to summit and lawn at summit.
8	Maintain parking area	GM	Adequate	once per year	no	Sp	PM	no	2	\$0	Filling pot holes. Parking area is a turn off from road.
9	Maintain the bulletin board structure.	GM	Adequate	As needed	yes	As needed	PM	yes	3	\$0	The structure is in need of repair.
TOTAL									50	\$0	

Key:
Action Type:
 GM – General Property Management
 HR – Historic Resource Management
 NR – Natural Resources Management
 SC – Scenic Resources Management
 SR – Structural Resources Management
 VM – Visitor Management
Performance Level:
 Adequate - The task is currently completed at a level that does not hinder resource protection or the visitor experience.
 Strong - The task is completed in a manner/at a frequency that represents the ideal.
Who?:
 EC – Ecologist
 PM – Property Manager
 S - Superintendent

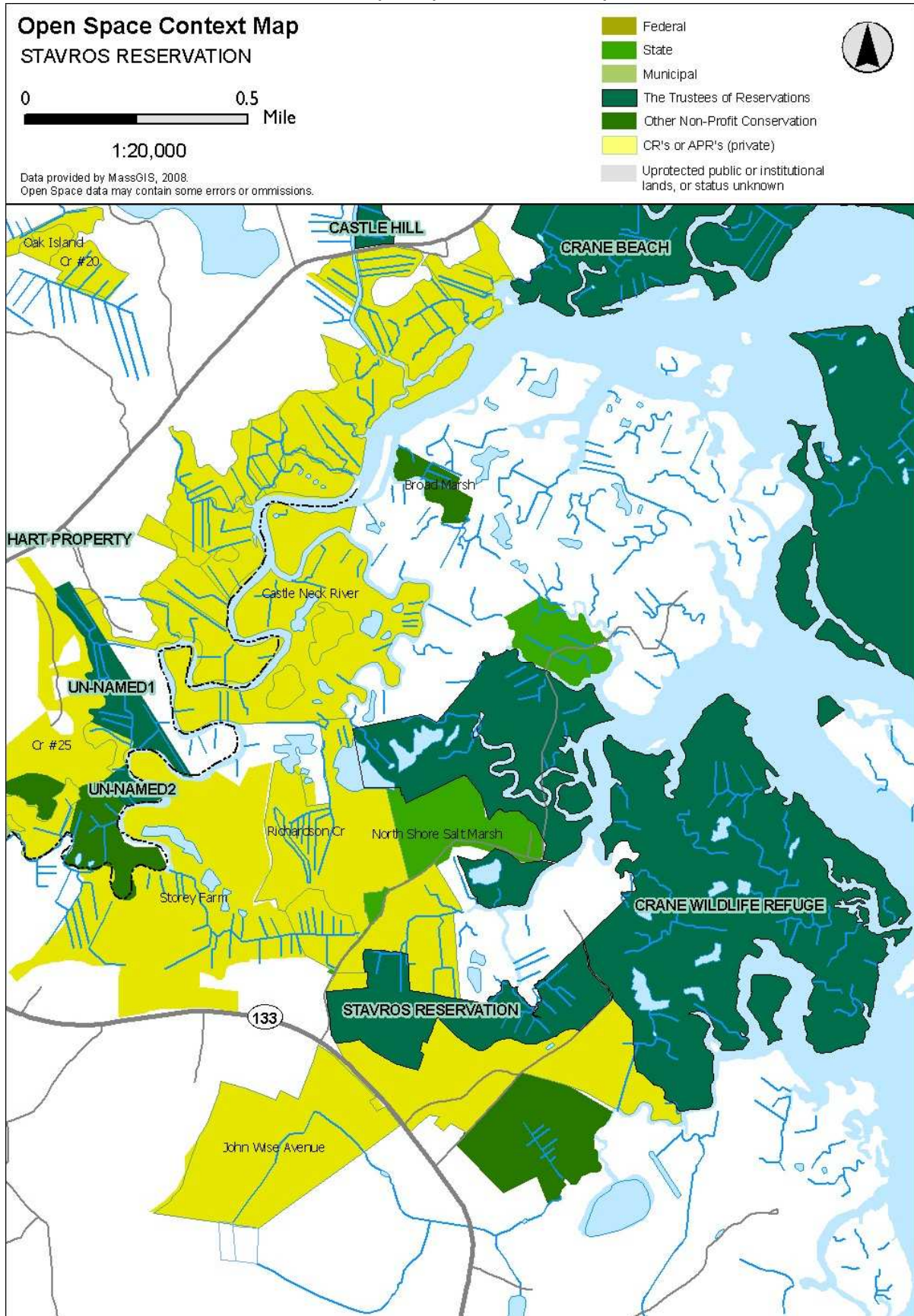
VIII. Conclusions

- a. Stavros Reservation part of a larger chain of environmentally sensitive marsh and protected open space. Although it is a C-type management property and is small in size, its historic buildings, impressive views, and habitat make it a hidden gem in the region. When implementing the structural resource management tasks, care must be taken to improve the site without harming the surrounding environment. Improvements to signage and development of education/interpretive materials would enhance the visitor experience and should be completed in the near future. An effort should be made to coordinate tasks between the Cape Ann Management Unit and Appleton staff, who are currently acting as property managers due to the company hiring freeze and a reduction of staff in the management unit.

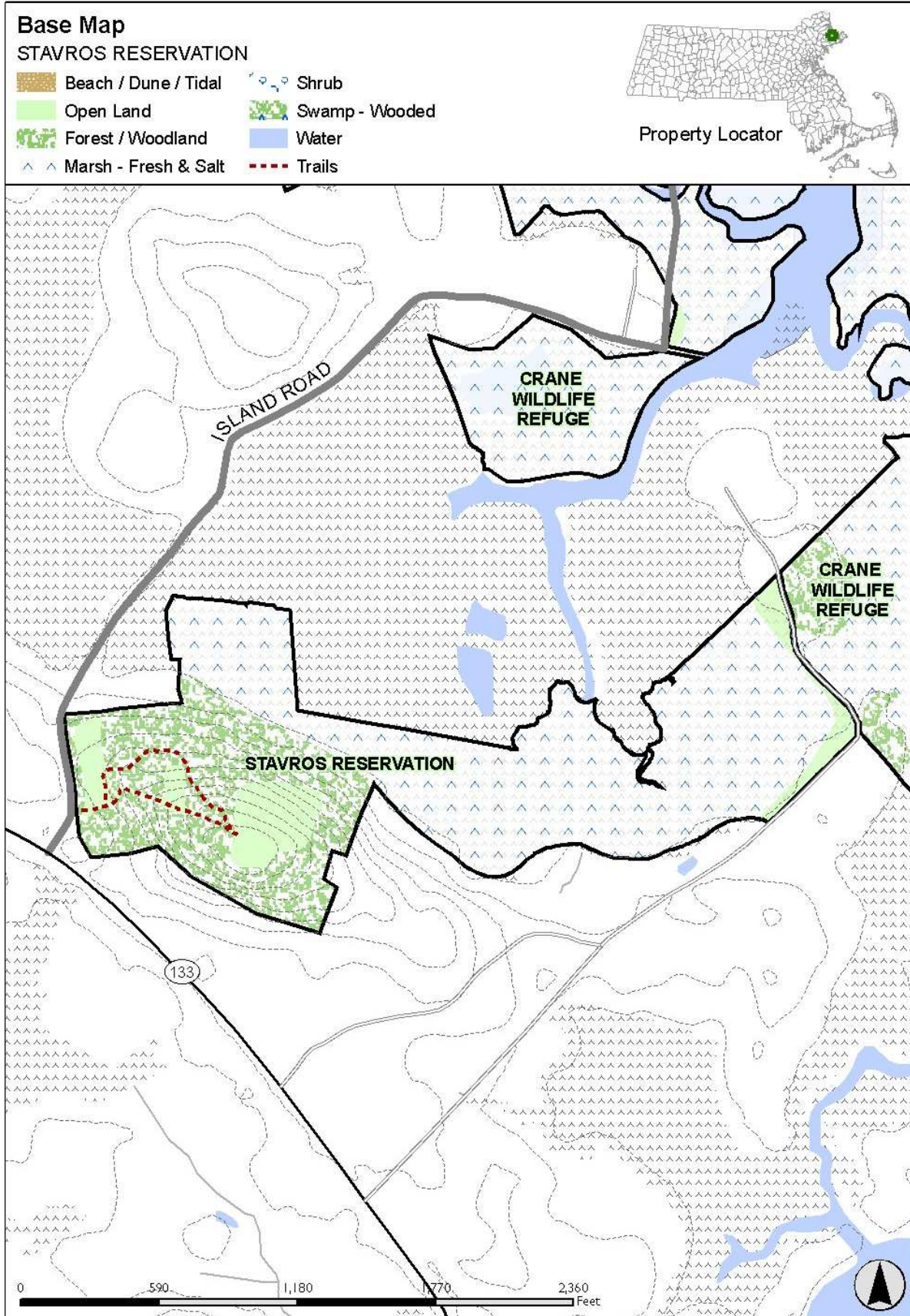
IX. Monitoring and Review

- a. Property plan should be reviewed annually by staff to ensure progress is being made to complete the recommendations. Future plan revisions may require additional research and field work.

APPENDIX A: Stavros Reservation Open Space Context Map



APPENDIX B: Stavros Reservation Base Map



APPENDIX C: Stavros Reservation Natural Heritage & Endangered Species Program Map

