Bamford Preserve on Long Cove Management Plan 2017





Completion date: June 28, 2017

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Introduction

Location and general property description

The Bamford Preserve on Long Cove is located on the western side of Long Cove in the town of St. George, Knox County (map 225, lots 33, 36, 37, and 39). The preserve is approximately 37 acres, and is divided into two sections: 19 acres lie on the west side of Long Cove Road, and 18 acres lie on the east side. Both sections feature extensive wetland complexes, including vernal pools. The preserve is primarily forested and slopes from the relatively steep uplands in the west to the tidal waters of Long Cove to the east, where the eastern parcel has 1100' of shorefront. The preserve also spans two sub-watersheds, with the western portion of the western parcel draining into an open water wetland off the property, and the rest of the land draining into Long Cove. At the time of writing, there is one 2500 square foot building on the property; this structure is slated for imminent demolition.

Geographical and open space context

With its high scenic and ecological values, Long Cove was at one point in MCHT's history recommended for inclusion in the Trust's Whole Place catalog. At that time, however, there were no viable projects in the vicinity, and so the area was never formalized as a Whole Place. That notwithstanding, the area remained of conservation interest for both MCHT and the Georges River Land Trust. Both organizations have achieved conservation success in the area in recent years. GRLT holds several conservation easements nearby, and also owns Tommy's Island, which is just south of the preserve's shoreline. In 2016, MCHT purchased High Island, at the confluence of Long Cove and Tenants Harbor, after years of seeking a conservation outcome for the island. MCHT also hold conservations easements further south in St. George.

Abutters

The preserve is located in a relatively dense neighborhood setting, and shares boundaries with several privately-owned residential properties. Current abutters are listed in MCHT's Lands and Stewardship Database. The closest neighbor is directly across Long Cove Road from the so-called Woodcrafter's building, site of current *de facto* and soon-to-be official parking and trailhead for the preserve.

Access

Access to the preserve is via Long Cove Road, which intersects with Rt. 131 7.5 miles south of Rt. 1 in Thomaston. There is currently parking for 4-5 cars – and room for a school bus to turn around – in front of the Woodcrafter's building at 105 Long Cove Road. A formal parking lot has yet to be created.

Acquisition History and Intent

MCHT has had an interest in conserving this property since 1999, when land protection staff first reached out to former owner, Robert Bamford, about conservation options for his family's land. Mr. Bamford then contacted MCHT in 2013 to pick up the thread of this conversation; he and his siblings lived out of state and did not want to see the property developed. Given the natural resource values and potential for public recreation – including shoreline access – MCHT applied for funding through the Maine Natural Resources Conservation Program. In the fall of 2014, MCHT was awarded funds, and purchased the property at below appraised value.

The Trust intends to uphold the preserve's significant ecological and scenic value while creating infrastructure to guide low-impact public enjoyment, including hiking, bird-watching, picnicking, and potentially hand-carry boat access to Long Cove.

Natural Resource Summary

A natural resources inventory (NRI) was conducted by ecologist Dave Santillo, PhD, during the 2015 field season. For more information, please refer to that document.

Noteworthy natural resources include an extensive network of wetlands on both the eastern and western sections. Both sections also support vernal pool complexes used by wood frogs and spotted salamanders; one of these (pool #11 depicted on map 2) meets the criteria for listing as "significant" (resulting in protection under Maine's Natural Resources Protection Act). A perennial stream bisects the eastern section, draining into Long Cove, and is fed by several smaller channels west of Long Cove Road. The eastern section also features approximately 10 acres of early successional shrubby habitat, including a shorefront area with several mature and productive old apple trees which may or may not have been planted.

Invasive Species and Control Options

Non-native invasive plant species are prolific on the eastern section of the preserve, with multiflora rose, shrub honeysuckles, Oriental bittersweet, and Himalayan balsam prolific in several areas. During NRI field visits, the contractor also hand-pulled a few stems of purple loosestrife from the northern boundary of the eastern parcel. At the time of writing, staff have developed an invasive species management plan and are in the early stages of control, with the general goal of keeping the western parcel invasives-free, and containing multiflora rose and Himalayan balsam (which are both abundant), and eradicating honeysuckle and bittersweet on the eastern parcel.

Human Context

Prehistoric use

No documented pre-European uses of the property are known to staff or the Maine Historic Preservation Commission at this time.

History of land use

The Bamford Preserve is located in a part of St. George that was a focal point for the local granite industry in the late nineteenth century. Nearby properties include significant quarries, and there are several small exploratory quarry holes and cobble stone cutting excavations ("motions") on the preserve.

Both the eastern and western portions of the preserve were cleared by at least the 1800s, and the current forest is all second growth. The eastern portion appears to have been maintained as open land until the 1940s; with somewhat better soils and topography this parcel would have been more suitable for pasture or crop production. The western portion was left to revert to forest land at an earlier date.

Of some historical significance, despite its current deplorable state, is the Woodcrafter's building. This building was initially constructed in the 1930s, and was used for construction of musical instrument cases, then later storage of boat building supplies (Alan Lord, personal communication, June 2016). In the 1990s it was acquired by the now-defunct Great Eastern Mussel Farms, Inc., and used for mussel packing. It was abandoned some time ago and acquired by the Town of Saint George for failure to pay taxes. Already in poor condition, the roof collapsed in 2015.

Contemporary community factors that may or will influence management

The most significant factor influencing management of the Bamford Preserve is the relatively dense, residential setting of the Long Cove neighborhood. With private residences on all sides of the preserve, ensuring that public use of the property does not detract from the neighborhood is critical. To this end, publicity for the property will be targeted locally (as well as on MCHT's website), parking will be designed for 4-5 cars, and staff will seek to keep neighbors well-informed and involved in stewardship to the extent possible.

At a neighborhood gathering in April of 2017, deer hunting was a noteworthy topic of conversation. Several nearby residents have hunted on the property for years and wish to continue this use, but there are some concerns of less-responsible practices (motorized vehicles harming wet soils, trash, unsafe shooting) becoming a problem. MCHT staff and neighbors discussed the best way to deal with this, ultimately settling on allowing hunting on both parcels, though by permission only rule for the eastern section. Staff will also make a point of regular monitoring (or enlisting local volunteers to do so) during firearms season for white tail.

A final factor of note is the relative lack of public trails in St. George. The St. George Conservation Commission has made great strides in recent years, with the creation of the Fort Point, Town Forest, Jones Brook, and school nature trails. That said, there is still limited waterfront public access, especially to Long Cove. As such, there was considerable enthusiasm for development of a trail network on the property, and many who expressed interest in creation of hand-carry kayak access to Long Cove via a wider, partially hardened trail on the eastern section of the property. Local residents also expressed a strong desire to see the property be used for educational purposes, with natural as well as cultural resources highlighted via trail layout and possibly some small interpretive signs and materials on the trailhead kiosk.

Current Use and Management

Assessment of public use

At the time of writing, use of the preserve is very low. A few nearby residents deer hunt, and more recently, an 8th grade science class from the St. George School has visited to inventory vernal pools. With no real infrastructure developed yet, though, there has been little reason for anyone to visit the property.

Current preserve management

Management to date has largely consisted of getting to know the property and the neighbors. In 2015 the Trust contracted a natural resource inventory, and also developed and began implementing an invasive plant management plan. Stakeholder meetings were held in October of 2016 and April of 2017, and staff have talked extensively with neighbors, Conservation Commission members, and other town officials. In May of 2017, the Trust was also finally able to accept the town's donation of the 0.29 acre Woodcrafter's building lot (map 33, lot 39) after obtaining signed release deeds from the previous owners (Great Eastern Mussel Farms, Inc.). At the time of writing, demolition of the building is pending permitting and scheduling the contractor.

In early 2017, MCHT staff applied for funding from the Maine Outdoor Heritage Fund for \$15,000 in access infrastructure improvement. MCHT was awarded \$10,000 in May, and staff are currently researching options for more broadly accessible trails and water access options. This funding source may also mean more non-local publicity.

Summary of easement and deed restrictions

Due to the funding source, MCHT is bound by the terms of a project agreement with The Nature Conservancy. The project agreement requires MCHT to submit a long-term management plan to TNC, and to adhere to trail building practices that avoid any disturbance to wetlands or habitat for sensitive species.

Permitted activities

The Bamford Preserve will be open to low impact public recreation. Fires and motorized vehicles are prohibited, and visitors are asked to carry out all waste, including human and pet waste and toilet paper. Hunting in season and following all state and local regulations will be allowed on both sides of the road, though by permission only on the eastern parcel. Camping will also be prohibited, though MCHT will consider special requests from Scouts or other organized groups for permission to camp on a case by case basis. At the time of writing, a requirement to keep dogs leashed is not envisioned, but use by dog walkers will be closely monitored.

Carrying Capacity Assessment

With completion of infrastructure development (parking, trails, and signs) and some vegetation management, the Bamford Preserve will be able to support a moderate level of use. Publicity will be targeted locally, as well as on MCHT's website, and parking will be intentionally limited so as not to overburden Long Cove Road with traffic. The eastern portion of the preserve will be well suited for use by those with mobility considerations, with a wider, more level trail. The western portion of the trail will be appropriate for lower levels of use, as soils are generally wetter and topographic constraints more challenging.

Fire Considerations

MCHT staff have communicated with the St. George fire chief, and would anticipate a rapid local response in the event of a wildfire on the preserve. The Trust will prohibit visitor fires on the property, though may seek permits for special occasions (such as a winter bonfire) or burning brush.

Anticipated Climate Change Effects

The most likely impacts of climate change are sea-level rise leading to inundation or inland migration of the fringing salt marsh on Long Cove. Given some of the higher projections for sea-level rise by the end of the century (6-8'), much of the eastern extent of the eastern parcel is highly likely to be converted to coastal wetland, or possibly inundated.

Preserve Management Targets, Goals, Threats, and Actions

Management Vision:

MCHT will manage the Bamford Preserve to uphold its significant ecological values as well as develop its potential for low impact recreation and education. Extensive wetlands, vernal pools, and other areas of sensitive habitat will be left untouched and public use routed away, except perhaps for strategic educational use (such as creating a trail to one easily-accessible vernal pool). The western section of the preserve will feature a trail designed for a more solitary and rugged hiking experience, while the eastern section will be well-suited for use by larger groups (such as Scouts or schools) and those with mobility considerations, with a wider and more level trail. At the time of writing, water access to Long Cove – though tide dependent – is envisioned, and staff and other stakeholders will investigate options for hand-carry boat launching. No forestry or other habitat management work is planned other than invasive species removal and some targeted clearing around the apple trees.

Target: Public Use and Community Benefit

Goal: Establish road front infrastructure on former Woodcrafter's lot

Threats: Neighborhood disruption, erosion, undue delay leading to community frustration, inadequate funding

Actions:

- Working with contractor, demolish Woodcrafter's building, remove debris, and grade site
- Restore building site with native plantings, seeking local donations of plants and volunteer labor when possible
- Create 4-5 car parking area, including stones to prohibit vehicle access to trail
- Install kiosk and signs

Goal: Create trail system, including potential water access and gathering locations

Threats: Extensive wetlands, potential for harm to salt marsh, permitting constraints, stream crossing challenges

Actions:

- Identify and construct trail on eastern parcel from parking area to shorefront that avoids and minimizes wetland impacts and stream crossings, and that seeks the most gradual path down the slope from the parking area
- Identify and construct trail on western parcel, avoiding wetlands and property boundaries (except with neighboring landowner approval)
- Research and implement options for minor hardening in wet spots (in lieu of bog-bridging) on eastern parcel
- Research and implement stream crossing options (including permitting), taking into account potential need to bring tractors or other mowing equipment across
- Clear and maintain a small area around apple trees, leaving the rest of the early successional shrub-scrub as habitat
- Explore feasibility of creating hand-carry water access to Long Cove

Goal: Seek ways for the preserve to benefit the local community

Threats: MCHT staff operating without input; failure to let St. George residents know about preserve; overuse or inappropriate use

Actions:

- Communicate regularly with preserve neighbors, Conservation Commission, • and other local stakeholders
- Hold events at the preserve as practical and as local interest dictates •
- Let local educators know about preserve's availability for outdoor learning
- Involve neighbors and other residents in volunteer stewardship activities •
- List preserve on Town website
- Develop educational materials for the preserve, with materials on kiosk, • MCHT website, and other outlets as they become apparent

Target: Ecological Values

Goal: Protect wetlands (including vernal pools) from human disturbance Threats: Foot traffic, trail creation disrupting hydrology, dogs in vernal pools during amphibian breeding season

Actions:

- Design trails to avoid impacts to wetlands
- Create trail to one easily-viewed vernal pool for educational purposes, leaving the rest out of the path of human activity
- Monitor dog use of preserve and, if necessary, install a targeted sign or seasonal leash rule to keep dogs out of vernal pools
- Monitor and document vernal pool productivity
- Remove debris from vernal pool behind Woodcrafter's building

Goal: Uphold other ecological values of preserve

Threats: Excessive clearing, spread of invasives, overuse or inappropriate use **Actions:**

- Continue to implement invasive species management plan
- Regularly monitor for motorized vehicle use; address any issues immediately
- Clear and maintain a small area around apple trees, leaving the rest of the early successional shrub-scrub as habitat

Target: Cultural Values

Goal: Highlight human use history of preserve

Threats: Lack of knowledge and/or time for research **Actions:**

- Identify local historians with knowledge of the property and the Long Cove area and document their knowledge
- Identify volunteers (possibly students) interested in developing interpretive materials, including display for kiosk and narrative for MCHT website
- Route trail past at least one quarry
- Prune apple trees

Target: Exemplary Stewardship

Goal: Uphold MCHT Stewardship practices

Threats: Lack of resources, including staff time and funding **Actions:**

- Enlist volunteers to the extent possible, including local organizations (Scouts, school groups, etc)
- Seek local donations of lumber, native plants, labor, etc
- Monitor and maintain marked boundaries
- Remove trash from shoreline
- Monitor preserve weekly late spring through fall and 1-2 times monthly in winter
- Update management plan after 5 years
- Adhere to MNRCP project agreement

Stakeholders Involved in Planning Process, Dates of Meetings

MCHT staff held two stakeholder meetings to inform the creation of this management plan. The first was held at Town Hall on October 2, 2016, and the second at a Long Cove residence on April 26, 2017. Lists of attendees and minutes from both meetings are filed in MCHT's project folder for this preserve. In addition, staff have had numerous conversations with neighbors, the Conservation Commission, and other town officials.

MCHT staff involved in the creation of this plan:

Amanda Devine, Regional Stewardship Manager Steve Walker, Land Protection Project Manager Jane Arbuckle, Director of Stewardship

References

Santillo, David. 2015. Natural Resources Inventory of Bamford Preserve, St. George, Maine.

Table 1. Implementation of Actions

| Targets | Action | Staff ¹ | Priority/ Timing | Notes |
|--|--|--------------------|---------------------|--|
| Public Use and Community Benefit | | | | |
| Establish road front infrastructure on former Woodcrafter's lot | Working with contractor, demolish Woodcrafter's building, remove debris, and grade site | RS, contractor | High/2017 | |
| | Restore building site with native plantings, seeking donations of plants and volunteer labor when possible | RS, volunteers | High/2017- 2018 | |
| | Create 4-5 car parking area, including stones to prohibit vehicle access to trail | RS, contractor | High/2017 | |
| | Install kiosk and signs | RS | High/2017- 2018 | |
| Create trail system, including potential water access and gathering locations | Identify and construct trail on eastern parcel from parking area to shorefront | RS, volunteers | High/2017- 2018 | Avoid and minimize wetland impacts and stream crossings, and seek most gradual path down slope from parking area |
| | Identify and construct trail on western parcel, avoiding wetlands and property boundaries* | RS, volunteers | Med/2018- 2020 | *Except with neighboring landowner approval |
| | Research and implement options for minor hardening in wet spots* on eastern parcel | RS | High/2017- 2018 | *In lieu of bog-bridging |
| | Research and implement stream crossing options | RS | High/2017 | Including permitting |
| | Clear and maintain a small area around apple trees | RS | Med/ 2017- 2018 | Leave remainder of early successional shrub-scrub as habitat |
| | Explore feasibility of creating hand- carry water access to Long Cove | RS, volunteers | Med/2017- 2020 | |

¹ RS = Regional Steward

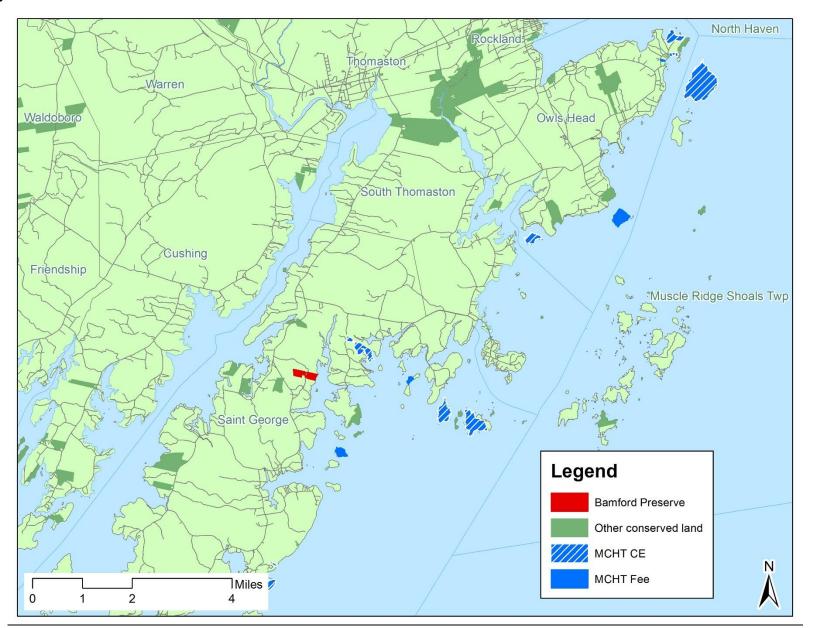
| Targets | Action | Staff ¹ | Priority/ Timing | Notes |
|--|---|---------------------|---------------------|--|
| Seek ways for the preserve to benefit the local community | Communicate regularly with preserve neighbors, Conservation Commission, and other local stakeholders | RS | High/ ongoing | |
| | Hold events at the preserve as practical and as local interest dictates | RS, other groups | Med/ ongoing | |
| | Let local educators know about the preserve's availability for outdoor learning | RS | Med/ ongoing | |
| | Involve neighbors and other residents in volunteer stewardship activities | RS | High/ ongoing | |
| | List preserve on Town website | RS | High/2018* | *Or when basic infrastructure (parking, trail) is complete |
| | Develop educational materials for the preserve, with materials on kiosk, MCHT website, and other outlets as they become apparent | RS, other groups | Med/ ongoing | |
| Ecological Values | | | | |
| | Design trails to avoid impacts to wetlands | RS | High/as needed | |
| Protect wetlands (including vernal pools) from human disturbance | Create trail to one easily-viewed vernal pool for education, leaving the rest out of the path of human activity | RS | High/ as needed | |
| | Monitor dog use of preserve and, if necessary, install targeted sign or seasonal leash rule to keep dogs out of pools | RS, volunteers | High/ ongoing | |
| | Monitor and document vernal pool productivity | RS, volunteers | High/ yearly | |
| | Remove debris from vernal pool behind Woodcrafter's building | RS | High/ fall 2017 | |

| Targets | Action | Staff ¹ | Priority/ Timing | Notes |
|---|--|--------------------|---------------------|--|
| Uphold other ecological values of preserve | Continue to implement invasive species management plan | RS | High/ ongoing | |
| | Regularly monitor for motorized vehicle use; address any issues immediately | RS, volunteers | High/ ongoing | |
| | Clear and maintain a small area around apple trees | RS | Med/ 2017- 2018 | Leave remainder of early successional shrub-scrub as habitat |
| Cultural Values | | | | |
| Highlight human use history of preserve | Identify historians with knowledge of preserve/Long Cove area and document their knowledge | RS, volunteers | Med/2018- 2020 | |
| | Identify volunteers interested in developing interpretive materials | RS | Med/2018- 202 | |
| | Route trail past at least one quarry | RS | High/ ongoing | |
| | Prune apple trees | Volunteers | Med/as needed | |
| Exemplary Stewardship | | | | |
| Uphold MCHT Stewardship practices | Enlist volunteers to the extent possible | RS | High/ ongoing | |
| | Seek local donations of lumber, native plants, labor, etc | RS | High/ as needed | |
| | Monitor and maintain marked boundaries | RS | High/ yearly | |
| | Remove trash from shoreline | RS, volunteers | High/ as needed | |
| | Monitor preserve bi-weekly late spring-fall and bi-monthly in winter | RS, volunteers | High/ ongoing | |
| | Adhere to MNRCP project agreement | RS | High/ ongoing | |

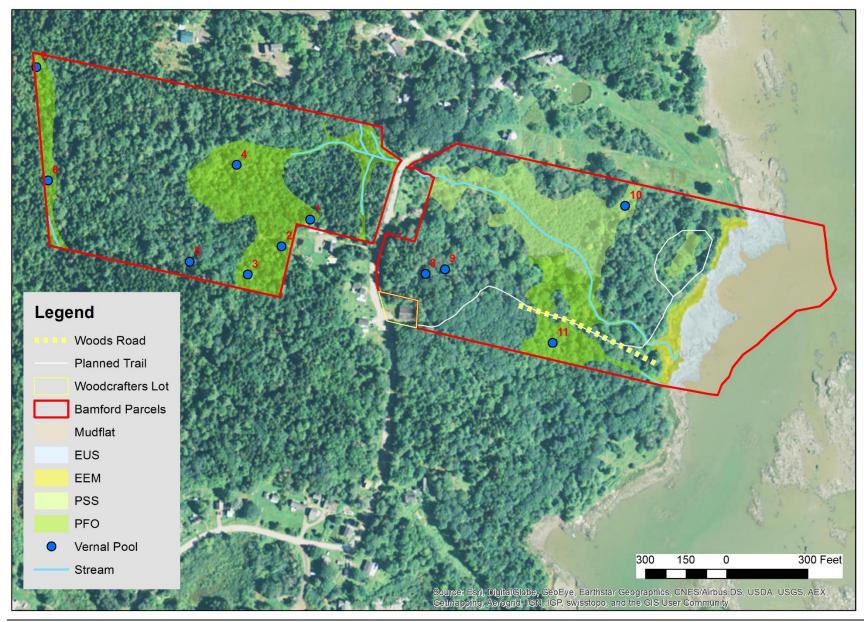
Table 2. Carrying Capacity Evaluation

| Considerations, including | Level of Visitation | | Key Management Actions | Level of |
|---|---------------------|-------------|---|--|
| Desired Visitor Experience | Current | Recommended | | Publicity |
| Considerations: Residential setting, many nearby neighbors Extensive wetlands and vernal pools Invasive species prolific on eastern parcel Potential for and interest in water access With clearing, the apple tree area could be an attractive picnic and gathering spot Limited publicly accessible land in the area Properly managing hunting use will be important High potential for regular school use Desired Visitor Experience: MCHT intends for the Bamford Preserve to become a welcoming destination for Long Cove neighbors and the broader St. George community. Visitors will be able to enjoy an easy walk to the shore of Long Cove, with some hand carry boat launching potential. The area around the apple trees, once cleared, will lend itself well to picnicking and perhaps community events (winter bonfires, for example). Given the extensive wetlands and winter deer use, use of the western parcel will be less intense, with a more rugged footpath winding through high points. | | Increase | Working with contractor, demolish Woodcrafter's building and grade site Identify and construct trail on eastern parcel from parking area to shorefront that avoids and minimizes wetland impacts and stream crossings, and that seeks the most gradual path down the slope from the parking area Communicate regularly with preserve neighbors, conservation commission, and other local stakeholders Design trails to avoid impacts to wetlands Continue to implement invasive species management plan Enlist volunteers to the extent possible, including local organizations (Scouts, school groups, etc) | MCHT website; local (include on St George website) |

Maps



Map 1. Location of Bamford Preserve on Long Cove



Map 2. Noteworthy natural resources and selected proposed infrastructure