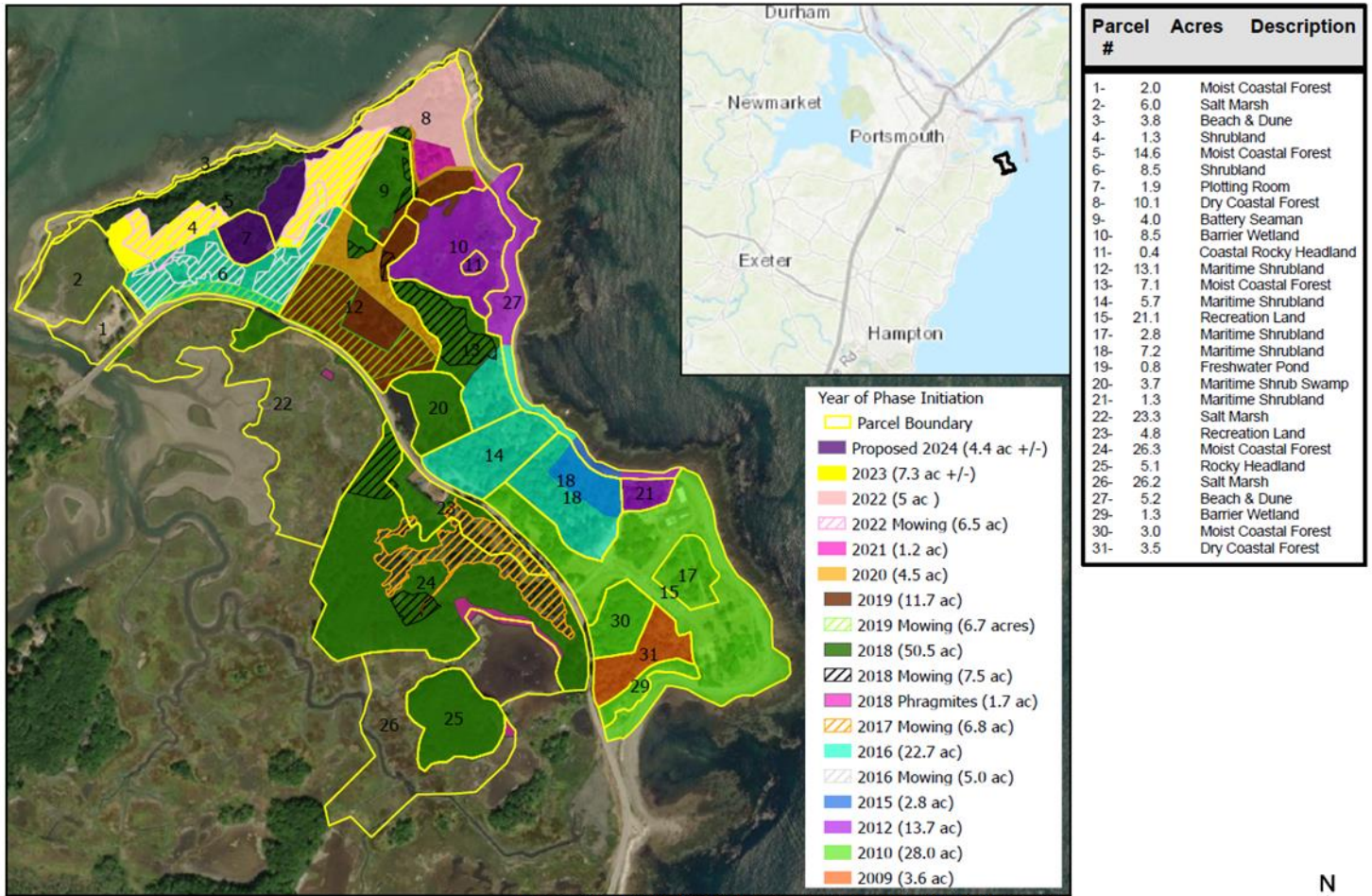


ODIORNE POINT STATE PARK: 2024 ANNUAL WORK PLAN

Rockingham County Conservation District

Existing and Proposed Odiorne Point State Park Restoration Partnership 2009-2024



0 500 1,000 2,000 US Feet



INTRODUCTION

The following work plan is based on the criteria outlined in Appendix A of the Odiorne Point State Park – Ecosystem Restoration Project as highlighted under the previous Research License granted to the Rockingham County Conservation District on March 25, 2013. The plan builds on the work proposed in the Odiorne Point State Park Invasive Plant Management Plan, Rye, NH (the “2010 IPMP”, FB Environmental Associates, Inc., May 2010) as well as the Invasive Plant Management Plan Addendum (2014) completed by RCCD. Tasks completed in 2023, as well as proposed tasks for 2024 are listed by each project on the following pages. Fields worked on are shown on the cover of this report, with those areas shaded in different colors to indicate restoration initiated by year, all of which are actively managed projects. The area shaded in dark purple is planned for new implementation in 2024.

SUMMARY OF 2023 WORK

The following summary statistics are provided in association with the work completed in 2023:

1. Project acres to date (see report cover for field numbers). The following descriptions include the fields as follows:
 - a. In 2023 7.3 new acres of Fields 4, 5, and 8 were completed. Follow-up in 2023 took place in the following Fields: 4, 5, 6, 8, 9, 10, 12, 13, 14, 15, 17, 18, 22, 23, 24, 27,29, 30, & 31 for a total re-treatment area of 60.3 +/- acres in 2023.

2. RCCD Hours, Match, and other activities:

	2023
RCCD Hours*	618.5
Match Hours * & **	82
Total Hours	700.5
Contractor Costs	\$6,700
Plantings	Two hundred native species plantings 400-500 DNCR grown shagbark hickory

**(Based upon average staff value of \$70/hour)*

*** The ability for the RCCD to provide match hours is becoming more constrained as the RCCD deals with rising costs and tight budgets.*

3. Discovered RTE species:

- a. Additional rare species were documented in Fields 1 and 22, marsh elder (*Iva Frutescens*) was found in both fields, and that information was provided to the NHB. Please see the map highlighting the location of the plants in the Appendix. This general area will be reviewed again in 2024.
- b. Pending water levels, RCCD plans to review the coastal salt pond species during the late summer 2024, which will also be reported to NHB.

4. DNCR Contributions:

DNCR has supplied continued base funding support which has been invaluable to the RCCD as it has allowed additional archaeological surveys to be completed, assisted with baseline documentation for coastal areas, supported volunteer efforts, producing new funding applications, and invasive plant mowing and hand control projects.

- a. The NH State Forest Nursery also continues to assist with donations of native planting stock and growing shagbark hickory seedlings (final batch previously grown out was planted during the spring of 2023). DNCR staff continues to assist with restoration activities, particularly with equipment and staff time when available.
- b. A new DNCR support in 2023 was that the RCCD requested and received a special use permit (Permit # 2023-18) to install game cameras. In May of 2023, six game cameras were deployed within the northwestern portion of the park. The intent of the installation was to gain a better understanding of species' presence and use. Two out of six cameras were moved to new locations in June because of the high number of people found on camera, and the minimal wildlife observed. The final camera placement included several locations where different management practices have occurred. Sites included mowed portions of Fields 4 and 5 (Cameras 1, 4, 7), within an area in Field 8 that has received 1-2 years of low volume foliar spray control (Camera 2) and Field 7 within an area of the park that RCCD has completed little to no management (Camera 3). A variety of challenges arose during camera deployment that limited data collected from several cameras: including, camera malfunctions, battery life, false triggers, cameras being jostled or repositioned by wildlife, vegetation height, and other impacts. Cameras 1, 5, 7 and 8 were most impacted by these challenges. Please see the Appendix for additional game camera data.

- c. The support of the SCA crews has been invaluable for this project with tremendous results, and we anticipate that support will be available again for 2025. These significant contributions go a long way toward meeting our mutual goals of thoughtful restoration work in the park. This support is one of the key ingredients in helping us obtain additional funding for future work in the park.

INVASIVE SPECIES MANAGEMENT & HABITAT RESTORATION BY PROJECT 2023

1. GATEWAY ENHANCEMENTS AT ODIORNE POINT STATE PARK, COASTAL & POLLINATOR HABITATS

Funding: NH State Conservation Committee Grant (SCC): \$17,828 (2021-2023)

Dates: SCC 6/2/21-4/30/23

Fields: Portions of Fields 6 & 12 along the bike path and Route 1A, with a small portion of Field 12 near the freshwater pond.

Acres: 2 +/- acres

Project Summary:

The objectives of this project were to: 1) to engage local and regional partners and volunteers to assist with invasive plant removal within these highly infested and minimally managed areas adjacent to Route 1a. 2) to prepare the site for pollinator habitat, to grow out local pollinator plants, purchase additional native pollinator plugs and seeds, and to host outreach and educational hands-on programs. Final invoicing and reporting were completed in April of 2023.

Plans for 2024 include planting additional native seedlings grown by the RCCD, and maintenance and watering for those newly established pollinators. This area will be well maintained as it is the first point of contact for many that approach the park, either on the bike path or on Route 1a. It is expected that additional outreach and volunteer events will occur as well as continued coordination with partners. Follow-up herbicide spot treatment is also anticipated in 2024.

2. COASTAL RESTORATION PLANNING AT ODIORNE POINT STATE PARK

Funding: NH State Conservation Committee Grant (SCC): \$21,397 (2020-2023)

Dates: SCC 5/20/20- 4/30/23

Fields: 3, and portions of Fields 8 & 5 along Little Harbor shoreline, from Frost Point to the Boat Ramp parking lot.

Acres: 2-3+/-acres

Project Summary:

The objectives of this project were to: receive input from natural resource professionals, stakeholders, and park visitors to assist in developing a preliminary restoration plan. This

project included additional assessment and monitoring to better understand existing conditions, and likely stressors.

Also, it is worth noting that information found in the Coastal Watershed Conservation Plan, NHDES, (2021) and the “Connect to Protect” recommendations as well as those found in the Trails for People and Wildlife, NHFG (2019) align with our initial identification of the most sensitive resources found, and worthy of continued planning for enhanced protection and/or restoration. The final report was completed including updated recommendations from the Odiorne Committee Meeting, held in April 2023, and submitted to the NH State Conservation Committee in May of 2023. Additional funding was pursued because of the recommendations coming out of this report.

3. Odiorne Point State Park, Habitat Restoration 2023 Advancing Towards Little Harbor Shoreline

Funding: NH Department of Agriculture, Markets and Food, Integrated Pest Management Program (NH DAMF, IPM): \$19,960

Dates: 9/20/23 – 7/15/24

Fields: Portions of Fields 4, 5, 6 and 8, including and areas adjacent to the mowing practice that took place in December 2022.

Acres: 6-8 +/- acres

Project Summary:

The goals of this project are:

- 1) to use IPM techniques refined from over fourteen years of work at Odiorne Point State Park, to initiate habitat restoration on 6 +/- new acres (Fields 4,5, 6 & 8). This work will connect areas previously treated by RCCD directly adjacent to the most northern section of Frost Point (Field 8) as well as portions of Fields 4, 5, 6 & 7 in the most western section of the park. This area contains sensitive coastal resources, including dunes, coastal banks, and several freshwater wetland complexes and is near transitional tidal areas, and require slow and careful IPM control practices, and
- 2). to provide outreach and hands-on workshops for at least three groups/organizations and to provide at least two technical outreach sessions with agency/funder partners on best management practices to enhance/protect existing sensitive habitat values, while also providing for appropriate visitor experiences.
- 3). To provide additional seeding and initial native planting efforts if/where it is most appropriate and the invasive seed sources seem manageable. Due to how open some of these habitats will become, other measures to control access to these habitats may involve fencing, roping, and signage to dissuade additional “bootleg” trails from being developed.

During the late summer of 2023, RCCD was able to continue with a variety of IPM control practices in this area. Due to the high number of re-sprouts located within three acres of

the initial mowed area, RCCD requested assistance from a long-time contractor-partner to assist with the use of a hydraulic hose. RCCD staff assisted with this process, and the control results were amazing.

Signage was also installed in a few key locations to highlight the habitat management aspects and included information on mowing invasive plants, control mechanisms, and coastal habitat restoration techniques. Additional signage will be completed in 2024 that will directly relate to coastal resiliency adaptations needed, and likely future management modifications. Additional follow-up control will also take place in this area (noted as one of the densest invaded areas mowed by the mowing contractor in 2022) in 2024 and 2025. Native plantings will likely be focused along the wetland and shoreline buffers once invasive plants are well controlled. Final reporting will be completed in July 2024.

4. Coastal Resilience at Odiorne Point State Park, focused on resilient best management practices and conceptual designs for the Little Harbor shoreline area.

Funding: NH Department of Environmental Services, Coastal Resilient Grant (NH DES, CRG): \$61,850 (2024-2025)

Dates: G & C approval -12/31/25

Fields: Portions of Fields 4, 5, 6 and 8 along the Little Harbor shoreline, including portions of Fields 1 and 2.

Acres: 8 +/- acres

Project Summary:

The goal of this project is to concentrate on resource assessments and designs of resiliency practices suitable for this historic coastal area. Trails currently interconnect with sensitive coastal systems that are being damaged by anthropogenic and natural processes. The coastal areas include fore and back dunes, salt marshes, freshwater wetlands, an over wash marsh, and important rare coastal community types. This project will guide coastal habitat resilience through a collaborative process with partners and end with a conceptual design aimed to include modifications to existing trail systems that are currently impacting environmental resources and ecosystem services. We will develop a phased flexible plan to increase coastal resilience that will help this area adapt to a changing climate using cultural and environmental properties and climate change as primary drivers. The Parks' high visibility and use will also enhance outreach opportunities connected to coastal resiliency.

5. Enhancing Coastal Resiliency at Odiorne Point, Little Harbor Shoreline

Funding: NH State Conservation Committee Grant (SCC): \$28,382 (2024-2026)

Dates: SCC G & C approval - 4/30/2026

Fields: Portions of Fields 4, 5, 6 and 8 along the Little Harbor shoreline, including portions of Fields 1 and 2.

Acres: 8 +/- acres

Project Summary: Concentrating on a portion of the northern Little Harbor shoreline, the goal of this project will be to implement initial best management practices to enhance the resiliency of this historic coastal area. We will focus conservation practices to improve coastal resilience that will help this area adapt to a changing climate while also collecting and analyzing data for enhanced preliminary permit review for future implementation of restoration projects.

6. DEPARTMENT OF NATURAL AND CULTURAL RESOURCES: BASE FUNDING

Funding: NH Department of Natural and Cultural Resources (NH DNCR), Division of Parks and Recreation: \$42,450.

Dates: October 2022 – December 31, 2024

Fields: *All fields under existing management, with emphasis on mowing practices in late winter 2022/2023, likely in an area of Field 8 and additional conservation practices along the buffer area adjacent to the bike-path.*

Project Summary:

The RCCD in cooperation with the NH DNCR, Division of Parks and Recreation has worked to restore the native ecosystem at Odiorne Point State Park for over fourteen years now. This has been a cooperative effort to implement many of the recommendations found in the Odiorne Point State Park Invasive Plant Management Plan, Rye NH (2010) as well as the Invasive Plant Management Plan Addendum (2014). Base funding is used to maintain and build upon our previous work. Additional progress continues under the DNCR base funding that was initiated in October of 2022, and will end in December of 2024, although most of the base funding has already been allocated. The following outlines practices completed during 2023 with assistance from NH DNCR.

1. Volunteer Coordination/Implementation:

RCCD solicited and managed four different school groups, Nature Groupie, and worked cooperatively with Seacoast Science Center staff for additional volunteer efforts to complete restoration plantings, seeding, watering, and mechanical (hand) invasive plant control as recommended in the plan. During 2023, almost four hundred hours were completed by volunteers, adding a value of almost \$13,000 of in-kind services. See the Appendix for more detailed information on volunteer affiliations, total hours, and values of volunteer assistance for 2023. The RCCD provided updated information for the DNCR website regarding restoration efforts at Odiorne, introduced new educational signage, and has continued with consistent

coordination with DNCR staff. Additional signage is being prepared to address future coastal resiliency management methods. Long-term volunteer efforts continue to be one of the best methods for educating about coastal habitat changes and conditions, while completing on-the-ground restoration practices aimed to enhance these sensitive ecosystems.

2. Completion of Operation and Management Plan for Existing Restoration Fields:
A draft of the Operation and Management Plan for Fields in active restoration since 2009 was initiated in 2018 and continues to be updated with all management activities. RCCD re-named the document, Managed Fields Report, which highlights each field as identified in the Odiorne Point State Park Invasive Plant Management Plan, Rye NH (2010) as well as the Invasive Plant Management Plan Addendum (2014) and includes photos of before and after restoration practices wherever possible. Each field listed includes a summary that describes the conservation practices completed to date, the field's current conditions and recommendations for future management. Additionally, RCCD has compiled a spreadsheet to track management practices by date and continues to update that information annually.
3. Rare Plant and Cultural Resource Surveys including detailed mapping delineation of Frost Point fields:
RCCD completed cursory rare plant surveys prior to conservation practices in 2023 and will continue to do so for any newly managed fields, as well as for follow-up herbicide spot treatments. RCCD also identified previously undocumented marsh elder (*Iva frutescens*) within Field 1 and 22. An updated map is in the Appendix.

Due to the wet conditions during 2023, Common Reed (*Phragmites australis*) located within the coastal salt pond was not spot treated, but this area will be reviewed for rare plant surveys and follow-up control in 2024.

Sensitive natural resources will continue to be documented and/or delineated along the little harbor shoreline as needed, and previously documented resources will be updated, collecting this data with a newly acquired submeter GNSS.

Mostly along the Little Harbor shoreline, paths continue to be assessed for natural resources and sea level rise (SLR) impacts. Through this effort marsh migration has been documented and will be re-delineated with equipment offering better accuracy.

Working cooperatively with DNCR staff, several temporary trail closures were necessary during early 2024 after several coastal storm events compromised portions of the coastal trail system, as a public safety concern. See attached maps

of temporary trail closures in the Appendix. Paths were closed in four locations in 2024 and it is expected that additional trails will need to be closed and/or relocated for safety concerns, resource protection, and consolidation purposes. Mapping and continued review with project partners is ongoing, as phased modifications will be planned.

4. Funding application(s):

RCCD completed two funding applications for continued planning and habitat restoration at Odiorne during 2023 for additional funds to expand existing planning and initial implementation phases at the Little Harbor shoreline area. new base funding state contract with DNCR was recently completed for \$76,000. Which will allow continued restoration objectives to be completed through June 2027. Base funding dollars have served as leverage for all our proposed funding applications and continue to be critical. Funders now request cash match from beneficiaries of projects as well as in-kind support. Continued DNCR support allows our long-term collaborative partnership to be more competitive.

It is important to note that the RCCD also participated with the NH DES, Coastal Program on a couple of closely related funding initiatives. Together a funding request was proposed to complete a collaborative saltmarsh restoration planning project at the Fairhill and Odiorne saltmarshes (220 acres) and was funded from Great Bay 2030 funding through the NH Charitable Foundation. The NH DES Coastal Program was able to successfully leverage those dollars to then apply and receive a NFWF, America the Beautiful Challenge (ATB) award for \$2 million dollars that includes final design, permits, and low-impact habitat restoration interventions to enhance three salt marsh systems in New Hampshire as well as essential monitoring.

5. Reporting:

Reporting on previously funded applications, including which fields received conservation practices in 2023 is found at the beginning of this document. RCCD will continue to report to the Odiorne Resource Management Committee on an annual basis, and recommendations from all partners are appreciated.

6. Mowing:

Areas of Fields 4, 5 and 8 previously mowed during December 2022, were treated for invasive resprouts and seedlings using handheld backpack sprayers and a hydraulic sprayer with assistance from a long-time partner contractor. Portions of the fields that were mowed were too wet to target in 2023 and are anticipated to be spot treated in 2024.

In addition, a small population of Tree of Heaven (*Ailanthus altissima*) was documented and treated using frill-cut herbicide applications found in Field 6 in 2022 by NH DAMF staff. The RCCD followed up with a low-volume foliar application of resprouts and new seedlings in 2023. This area will continue to be monitored, and due to the potential hazard, the trees will need to be cut down at some point.

RCCD expects to use hand-held equipment for the invaded sensitive resources found within the coastal resource areas along the Little Harbor shoreline and will report back next year on the conservation practices completed and methodologies used.

Funding: NH Department of Natural and Cultural Resources (NH DNCR), Division of Parks and Recreation: \$ 76,000.00

Dates: G & C approval – June 30, 2027

Fields: All fields under existing management, with emphasis on new habitats located along the northwestern portion of the park including hand cutting, low impact invasive plant control, and restoration efforts.

ANTICIPATED VOLUNTEER AND OUTREACH OPPORTUNITIES AT ODIORNE POINT STATE PARK (2024)

- May 9 – Liberty Mutual
- May 17th- Plymouth High School
- May 23 – ConVal Student Council
- July – Liberty and/or Timberland volunteers
- August – UNH PROVES
- Summer 2024 – additional volunteer and outreach restoration opportunities are likely to be scheduled.
- October 2024: Plymouth High School

PROPOSED FUNDING REQUESTS FOR FUTURE MANAGEMENT

RCCD plans to pursue funding for some or all the following tasks in the upcoming year, depending on staff and funding availability.

1. To date the RCCD has obtained \$854,607 (includes three funding applications currently waiting for Governor & Council approvals), in external funding to restore a variety of coastal habitats in fields shown on the *Existing and Proposed Odiorne Point State Park Restoration Partnership 2009-2024* map found in the Appendix. The funding listed also provided for some maintenance of previously initiated habitat restoration areas. The Appendix also contains the *2024 Odiorne Restoration Focus Map* which highlights the general area for restoration practices to take place. Additional detailed on-site reviews in the spring of 2023 were completed to best

determine areas to initiate invasive plant control and RCCD will continue to assess this as well as where access points for future coastal restoration are most appropriate for the foreseeable future.

2. RCCD will continue to pursue opportunities to match existing funding. One of the primary reasons the RCCD has been successful in obtaining this funding is because of the base funding provided by DNCR. This funding covers much of our costs for grant writing, mowing, volunteer coordination, and provides valuable match dollars. It is interesting to note the significance of our volunteer match value of over \$284,000 through 2023 and our continued partner funding value at almost \$855,000 over the past fourteen years, all of which continues to be impressive (see the Appendix for the total grant and volunteer summaries).

Proposed Funding:

National Fish and Wildlife Foundation (NFWF) National Coastal Resiliency Fund, 2024 (NCRF) - letter of intent submitted April 2024, full proposal, if requested back, due July 2024.

Proposed time frame: 10/25-12/28

With substantial assistance from the NH DES, Coastal Program staff a letter of intent (LOI) was submitted in April 2024 to develop final designs and permits for shoreland restoration and public access improvements at the Little Harbor section of Odiorne Point State Park. The project will protect a diverse set of coastal habitats and improve public access through resilient best management practices, with final designs and permits for shoreland restoration and public access improvements at the Little Harbor section of Odiorne Point State Park.

Initial funding request: \$450,000.00

NH Department of Agriculture, Markets and Food (NH DAMF), Integrated Pest Management Program (IPM).

Proposed time frame: 8/24-6/25

To assist with careful hand control and hand cutting in sensitive resource areas within the Little Harbor shoreline area, continued enhanced mapping within other areas of the park, to re-treat other previously managed areas, and complete continued outreach events.

Expected funding request: \$20,000.00

Long-term Management and Funding:

Long term resource management for enhancing coastal habitats in the park is needed. It is anticipated that during the next several years on-going management and monitoring will likely be transferred to NH DNCR, Parks and Recreation staff. RCCD will collaborate and cooperate to ensure that a smooth transition occurs when the time is deemed right. Grant funding for invasive species control work and/or habitat enhancement work is limited and competitive. Although the RCCD has been successful, piece-meal resource management options are difficult for long-term habitat restoration efforts.

NH DNCR base funding allows RCCD to apply for funds and to utilize it as partial match, but additional funds are needed to continue sustainable habitat management. As initially outlined in the 2010 IPMP, several options exist to support continued habitat restoration goals. It is hoped that the Odiorne Resource Management Committee will continue to work with RCCD to consider and evaluate collaborative funding models that may be acceptable. Future projects are also being discussed, and it is likely that the pollinator enhancement project may be extended along the Route 1A frontage, where practicable. It is also anticipated that additional engineering designs, permitting, and outreach will be needed for proposed trail modifications within the Little Harbor shoreline area. This is becoming increasingly important within these coastal resources and is now critical to enhance the resiliency of this area. The best alternative for an accessible trail is intended to be analyzed as well. Many different options and resource areas will continue to be assessed in 2024-2025 with increased collaborative discussion. Additional assessments, and coordination regarding best methods to advance an adaptive phased restoration approach co-aligned with approved funding objectives will take place in the near term.

As one maintenance component, the RCCD staff met with the NH State Forest Nursery Manager, Billy Kunelius, in the spring of 2024 to discuss optimal species for restoration plantings at Odiorne. RCCD has provided the nursery with an initial list of potential species and will continue to refine that list to determine approximate native species numbers needed, and a general planting timeframe during the next several years. RCCD will assist with seed collection and delivery and the NH State Forest Nursery. RCCD is also in the process of growing additional species for the RCCD to plant at Odiorne for the next several years. Please see the list of potential species in the Appendix.

APPENDIX

1. 2009-2024 Odiorne Grants and Match Spreadsheet
2. Volunteer Spreadsheet 2023
3. Total Volunteer & Match Value, 2023
4. 2024 Total Grant Summary
5. 2023 Odiorne Grants & Match to date, April 2024
6. Planting Spreadsheet by Year
7. 2023 Work Completed Odiorne Point State Park
8. 2023 Completed Native Plantings
9. 2023 Completed Shagbark Hickory Plantings
10. Existing and Proposed Odiorne Point State Park Restoration Partnership 2009-2024
11. 2024 Temporary Trail Closures and Alterations, Map 1 of 2
12. 2024 Temporary Trail Closures and Alterations, Map 2 of 2
13. Coastal Trail Over wash and Inundation Map, February 2024
14. 2024 Odiorne Restoration Focus Map