

# Plan for Wildwood Bank

(as recorded in the 28 February 2022 Wildwood Association Meeting Minutes)

## Table of Contents

### WILDWOOD’S PURPOSE AND PLAN OBJECTIVE

### FINDINGS AND PLAN

1. Erosion Control
2. Invasives Management
3. Maintaining and Improving the View
4. Stairs

### ACTION POINTS

### APPENDICES

1. Attachments
  1. Survey of Wildwood Reserve
  2. 2013 Shoreland Zone Permit and 2021 Shoreland Zone Permit Extension
  3. Vegetation Management Plan with 2022 Shoreland Zone Permit
  4. Budgets
2. References consulted
  1. Town of Cumberland Codes Officer: Bill Longley
  2. Landscape Architects: Sarah Witte and Tom Farmer
  3. Arborists: Bello & Wiggin Tree Company, Hawkes Tree Service, Brownie’s
  4. Landscapers: Gnome Landscaping
  5. Maine State Geologist: Peter Slovinsky
  6. Cumberland County Soil and Conservation District Engineer: Chris Baldwin
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### WILDWOOD’S PURPOSE AND PLAN OBJECTIVE

Wildwood’s purpose as stated in the by-laws: “The Purpose of this Corporation shall be to protect, preserve and maintain the physical assets of Wildwood and to ensure that this is a safe and welcoming environment for all present and future residents.”

The motion approved by the membership at 2020 Annual Meeting serves as the plan’s objective: “The Board is to develop and implement a short and long-term plan to address all issues (view, erosion, stairs, etc.). The Board is to have without limitations, the discretion to establish budget, consider assessments, appoint committees, retain professionals, and take any reasonable and necessary steps to

make and implement the plan. The Board is to work as quickly as possible to recover as much of the view as allowed by the Shoreland Zone ordinance.”

## FINDINGS AND PLAN

### 1. EROSION CONTROL

#### FINDINGS

In every conversation with every professional consulted, the board maintained that our primary focus is erosion control. The overwhelming advice was to first establish a baseline from which we will be able to measure and track any slumping or eroding on the bank. Therefore in 2020, the Board executed a full boundary and topographical survey with Owen Haskell Surveyors who also installed six Monitoring Points along the bank. (Survey attached)

Protecting our beach grass is imperative. The slightly elevated fringing dunes at the base of the bluff – marked by the presence of dune grass in several areas – must be protected. This dune formation is rare inside Casco Bay and it offers stabilization of the bluff, particularly in light of the strong southeasterly storm winds we have experienced in the last five years.

#### PLAN

Short-term plan: Keeping erosion control the top priority for all work and maintenance on the bank (see sections below) until we can read survey monitors. Start the process now for consulting and quoting the planting of low-lying and native water-loving plants back from the edge of the gullies while maintaining a barrier/strip of grass at the banks’ edge to prevent invasives from encroaching new plants and to reduce groundwater flow over the edge of the bluff.

Protect the beach grass from boat and rack storage, foot traffic, and soil disturbance. Create opportunities for the dune grass to spread by removing the tar on the beach adjacent to the dune grass. Start consulting our professional references about expanding the beach grass by planting beach grass plugs. Also, education is key – and the Wildwood Rules & Procedures should be updated to discourage walking on or disturbing the precious beach grass.

Long-term plan: Measure and track the Monitoring Points every 3-5 years for bank slumping and rate of erosion. The board will consult with experts such as geotechnical experts, engineers, coastal geologists, or the landscape architect to re-assess piezometers and the possibility of French drains, as well as assess the deep gullies developing on the beach.

## 1. INVASIVES MANAGEMENT

### FINDINGS

The Board consulted Cumberland Codes Enforcement Officer (CEO) Bill Longley, Landscape Architects Sarah Witte and Tom Farmer (who will take the lead now that Sarah is phasing into retirement), Shoreland-Zone-certified Landscaper Gnome Landscapes, and several ecological and environmental experts including Maine State Geologist Pete Slovinsky and the Cumberland County Soil and Water Conservation District Engineer Chris Baldwin for the best practices of invasives management in the Shoreland Zone, with a focus on health and safety of the bank and erosion.

Their unanimous recommendation was to “get comfortable” with the invasives for the long-term because their root systems provide critical stabilization of the bank and we will never have the financial or physical resources to eradicate invasives completely given how aggressively they take over new plantings. It is very difficult and expensive to ensure healthy growth of new plants on bank, so we have been advised to embrace the root systems that are already in place.

Maintenance for bittersweet and Japanese knotweed (bamboo) in particular are specified below:

- Bittersweet should be managed for the protection of trees and cut back, but leave roots intact for the stability of the bank. Because their root systems are crucial, do not use chemical treatments (i.e., herbicides including the “cut and dab” approach) to kill them. When bittersweet is so dominant (as it is along our bank), it plays a key role in bank stability because the root structure holds the soil together and reduces the groundwater load in the soil. Bittersweet’s root structure provides stabilization of the bank by binding the sand layers and the clay layers together. The roots serve as a mooring tying the layers to each other and thereby lessening slippage along the clay layer. Bittersweet should not be killed because the roots take up groundwater and lessen the impact of heavy rain. Also, any killing/root removal actually promotes aggressive invasive growth.
- Japanese Knotweed (bamboo) should also be managed, but contained to prevent further spread. There is a large area of knotweed near the base of the beach stairs to the south (right side near base of stairs if facing the water) which should be contained. Chopping and/or Smothering is recommended (see below explanation) for containment versus killing/eradicating the roots for erosion concerns.

We are allowed to execute all of the above invasives management methods under our Shoreland Zone permits. (2013 Shoreland Zone Permit and 2021 Extension attached)

## PLAN

Short and Long-term Plan: Leave invasive roots intact for bank stability. Consistently cut back encroaching invasives including bittersweet “shrubs” to max height of 36” along the top of the bank including the pollinator garden at least 2 or 3 times during the growing season. Late fall/early winter is the ideal time for the final cut of the season. Bittersweet vines entangling trees to also be cut. To the extent possible, bittersweet plants in the middle of the bank should also be trimmed on the same schedule.

For Japanese Knotweed (bamboo) exclusively and as permitted by our Shoreland Zone Permit, organize a volunteer-knotweed committee or hire a certified landscaper to chop and/or smother the edges of the section to prevent further spreading.

The Chopping Method: In the beginning of June, and again in July and August, cut stems close to the ground. Chop and bag the material and dispose of it like household waste – do NOT compost or toss into the woods where it can regrow. The chopping and removing plan is 3 times each summer for three years. More information is available from a group in Connecticut called NixtheKnotweed. They and others have videos on Youtube explaining the approach: <https://www.youtube.com/watch?v=LQEv3mWzdFI>

The Smothering Method: In the beginning of June, cut stems close to the ground. Cover with heavy plastic staked to the ground, and put mulch on top of the smothering material to improve its appearance. This is most effective in early summer once the plants have put on a significant amount of growth and have exhausted some of the reserves in their rhizomes. Smothering can take upwards of five years.

We have approved permits for all work described above and it is in our best interest to partner the Codes Officer with a “heads up” when any work is scheduled so that it is on his radar.

## 1. MAINTAINING AND IMPROVING THE VIEW

### FINDINGS

Implementing an ongoing maintenance plan on a regular basis is crucial to

maintaining the view. The first step was securing approval for this work through a Shoreland Zone Permit for which we were approved in 2021. We are now allowed to maintain the current view by consistently cutting back of the encroaching invasives and non-invasive shrubby understory along the top of the bank at least 2 or 3 times per year. Sarah Witte's exact words were, "Don't stop!" Vegetation should not be cut lower than 36" which is the maximum allowed height. In all removal and trimming tasks, the debris should be hauled away and not spread on the bank partly because it's not legal per Shoreland Zone rules and partly because it actually allows for more erosion, and partly because the seeds of any invasives will be given more chances to grow. Any contractors hired to do this work should be certified by DEP for the Shoreland Zone.

Improving the view is also allowed within the Shoreland Zone along these guidelines:

"Limb up" the bottom 1/3 of trees which would not only improve the view, but maintain tree health, reduce the weight of the trees for potential falls and soil slumpage, cut windage, and allow more sunlight to reach the root systems of the understory providing bank stability. Arborists who would perform the limbing do not need to be DEP certified for Shoreland Zone, that only applies to contractors working in earthwork like landscapers.

Implementation of a Vegetation Management Plan using the "point system" which would allow carefully selected vegetation to be cut down to ground level with roots remaining intact. Shoreland Zoning standards established a rating system which defines a "well-distributed stand of trees" and owners in the Shoreland Zone must maintain a minimum number of "points" worth of trees within any 25'x50' area, and at least 5 saplings (for the next generation). Any sections with 16 or fewer points will not have any trees removed. Points are assigned to trees depending on their trunk size. Implementation of a Vegetation Management requires hiring a licensed professional (in our case, landscape architects Sarah Witte and Tom Farmer) to inventory vegetation and measure trees, thoughtfully select vegetation for removal, prepare the plan, and submit it to the town code officer for approval. Once approved, work has to be completed within a year or an extension can be requested. So long as we continually trim and maintain approved vegetation every year or two, it does not require re-permitting. This includes saplings: once the 5 saplings are identified in each grid, we can eliminate any saplings over

and above the required 5 as long as the points are also met. If new growth is not maintained after several years and becomes a 6' tree, for example, then re-permitting is necessary which requires going through the point system again.

## PLAN

Short-term Plan: Contract Gnome or another landscaper certified by DEP for Shoreland Zone to continue to maintain cutting invasives and non-invasive shrubby understory along the top of the bank at least 36" high at least 2 or 3 times per year. We have an approved Shoreland Zone permit for this work (2021 Shoreland Zone permit extension attached) and it is in our best interest to partner the Codes Officer with a "heads up" when any work is scheduled so that it is on his radar.

Contract an arborist to limb the bottom third of a selection of trees on the bank. Trees selected by the arborist for limbing were identified primarily for view improvement, but considerations were also taken for tree health, safety, and budget. Even though it is not required for limbing, we have an approved Shoreland Zone permit for this work (2022 Shoreland Zone permit attached) and it is in our best interest to partner the Codes Officer with a "heads up" when any work is scheduled so that it is on his radar.

Keep the process moving forward for implementing a Vegetation Management Plan. In October, the board approved hiring Sarah Witte and Tom Farmer to prepare a Vegetation Management Plan for the bank who summarized their plan as follows:

"The proposed activity is a Vegetation Management Plan for the health of the trees, management of the invasives, and maintenance of the view. No earthwork or construction is proposed." They spent several days on the bank taking an inventory and carefully tagging selected vegetation for removal according to the point system. Vegetation flagged with a pink ribbon may be removed by cutting it to ground level without disturbing the roots. Sarah and Tom were very thoughtful in identifying this vegetation... trees may have been selected because it was a concern for erosion, or it compromised a nearby tree's potential for growth, or because a tree would eventually create view problems. Every decision made for each tree kept in mind our concerns for erosion (Vegetation Management Plan with approved 2022 Shoreland Zone permit attached).

Tom Farmer submitted the Vegetation Management Plan to Cumberland Codes Enforcement Officer Bill Longley and it was approved on January 31, 2022 and it

is valid for one year.

The board secured several quotes from licensed arborists for both the above-mentioned limbing of the trees and flagged-vegetation removal according to the approved Vegetation Management Plan. The board is seeking association approval for pulling from reserves for executing this work (see Action Points). Tom Farmer will meet with the arborist prior to work commencing to make sure that work happens in the correct order and to the right specifications.

Long-term Plan: Contract an arborist to cut and maintain vegetation within one to two years as needed per the Vegetation Management Plan – it was recommended that we tag, paint, or stake the cut stems to be able to identify and continue to maintain them going forward – and continue to limb the bottom third of selected trees and cut entangling bittersweet. The board has also recorded a video of all flagged vegetation for future reference. Now that we have a baseline grid plan for the entire bank, as trees grow and vegetation evolves, landscape architect Tom Farmer said that we can hire him “as needed” to evaluate certain grids or sections of concern which will be much less expensive than gridding out the entire bank again. Hire Tom Farmer to re-evaluate grids within the historic view areas in 2026.

## 1. STAIRS

### FINDINGS

Barring any unforeseen circumstances, several knowledgeable neighbors have assessed the stairs and deemed them structurally sound overall for immediate years to come. It is important to keep the sand from accumulating below them because sand and the salt water it holds are not good for steel. There are a couple of rusty posts that will need attention and neighborhood volunteers have continued to replaced treads as needed. The treads are looking worse for wear than expected because it was recently discovered that “interior” replacement stair treads were accidentally ordered years ago and not “exterior” treads that would withstand the elements better.

### PLAN

Short-term plan: Maintain stairs to extend their longevity. To make it easy to keep sand away from treads, a shovel has been placed to the right of the base of the beach stairs. Replacement of rusted posts has been generously offered by neighborhood volunteers, Doug Geheb and John Ingham. When we are out of the current supply, order “exterior” replacement treads going forward.

The Board shall seek a professional opinion for the structural integrity of the

stairs. Strategize means to extend their useful life, i.e. replace treads with fiberglass or other measures.

Long-term plan: Though not an immediate need, this is a future capital expenditure to budget and plan for in the years to come. With the raised dues amount of \$500 kicking in this year, the association will continue to build reserves. Neighbor Caleb Ballard, a mechanical contractor, has connections with a metal fabricator and is working on an economical quote for similar replacement stairs.

#### ACTION POINTS IN ORDER OF PRIORITY (HIGHEST PRIORITY FIRST)

1. Execute Sarah Witte and Tom Farmer's Vegetation Management Plan which allows vegetation removal and selected tree limbing. Hire arborist Bello & Wiggin Tree Company to remove all pink flagged vegetation per Vegetation Management Plan, limb the bottom third of selected trees along the waterfront, cut bittersweet entangling trees, and stake removed vegetation so that we can identify and maintain removed vegetation going forward. Tom Farmer to meet the arborist prior to commencing work to review scope of the job and proper execution. Partner Cumberland CEO when work is scheduled.
2. Consult professional references about expanding the beach grass by planting beach grass plugs.
3. Contract Gnome or another landscaper certified by DEP for Shoreland Zoning to continue to maintain cutting invasives and non-invasive shrubby understory along the top of the bank at least 36" high 2-3 times per year. Partner Cumberland CEO when work is scheduled.
4. Start the process now for consulting and quoting the planting of low-lying and native water-loving plants back from the edge of the gullies while maintaining a barrier/strip of grass at the banks' edge to prevent invasives from encroaching new plants and to reduce groundwater flow over the edge of the bluff
5. June 2022, contract certified landscaper or organize neighborhood volunteers to chop or smother Japanese knotweed (bamboo) as recommended. Partner Cumberland CEO when work is scheduled.
6. During Fall of 2023 at the earliest or anytime through 2025, hire Owen Haskell to survey the Monitoring Points (~\$700) and assess for bank slumping and rate of erosion. The board will consult with experts such as geotechnical experts, engineers, coastal geologists, or the landscape architect to re-assess piezometers and the possibility of



- French drains, as well as assess the deep gullies developing on the beach.
7. 2023-2024, contract same arborist to continue to maintain vegetation removal according to Vegetation Management Plan and limb trees as needed. Partner Cumberland CEO when work is scheduled.

## APPENDICES

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