

miOTTAWA SANDS PARK

A COLLECTIVE COMMUNITY
VISIONING PLAN

DECEMBER 2020



Ottawa County Parks &
Recreation Commission



miOTTAWA SANDS PARK

A COLLECTIVE COMMUNITY VISIONING PLAN

PREPARED FOR THE OTTAWA COUNTY PARKS & RECREATION COMMISSION

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Introduction

EXECUTIVE SUMMARY

A Master Plan is both an idea as well as a tool. The ideas generated in the process are meant to be used as transitional tools to implement the community-driven vision. The Ottawa Sands County Park Master Plan was achieved through the collaboration of a dedicated County Parks Department and an active citizen base that embarked on a process that would guide the community toward recognizing the potential for redevelopment at this key greenway hub.

Through extensive interaction with residents, municipal leaders, governmental agencies, and others, a plan was conceptualized which addresses the desires, needs, and expectations of the community. Throughout the community engagement process, it was possible to build a picture of how participants defined a sense of place on the 345-acre former sand mining property. From the process, the Master Plan was shaped as an instrument to guide future development at the park. The community has presented high expectations for the improvement of the site which currently consists of walking trails, an 80-acre man-made lake, over a mile of Grand River shoreline, critical dunes, and is situated in a 2,400-acre corridor of public land.

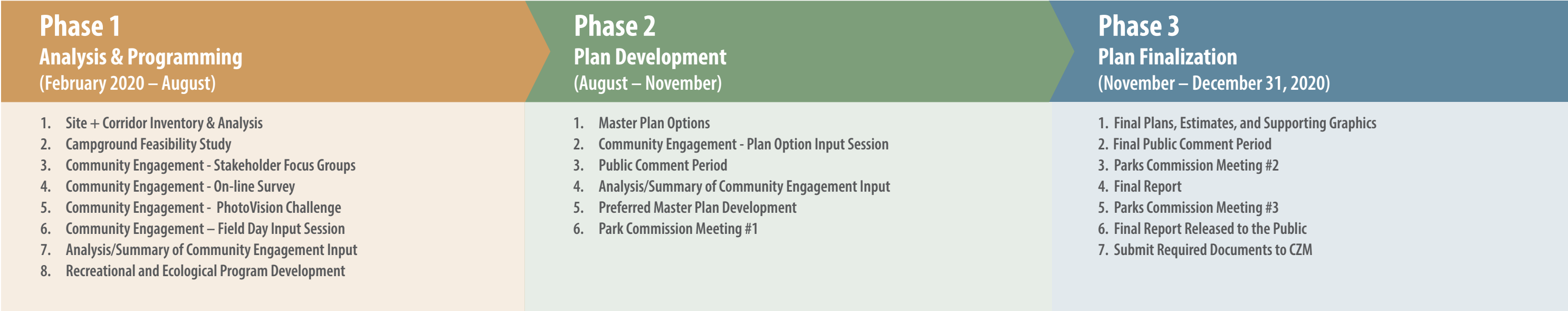
With the site’s abundant natural features, scenic beauty, proximity to a waterfront urban center, and a significant amount of disturbed land (nearly 90 acres), the site as well as the entire corridor offer tremendous opportunities for recreation, connectivity, place-making, improved natural resource management, and restoration. As a result, the master plan’s focus is on integrating unique uses, site amenities, and restoration techniques to create a park experience that is like no other found in Michigan.

In the brief time since the park was opened to the public in 2019, the site has experienced significant use. With public interest and feedback regarding the property extremely high, this Master Plan emphasizes the human factor critical to place-based decision making. It represents a robust community engagement model that delves deeply into topics like conservation, preservation and recreational access and programming.

This process recognizes that a “plan” is only successful if it is informed and reflective of the input provided. The plan should provide clear guidelines for how a place is going to look, feel, and interact with its users and is important for maintaining the positive, distinct qualities of a place and making the most of existing resources.

The Ottawa Sands Master Plan capitalizes on the community’s assets, inspiration, and potential, with the intention of creating a place that promotes people’s and the environment’s health, happiness, and well-being. The Master Plan builds upon the idea that creating a culture of place takes intentional and integrated efforts from community leaders, staff, local organizations, and the general public. The result is a plan with a focus on physical and emotional connectivity and natural resource management that strengthens the immediate site, adjacent greenway corridors, and the West Michigan region.

THE PLANNING PROCESS





INTENT

This Master Plan document provides a coordinated approach to making important decisions regarding the future site development at Ottawa Sands County Park. Site development decisions are influenced by several factors that can change unpredictably over time and thus require ongoing careful evaluation and consideration. As such, the master plan must provide sufficient data and extensive public input to support future development decisions, as it is one of the primary tools used by the Ottawa County Parks & Recreation Commission (OCPRC) in making decisions that affect the future use of this site. The following describes the overall intent for the Master Plan:

- Provide a long-range planning document to help guide decision makers in transforming the site from an underutilized and disconnected sand mining operation into an integrated, accessible community asset.
- Capitalize upon existing and proposed Greenway efforts to expand recreation options and ecological improvements along the Grand River and Coastal Corridor.
- Provide guidance to create a connected network of diverse dunal, upland, riparian, and riverine habitat areas.
- Recommend opportunities to celebrate the historical and cultural significance of the existing landscapes by recognizing their intrinsic value and making improvements to bring their stories to life.
- Establish a conceptual design vocabulary that acknowledges and allows for the diverse character of areas along the corridor to be expressed.

HOW TO USE THIS PLAN

This master plan is meant to be used as a tool for both the OCPRC and citizens to understand the guiding principles that participants in the planning process expect. While the plan identifies conceptual opportunities for recreational and ecological development, it also provides a framework for responding to federal and state grants and philanthropic proposals and has the ability to respond more readily to changing recreation trends.

Inventory + Analysis

THE STORY OF THE SITE

COASTAL + RIVER GREENWAY CONTEXT

NATURAL FEATURES INVENTORY

ECOLOGICAL ANALYSIS

RECREATION + CONNECTIVITY + CAMPING ANALYSIS

THE STORY OF THE SITE

CONFLUENCE OF ECOLOGY AND PEOPLE

The landscape of the Ottawa Sands site paints an amazing picture of the close interrelationship between people, this land, and the forces of nature throughout time. The landscape has both supported and been influenced by the cultural practices of local populations from before earliest recorded observations and has gone through dramatically different iterations during that time. The land and its rich resources have provided for the needs of human residents for thousands of years. On the northern shore of the lower Grand River, near its confluence with and just inland from Lake Michigan, Ottawa Sands is part of the extensive series of lakefront dunes formed by drifting sands over centuries following the last retreat of glaciers over 10,000 years ago. During this dynamic era, the Grand River actually flowed through the site for a period of time. The site contains back dunes that stabilized 6-7,000 years ago to the east, and fore dunes a few thousand years later to the west. The distinct wind-formed topography became blanketed with a living surface, initially grasses, then more diverse perennials and woody plants as the soil became more complex. Aboriginal peoples occupied this area during that time up until about 200 years ago, and the plants and animals of the dunes co-evolved with the native people, in part through their cultural practices that sustained their needs. Removal of wood for cooking and heating kept the wooded landscape fairly open. Selective harvesting of the understory plants for food, medicine, dyes, building materials, and other uses created a level of disturbance that stimulated new growth. Annual fires were used in hunting, and to burn off the dormant material in the fall, keeping it safe from uncontrolled fire during the winter and early spring. All of these practices led to an extremely diverse, rich, and stable landscape covering the dune surface.

Western settlement then transitioned the Ottawa Sands landscape to another era of human engagement, one that was largely extractive in nature. The riverfront site made it an ideal conduit for the rapidly harvested timber and other natural resources to flow through from the interior of the state to other growing markets, primarily Chicago, via lake-bound vessels. Timber was harvested from the late 1830's through the 1920's and included pine and other hardwoods for lumber and industry, and cordwood to fuel steam-powered trains and ships, as well as for cooking and heating homes. The removal of timber exposed the understory to a much higher light level. The timber clearing was visually dramatic, as was the introduction of roads and structures, including a rail line and train depot in 1858, and the associated smoke and din of steam-driven machines.

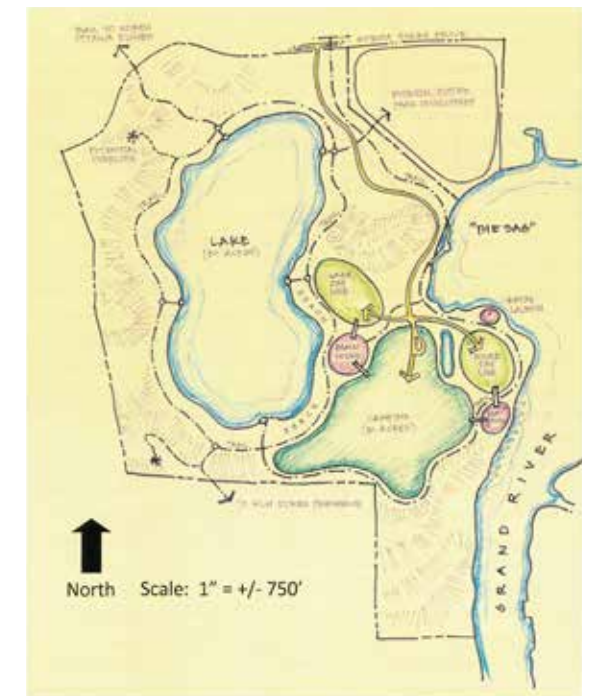
Much of the site was otherwise undisturbed, and changes that were occurring to the perennial vegetation and underlying soil were much more gradual and subtle. During this time, the landscape no longer experienced the regular, seasonally rhythmic disturbance that its stability relied upon from the native people, and so began to transition. Fire suppression led to some species declining, and others becoming more dominant.

Transitioning to the next phase of human engagement, the timber and other resources that passed through the site dwindled and markets shifted, and the site and adjacent dunes were used passively for recreation and traversed by dune rides. The underlying sand then became the primary resource for extraction, - a sand mining operation was established on the site in the 1950's, and the site became closed to the public for seventy years. The interior portion of the property was excavated, sorted, and shipped via river barge conveniently loaded on the southeast side of the site. This operation provided a steady source of high-quality sand for the automotive and construction industries for decades. During this time, the woody vegetation re-grew on the perimeter of the site that was not mined. The understory eventually became incrementally more shaded, and the changing light levels allowed some of the woodland perennials to fade away. These changes were also quite gradual, especially in contrast to the rapidly changing interior that reduced undulating dune landforms to a large, open lake, excavated to a depth of sixty feet. As the most valuable sand became diminished, the extraction operation was phased out, and eventually closed, and the area of the sand extraction was either open water in the lake or re-vegetated with native grasses.

The next era of human engagement then emerged when the site was acquired by Ottawa County for public use in perpetuity. The site was opened for public access after the acquisition and the primary use of the site to date has been low-impact walking trails around the lake and wooded areas. Remnant made-made facilities from the previous industrial use can still be found on the site. They include: gravel entrance drive, control gates, breasting dolphins along the river, office building, water well, and overhead electrical lines.



ACTIVE MINING DURING THE 1990'S



Site Development Plan
Ottawa Sand Acquisition



COASTAL + RIVER GREENWAY CONTEXT

ECOLOGICAL CONTEXT

The Ottawa Sands site is a part of a much more extensive coastal and river greenway corridor open space system, and provides a critical link between the North Ottawa Dunes site and the PJ Hoffmaster State Park to the north, the City of Grand Haven Open space and Kitchel-Lindquist-Hartger Dunes Preserve sites to the south and towns, universities, and cities to the east. From an ecology perspective, these adjacencies and the larger critical mass of the entire system are likely a large part of the reason for the level of ecological integrity that remains on much of the site; the plants, animals, and other organisms native to lakefront dune habitat are prevalent in the area, and therefore have been able to remain and/or have repopulated the disturbed areas of the site. Despite the intensive extractive uses that were operated on the Ottawa Sands site for many decades, it has always provided habitat for migratory birds, raptors, amphibians, and many other species of wildlife. The richness of the site ecology is likely substantially greater than it would be if it were an isolated patch. Alternatively, it serves to sustain and support the ecology of the adjacent lands through providing connectivity and allowing the free flow of all manner of flora and fauna across the property lines that are undetectable by non-human residents.

RECREATION CONTEXT

From a recreational perspective, the site, as mentioned above, is situated in a prominent confluence of the Lake Michigan Coastal and Grand River Greenways Corridors. The Grand River Greenway will eventually connect the City of Grand Rapids to Lake Michigan via the Grand River and Idema Explorers Greenway Trail. The River Greenway is comprised of a non-motorized shared-use trail connecting to other Ottawa County Parks and natural areas, villages, cities, and university campuses along its route. The Lake Michigan Coastal Greenway Trail system is comprised primarily of preserved open space with existing and planned paved and nature trails connecting from PJ Hoffmaster State Park to the north and the Grand Haven Pier to the south. There are immense opportunities to provide recreational facilities and programs on the Ottawa Sands property that are currently absent as well as compliment other existing and proposed recreational uses within the corridor.



PJ HOFFMASTER STATE PARK



NORTH OTTAWA DUNES



NORTH BEACH



COAST GUARD PARK



OTTAWA SANDS PARK



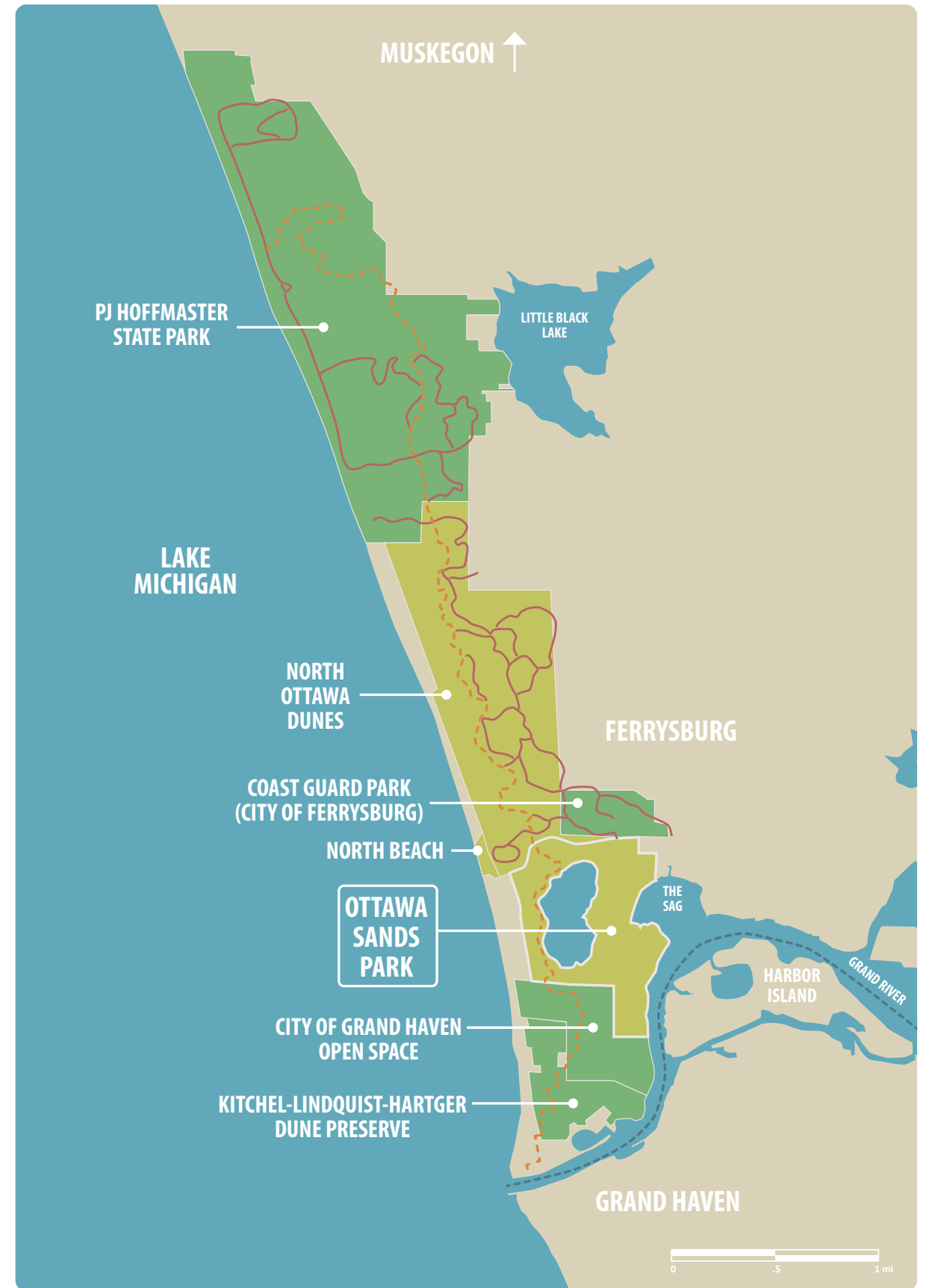
GRAND HAVEN OPEN SPACE



KLH DUNE PRESERVE

LEGEND

- - - PROPOSED COASTAL GREENWAY TRAIL
- EXISTING TRAILS
- - - GRAND RIVER GREENWAY
- OCPRC MANAGED OPEN SPACE
- OTHER PUBLIC GREEN SPACE



NATURAL FEATURES INVENTORY

FLORA

A detailed floristic inventory was performed by William Martinus in 2020 and augmented by his numerous site observations prior to then. As a whole, the site is an interesting tapestry of landscape ecologies that are evocative in varying degrees of Michigan natural land typologies, including four Terrestrial and seven Palustrine (wetlands), described in the Hydrology/Wetlands section. There were also areas that do not currently resemble a natural community, including the quarry lake, excavated areas, and open “dune field”, all of which were created during the mining operations.

The survey identified 392 different plant species, 278 of which are native to Michigan. The trees included hardwood and conifer species indicative of Mesic and Dry Mesic Northern Forest. There were only a few larger, older specimens, and the age distribution of tree species was somewhat narrow generally, indicating removal of trees for timber in the past. There were 11 species of ferns, 34 species of sedges, and 49 species of grasses, although their overall coverage and density was quite sparse, due to past disturbance, over-browsing by deer, and fire suppression.

There were several more conservative native species present, including 18 that rate 8 or higher on a scale of 1 to 10, with 10 being the most conservative. However, the vast majority were three or lower on this scale, indicating a degraded condition. There were 3 plants on the state list for species of Special Concern, although they were not as conservative. There was one plant (Pitcher’s Thistle) on the federal (and state) Threatened list, although this was a bit of an anomaly, in that it has been observed growing in the altered dune field area which bears the lowest level of integrity of the site’s plant communities.

It should be noted that the large size of the site and the overall diversity described above have led to an initial Floristic Quality Assessment (FQA) score that is relatively high. This metric, used by Ottawa County Parks on other sites (and widely used in the State of Michigan to evaluate natural areas) was developed by Floyd Swink and Gerould Wilhelm, PhD, one of the consultants on the Master Plan team. Although the site has great ecological value in regard to its key location in the coastal and river corridors, this score should not be misinterpreted to overvalue any particular area of the site. Additional more detailed FQA scoring on individual plant communities on the site would likely lead to a more accurate scores and a better indicator of rarity, integrity, and value of these areas.

HYDROLOGY/WETLANDS

Healthy natural landscapes rely upon stable, steady water temperature, chemistry, and hydrology/degree of seasonal wetness to thrive. The relative wetness of the landscape is in direct correlation to the soils and water table (elevation of groundwater) of the site. Wet conditions on the site exist adjacent to open water bodies, including the Sag, the Grand River, and the excavated quarry lake. Other wetland areas interior to the site have developed in shallow excavations associated with mining operations and were not present prior those activities.

A detailed Wetland Assessment and Restoration Concept Plan was performed by Applied Ecological Sciences, Inc. during the spring/summer of 2020. The survey identified and classified eighteen distinct areas that were recognized as wetlands. The site included both riverine and dunal contexts and exhibits characteristics of seven distinct Michigan wetland typologies: Submergent Marsh, Emergent Marsh, Great Lakes Marsh, Intermittent Wetland, Inundated Shrub Swamp, Northern Shrub Thicket, and Southern Hardwood Swamp. The study made a series of recommendations for the restoration and improvement of each of the eighteen areas and ranks these restoration priorities of the different wetland features in groups. This ranking listed areas adjacent to the quarry lake first. These recommendations were adapted into the overall site ecology restoration and long-term management approach of the Master Plan.

REPTILES/AMPHIBIANS

Another excellent indicator of ecological health was the presence, diversity, and relative rarity of reptile and amphibian species. A Herpetological Assessment was performed for the Ottawa Sands site by Herpetological Resource and Management, LLC. The survey observed two species of reptiles (Northern Brown Snake and Eastern Box Turtle) and four species of amphibians while on-site, including one ecologically significant species, the Fowler’s Toad (*Bufo [Anaxyrus] fowleri*), which is rare throughout most of the state and listed as a Species of Concern and protected by law in Michigan. The study concluded that there are likely seventeen additional reptile and amphibian species present based upon the current site conditions, some of which have already been confirmed by others. In addition to verifying the presence and likely presence of reptiles and amphibian species, the report also made several recommendations to improve habitat for these and potentially other species. These recommendations were incorporated into the Master Plan.

OTHER WILDLIFE

The Ottawa Sands site hosts a variety of other species of wildlife that have been observed anecdotally in recent time. In addition to the reptiles and amphibian species, there are deer, turkey, and other small mammals. 103 species of birds have been identified, including a pair of nesting Bald Eagles that have been observed on-site throughout the mining operations and have remained since the site was opened for public use. Bald Eagles and Red-Headed Woodpeckers, also seen nesting on-site, are both species of Special Concern. 47 species of insects have been observed, and a complete insect inventory would likely yield many more species as well.

Eight species of fish have been observed in snorkel surveys of the lake; largemouth bass was the more prevalent gamefish, with a few smallmouths identified. Panfish species were largely bluegill, with some yellow perch, both generally of smaller size. Forage species included sand shiners, bluntnose minnows, and banded killifish. The size and distribution of these fish species generally indicated the lake is lacking sufficient food sources for the predator species and panfish, and habitat to support greater numbers of forage species.

SUMMARY

The natural features inventories represent a snapshot in time of a complex, interrelated, dynamic landscape that is at the dawn of the next era of human engagement. The site’s diverse natural features reinforced the fact that while the site currently provides habitat to a large variety of flora and fauna, and provides a critical ecological and cultural link within the Coastal and River Greenway Corridors, all of the landscapes are degraded to varying degrees. The site ecology is generally declining due to a variety of factors, primarily related to the lack of active management/stewardship prior to acquisition by Ottawa County dating back to early settlement. These factors, including deer over browsing, fire suppression, and aggressive invasive plants, will continue to contribute to system decline without active intervention.

This decline is not immediately evident to most visitors, as the site has only been open to the public for a short period of time. It is only perceivable through the type of continued measurement and analysis of ecological indicators the County has initiated with this Master Plan. The interventions necessary to begin a new era of regeneration based upon natural process at Ottawa Sands were woven into the planning recommendations of the Master Plan.

ECOLOGICAL ANALYSIS

OVERVIEW

There is a sense of peaceful isolation that is experienced within the site, shielded from the adjacent noise and movement of active urban life, industry, and river activities. This is due in large part to the topography of the remnant dunes around much of the site's perimeters and augmented with several large stabilized spoil piles which screen and buffer views and noise from off-site. This overall, palpable perception of serenity has led many to describe the Ottawa Sands property as "pristine". While the site has many wonderful ecological amenities, as well as enormous habitat restoration potential, the current conditions and history clearly indicate a significant level of impact to virtually every spot on the site, with various degrees of disturbance.

While the entire site exhibits altered conditions due to various impacts over time as is described in earlier sections, the portions of the site that have experienced less surface disruption generally exhibit a higher level of ecological integrity. As the floristic survey clearly illustrates, the level of ecological integrity generally correlates to the level of soil disturbance on the site. For the purposes of this analysis, the tapestry of existing conditions and representational Michigan ecology typologies has been simplified into nine generally distinct characteristic zones.

ZONES

This analysis was used to consider the potential location and layout of various active recreational uses to integrate into the site. The nine landscape zones are listed below in descending order of least disturbed, and therefore greater habitat restoration potential, to most disturbed:

- 1 OPEN BARRENS**
 - Back dune topography
 - Open grassland with a higher concentration of native species
 - Generally less-disturbed soils
- 2 IMPACTED FOREST - WEST/SOUTH**
 - Foredune topography
 - Hardwood and pine tree species
 - Sparse understory (ground plane) vegetation due to shading and deer browsing
 - Generally less-disturbed soils
- 3 IMPACTED FOREST - EAST**
 - Back dune topography
 - Varying tree cover, mostly younger
 - Sparse, low-diversity understory (ground plane) vegetation due to shading and deer browsing
 - Some degree of soil disturbance
- 4 SAG MARSH**
 - Transitions from marsh to open water
 - Subject to water level of the river
- 5 MARSH SHORELINE**
 - Narrow aquatic edge
 - Shoreline erosion due to steep conditions, foot paths and wave action
- 6 QUARRY LAKE**
 - Open water from quarry excavation up to 60' deep
 - Variety of fish species, few predator species
- 7 EXCAVATED MARSH**
 - Common wetland species in former quarry settling basins
 - Former open water basins were filled in after mining operations ended
- 8 RIVER EDGE**
 - Fairly steep, eroding river shoreline due to steep side slopes, river scouring, and waves generated by river boat traffic
 - Narrow aquatic edge with minimal native vegetation
- 9 EXCAVATED DUNE**
 - Sparse dune vegetation in open areas of former excavation and quarry material/equipment operations



RECREATION + CONNECTIVITY+ CAMPING ANALYSIS

RECREATION + CONNECTIVITY

As described in the 2021 Ottawa County Parks, Recreation, & Open Space Plan, Ottawa Sands is classified as a Regional Park within the Lake Michigan Coastal Greenway with a service area radius of 20-40 miles. Parks in this classification are usually large (100-500+ acres) and are located to take advantage of unique land and/or water resources. Park development emphasizes preservation of the natural environment and typical facilities might include picnic areas, swimming and boating facilities, camping areas, nature interpretation facilities, winter sports areas and a wide variety of other facilities.

Currently, recreational opportunities at the park are limited to a 3.5-mile network of foot trails consisting of loose sand and the former gravel mining access road. Users enjoy bird watching and the general scenic nature of the property. While a trail connection exists to the North Shore paved path, other opportunities exist. There are several other parks and open spaces directly adjacent or in close proximity to Ottawa Sands. They include:

- Coast Guard Park - Traditional amenities including court and field games, picnic areas, play areas, shelters and paved parking
- North Ottawa Dunes - Extensive undeveloped dunes and forestlands with nature trails, boardwalks and overlooks
- North Beach Park - Lake Michigan swimming beach, picnic shelter, volleyball, play area, dune climb, vending/concessions and paved parking
- Grand Haven Open Space - Undeveloped dunes and forestlands
- Kitchel-Lindquist-Hartger Dunes Preserve - Undeveloped dunes and forestlands with nature trails and small parking lot

As mentioned earlier, Ottawa Sands is situated in a prominent confluence of the Lake Michigan Coastal and Grand River Greenways Corridors. Additionally, with its proximity to a major waterfront urban center, there is incredible potential for this site to act as the “Hub” for recreational programming, environmental education/leadership, and local and regional water and land trail connectivity. Based on the ecological analysis, recreational development and programming including support facilities, such as roads, parking, and structures, should be placed on the areas of the site already disturbed by past mining activities.

CAMPING

A campground feasibility study was conducted by MC2 to provide an assessment for developing a campground within the park. The report intended to determine the feasibility of and assessment of target markets for the campground, type of potential camping accommodations, estimate of construction costs, suggested rate structures, and estimate of operational expenses.

A summary of the site’s strengths related to camping include:

- Location between Lake Michigan and the Grand River situated centrally to Ferrysburg, Village of Spring Lake, Grand Haven, and Spring Lake Township
- 80 acre fresh water inland lake
- Disturbed areas ripe for recreational opportunities
- Undulating forested and critical dune terrain allows for vistas, seclusion, and habitat development
- Adjacency to the Grand River allows for increased river access to the site as well as increased recreational programming opportunities
- Abundant and unique flora and fauna to area is an attraction for visitors
- Existing trail system offers connections to adjacent parks, open spaces, and beaches along the Lake Michigan coastline from the Grand Haven Pier to P.J. Hoffmaster State Park
- Education and interpretation opportunities based on unique history of the site and the ecological importance of protecting and enhancing the biological diversity

Although the study presents several compelling opportunities for multiple camping options including the financial feasibility of a full scale modern RV campground, it became clear during the engagement sessions, that camping within the park should be focused on creating a low-impact and unique experience. Yurts, tent pads, and cabins/treehouses were among the most desired camping facilities based on stakeholder and community input.

A regional assessment shows very little choice in having a unique camping experience. Outdoor recreation trends are adjusting to today’s demographics. The Baby Boomer cycle is waning with the next large demographic group, the Millennials, increasing their presence into the outdoors. Millennials, along with Generation X desire to be challenged or have a unique experience from traditional camping experiences of the past.



Recreational Opportunities



Unique Camping Opportunities

Engaging the Community

A COLLABORATIVE COMMUNITY-BASED PROCESS
OUTREACH STRATEGIES
ENGAGEMENT SUMMARY

A COLLABORATIVE COMMUNITY-BASED PROCESS

OVERVIEW

Robust community engagement was essential to the planning process for Ottawa Sands. Stakeholders identified needs and concerns, proposed solutions, and offered implementation strategies. The community is heavily invested in this master plan and has expressed commitment to advancing its design initiatives.

To collect input on community priorities and to build consensus for future implementation, the design team led a diverse public engagement strategy throughout the planning process. Outreach was conducted at a variety of scales and access points, allowing community members to provide input in person or virtually. Over 1,000 people in the West Michigan community and beyond participated in a broad range of input opportunities through public meetings, community events, social media, online surveys, and focus group stakeholder meetings. The following pages highlight the process and some of the feedback the team heard through the project process which became a basis for the design direction. Notes and summaries of these outreach strategies are included in Appendix C.

FOCUS GROUPS

The engagement process kicked off with a two-day engagement session of discovery and conversation with project partners and local stakeholders. These community leaders provided valuable insight into Ottawa Sands Park, Lake Michigan Coastal Corridor, and surrounding areas. The findings of these conversations shaped the format and foundation of the broader public engagement process and defined a set of shared master plan goals:

1. Coordinated Management Approach
2. Improved & Connected Trail Systems
3. Unique Camping Experience
4. Ecological & Historical Awareness
5. Improved Parking
6. Pedestrian & Vehicular Safety
7. Economic Development & Tourism
8. Grand River Interaction



miOTTAWA SANDS PARK PUBLIC OUTREACH PROCESS

FOCUS GROUPS

City of Ferrysburg • City of Grand Haven • MDNR State Parks • OCPRC Board Members • Friends of Ottawa County Parks • OCPRC Foundation • OCPRC Staff • County Commissioners • Kitchel-Lindquist-Hartger Dunes Preserve • Ottawa County Dune and Wetland Corridor Stakeholders

ONLINE SURVEY

June 20 - July 31, 2020
872 Participants

PHOTOVISION CHALLENGE

March 10 - October 1, 2020
45 Participants

COMMUNITY FIELD DAY INPUT SESSION #1

July 18, 2020
48 Participants

COMMUNITY OPEN HOUSE INPUT SESSION #2

October 3, 2020
40 Participants

OUTREACH STRATEGIES

ONLINE SURVEY

A virtual participant survey was provided to capture a wide range of public opinion on future improvements to Ottawa Sands Park. The survey asked participants a series of 19 questions focused on their proximity to the park, their desired use of the park space, and how they feel the park should be managed both ecologically and programmatically. The data collected was analyzed and used to develop two schematic master plan design options for the community to respond to. Below is a sampling of the online survey findings:

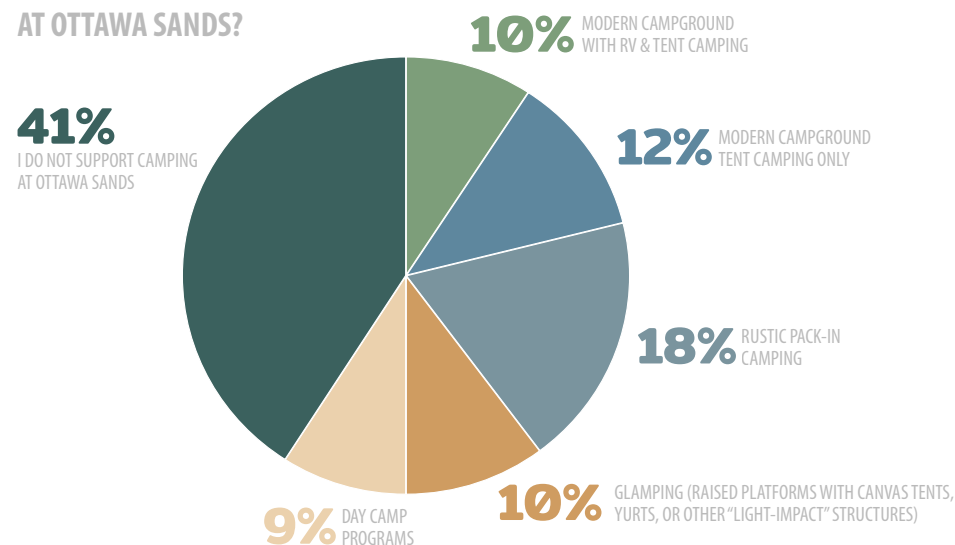
TOP 15 OPPORTUNITIES PARTICIPANTS ARE EXCITED ABOUT

1. **HIKING:** (walking, natural paths, boardwalks, more/improved trails)
2. **NON-MOTORIZED BOATING:** (kayaks, canoes, paddle boarding)
3. **SWIMMING:** (inland lake access, beach)
4. **WILDLIFE VIEWING:** (birdwatching, views, photography, eagle's nest)
5. **HABITAT:** (minimal to no development on site, restoration, quiet)
6. **CAMPING:** (glamping, yurts, RVs, rustic, tents, primitive)
7. **FISHING**
8. **MOUNTAIN BIKING/BIKING TRAILS**
9. **ACCESS:** (paved trails, ADA, multi-use)
10. **REGIONAL TRAILS:** (connect to PJ Hoffmaster, trail to canal, trail through KL)
11. **PICNIC SHELTERS**
12. **EDUCATION:** (interpretive signage, Native-American history, site ecology)
13. **HUNTING:** (deer)
14. **GRAND RIVER ACCESS:** (non-motorized boat access, fishing piers, motor boat slips, views of river)
15. **MODERN RESTROOM FACILITIES**

TOP 15 PARTICIPANT CONCERNS

1. **OVERUSE:** (crowds, trash, noise, lack of safety, site too small for programming)
2. **CAMPING:** (RVs or modern camping)
3. **OVER-DEVELOPMENT:** (buildings, structures, events, pavement, commercialized)
4. **HABITAT LOSS:** (destruction, invasive species, pollution, erosion)
5. **LAKE ACCESS:** (disturbing "pristine" lake, erosion, no swimming, no boating of any kind)
6. **PARKING/TRAFFIC:** (not enough parking, paved lots, increased traffic)
7. **WILDLIFE DISRUPTION:** (hunting, over fishing, protect the eagle's nest)
8. **BIKERS:** (no bike trails, dangerous, no-mixed trails)
9. **MOTOR VEHICLES:** (boats, cars, ATVs, etc.)
10. **OFF-LEASH DOGS**
11. **SAFETY:** (social distancing, lack of staff-monitoring/policing, emergency access into site)
12. **INCREASED COST:** (entry fees, taxes)
13. **MOVING THROUGH THE DESIGN PROCESS TOO QUICKLY**
14. **LACK OF SHADE**
15. **NO BIKING TRAILS AVAILABLE**

WHAT TYPE OF CAMPING SCENARIO ARE YOU INTERESTED IN HAVING AT OTTAWA SANDS?



INPUT SESSIONS

OCPRC invited the public to participate in two family-friendly engagement sessions to understand the desires and concerns of the community as they pertain to the park and surrounding area. The first input session was held at Ottawa Sands Park where participants visited a series of stations to provide feedback and imagine park improvements in situ. Participants were asked to provide feedback on existing park conditions, Grand River waterfront activation, camping scenarios, ecological management practices, and recreational opportunities. Findings from this session along with the online survey directly informed the two schematic master plan design options that were revealed at the second input session.

The second input session was hosted at the nearby Coast Guard Park. At this event, the community had a first look at potential park improvements with two master plan design options and imagery to give feedback on. Participants were assisted on a self-guided tour of the design process to date with team members, answering questions and describing the plans in more detail. Data and feedback collected from this session was used to complete a preferred master plan.



Input Session #1



Input Session #2

PHOTOVISION CHALLENGE

The community posted photos to their personal Instagram accounts and described what they like to do at the park, what could be improved at the park, and what they wish they could do at the park. Photos were reposted on the @miOTTAWA_SANDS account and a collective community gallery was built that directly influenced concepts for future park improvements. The gallery showcases what makes Ottawa Sands Park a special place in our community.



PhotoVision Challenge

ENGAGEMENT SUMMARY

UNDERSTANDING THE INPUT

Throughout the community engagement process, clear priorities emerged that stakeholders and community participants felt should steer the development of Ottawa Sands. At the conclusion of the engagement, it was necessary to synthesize the input received from stakeholders, community members and public agencies.

To synthesize, a record was kept of the comments and votes from each community engagement activity including the stakeholder focus groups sessions, on-line survey, photovision challenge, community field-day input session, #1, open house input session #2, This input was organized into priority groupings which were presented on summary sheets along with a description of which Intent they addressed.

These priorities were tabulated from high to low and were presented to the OCPRC for consideration. These priorities were used to form the foundation of the proposed programming framework. The programming framework applies to both the recreational and ecological opportunities on the site. This framework along with the inventory and analysis was used as the basis in creating the Project Visions and Goals as well as the Master Plan recommendations. The image to the right summarizes the programming priorities from the community engagement responses.



HIGH PRIORITY

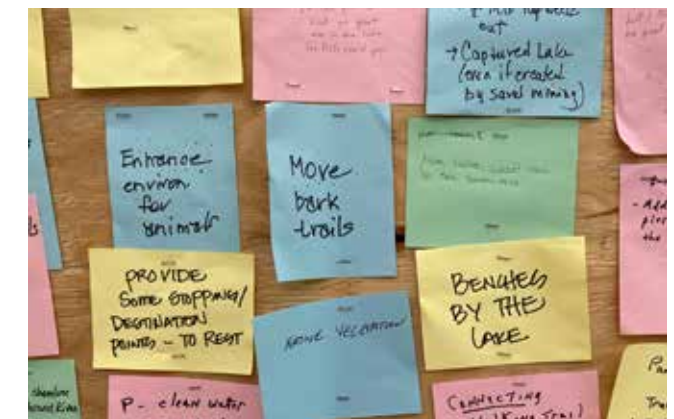
- ECOLOGICAL RESTORATION
- TRAILS: NATURE / ACCESSIBLE / CONNECTIONS TO COASTAL GREENWAYS
- BOARDWALKS & OVERLOOKS
- INTERPRETIVE SIGNAGE
- FISHING
- RESTROOM FACILITIES
- NON-MOTORIZED BOAT ACCESS (LAKE & RIVER)
- ENVIRONMENTAL EDUCATION / NATURE CENTER
- WATERFRONT PROMENADE CONNECTED TO REGIONAL TRAILS & GRAND RIVER

MEDIUM PRIORITY

- GLAMPING / NON-TRADITIONAL CAMPING / OUTFITTED CAMPING
- PICNIC SHELTERS
- PARKING / VEHICULAR & PEDESTRIAN CIRCULATION IMPROVEMENTS
- OFF-LEASH DOG AREA
- RECREATIONAL HUB: RESTROOMS / CONCESSIONS / MEETING ROOMS
- WATER TAXI TO GRAND HAVEN
- LARGE EVENT SPACE / OPEN FLEXIBLE SPACE

LOW PRIORITY

- MOUNTAIN BIKE TRAILS
- FIELD SPORTS
- MODERN CAMPGROUND / RV SITES



Recommendations

PROJECT VISION + GOALS

PLAN DEVELOPMENT

OVERALL MASTER PLAN

CORE ENLARGEMENT PLAN

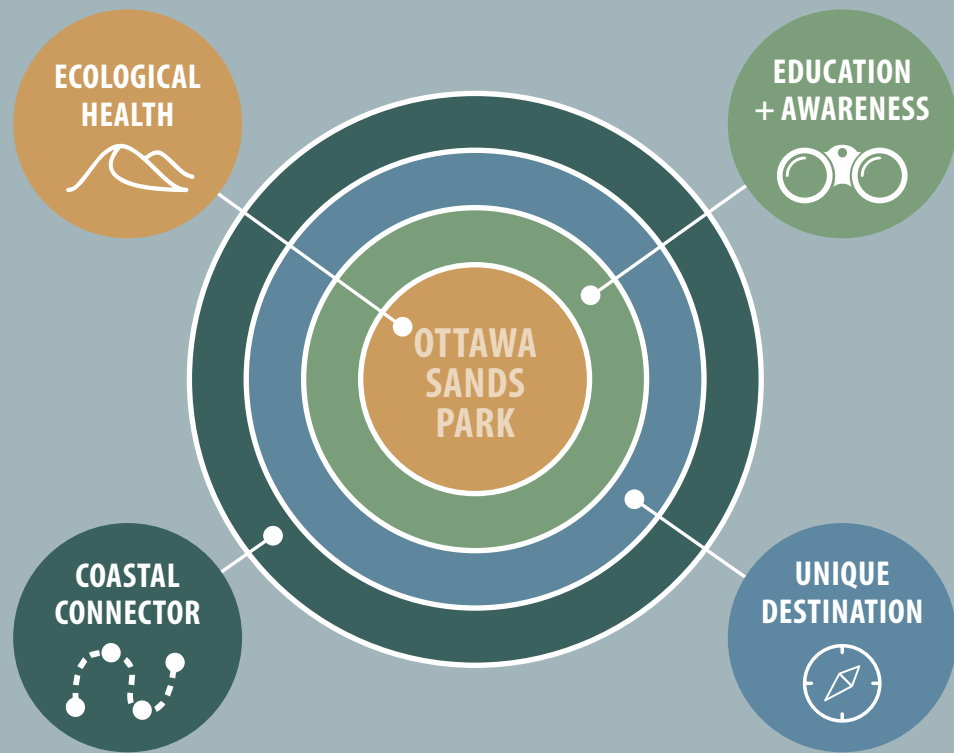
AERIAL PERSPECTIVES

PRECEDENT IMAGES

GREEN INFRASTRUCTURE PLAN

UTILITY PLAN

PROJECT VISION + GOALS



THE OTTAWA SANDS VISION

Using the Community Input, Inventory and Analysis, as well as prior planning efforts by Ottawa County Parks as a guide, the following project vision and goals were established.



ECOLOGICAL HEALTH

The natural landscapes of the Ottawa Sands site provide a beautiful, authentically Lake Michigan/Grand River setting for the public use and recreational activities available now and over time as the site is improved. The natural features of the site are clearly what many park visitors cherish about it. The secluded, serene nature of the site offers a sublime experience to connect with nature available to many due to its proximity to Grand Haven, Ferrysburg, and the Grand Rapids/Muskegon/Holland metro region.

The Vision for Ottawa Sands is essentially regenerative in nature. The Master Plan is informed by a thorough understanding of the current ecological conditions, with the intent to measure and quantify key ecological indicators through active stewardship and monitoring initiated with the surveys obtained for the Plan. The site contains a varied array of natural features and landscapes and provides habitat for birds, butterflies, insects, fish, snakes, frogs/toads, and other wildlife. However, it continues to be in a state of incremental decline; without active human-performed restoration and management, it will continue to be on a trajectory of species loss.

The plants and animals that exist on site, especially the more conservative species, will only thrive and reproduce in a community that exhibits the same conditions that they evolved in with stable hydrology, consistent light levels, certain types of disturbance (human and otherwise) that mimic aboriginal practices, proximity to symbiotic hosts and predators, and many other factors that have yet to be fully understood by ecological sciences. This plan provides a series of recommendations for active ecological restoration and management/stewardship of the site's natural landscapes based upon the County's experience and best practices. OCPRC staff and volunteers have already begun some of the more fundamental invasive species management activities and will start to implement the other recommendations once the plan is adopted, and appropriate funding resources put in place.



EDUCATION + AWARENESS

Fundamental to Ottawa County's regenerative approach is to leverage the strategically located park infrastructure improvements towards the restoration of existing ecologies where they exist and recreate new ecologies in the most altered areas of the site.

The degraded nature of the site makes it an ideal location to explore how to optimize the impacts of these improvements towards long-term stability and habitat connectivity. Utilization of high-performance green infrastructure practices will not only serve to support the enhanced site ecology, but provide a visible, exciting demonstration and education resource to illustrate the potential to re-establish increasingly healthy and diverse ecologies on degraded sites.

Parks and open spaces are increasingly using their sites as living laboratories for sustainability problem-solving and engagement. "Living labs" emphasize experiential learning and park sustainability through the integration of research and green infrastructure operations. By engaging the community in this way, Ottawa Sands will increase its ecological value while contributing to knowledge and research needed to make an impact beyond its borders.

Additionally, with our heightened awareness of the serious health and social issues confronting all of us today, it is important to provide access and awareness to the health and social benefits associated with access to quality parks and open spaces. The opportunity for exercise, social interaction, and quiet reflection in parks, greenways, and other open space must be part of any comprehensive solution.



UNIQUE DESTINATION

The existing uniqueness of the park can be attributed to several factors including:

- Being immersed in a natural and quiet space in such close proximity to residential, industrial, and urban settings.
- The opportunity to engage with an inland lake of this size as most of Ottawa County's water resources are primarily smaller ponds, rivers/creeks, wetland/marsh, and of course Lake Michigan.
- Proximity to Lake Michigan, Grand River, Trail Systems, state parks, and vibrant urban waterfront community.
- Access to flora and fauna unique to the West Michigan Coastal Corridor

There is incredible opportunity to add to the unique offerings of the park. As development of the park moves forward, it is important that improvements whether they are large or small, recreation-based or ecological-based are a tied to the history, culture and richness of this place and instrumental in advancing the park as a regional hub for recreation, ecological restoration and environmental education and leadership.



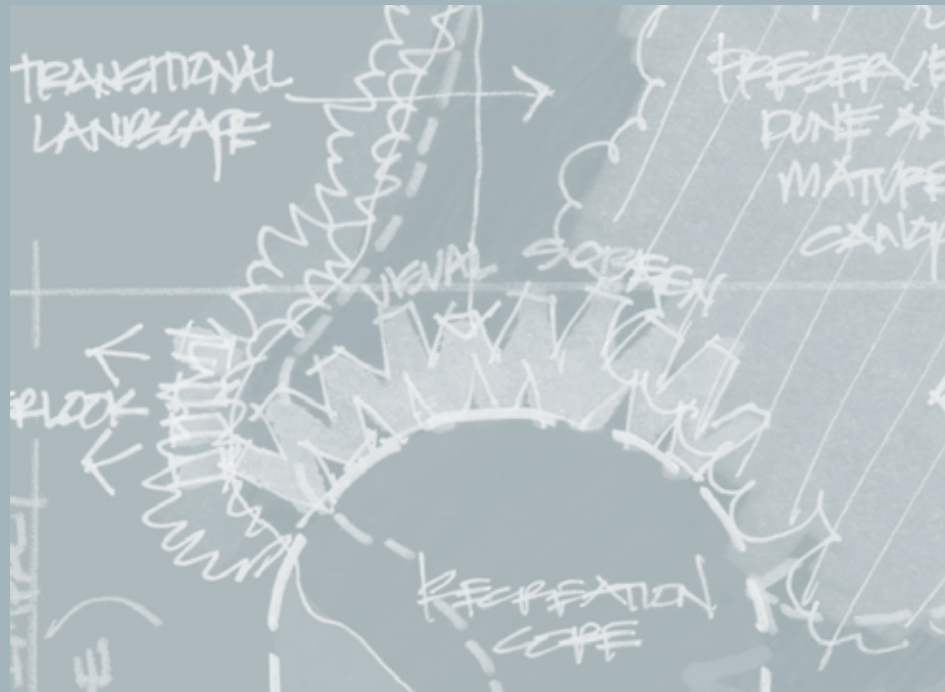
COASTAL CONNECTION

The site provides a critical link between the Lake Michigan open space corridor with critical dunes to the north and south, and the Lower Grand River corridor that links Lake Michigan to Grand Rapids by water. These two corridors contain an incredibly rich, connected series of natural lands. The native flora and fauna of the region flow through this site now. Ottawa County currently manages some of these natural areas and has been in discussion with management entities and agencies for the other areas to develop a closely coordinated and synchronized natural areas management plan. This plan will inform the ecological restoration and stewardship effort in a way that ensures that all are working together to protect, improve, and maintain the highest level of habitat quality throughout. As a result, the conservative plants, animals, birds, reptiles, amphibians and insects of critical dunes landscapes of Ottawa County will multiply in numbers and species diversity with each season.

The Grand River Greenway will eventually connect the City of Grand Rapids to Lake Michigan via the Grand River and Idema Explorers Greenway Trail. The River Greenway is comprised of a non-motorized shared use trail connecting to other Ottawa County Parks and natural areas, villages, cities, and university campuses along its route. The Lake Michigan Coastal Greenway Trail system is comprised primarily of preserved open space with existing and planned paved and nature trails connecting to PJ Hoffmaster State Park to the north and the Grand Haven Pier to the south. As the confluence to these two recreational corridors, Ottawa Sands will provide critical non-motorized bike, nature, and water trail connections to the north, south, and eastern edges of the site.

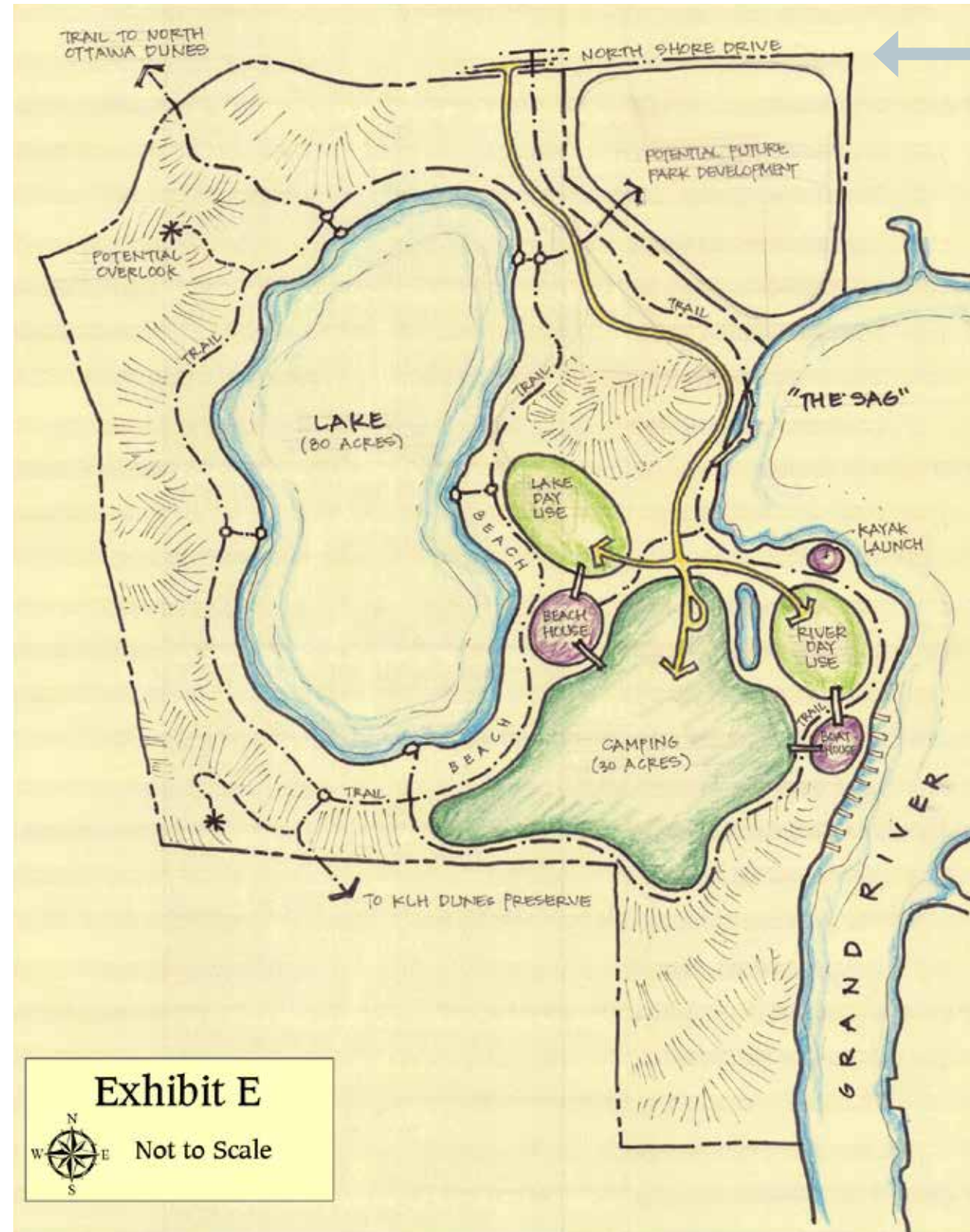


PLAN DEVELOPMENT



When environment, community, and recreation needs are combined in harmony with the capacity of the land, distinctive and timeless places with significant value and enduring quality are created.

Planning is collaborative endeavor, and a clear process allows for feedback and involvement by all. The Ottawa Sands Master Plan development process can be defined as the steps taken in search of form or answers to design questions. It was a process of envisioning and weighing possibilities with the aim of proposing intentional change. Continuous feedback was the cornerstone of that process. At every phase, staff, stakeholders, and citizens were engaged to understand preferences and alternatives. These methods proved to reconcile diverse and even conflicting priorities, leading to better solutions.



PREVIOUS
PLANNING
EFFORTS
+
INVENTORY &
ANALYSIS
+
COMMUNITY
ENGAGEMENT
INPUT
+
PROJECT VISION &
GOALS
=
PROJECT PROGRAM
ELEMENTS →

2018 CONCEPTUAL PLAN DEVELOPED BY OTTAWA COUNTY PARKS

PROJECT PROGRAM ELEMENTS

The following project program elements were developed through the process of reviewing the previous plan completed by Ottawa County Parks, understanding the recreational and ecological opportunities and constraints based on the inventory and analysis, listening to and documenting the input of the community, and vetting each program element as it relates to the four categories of the Project Vision and Goals

DAY USE TRAIL HEAD

- Addresses immediate access and multi-function recreation needs
- Uses existing entrance and drive avoiding ecological disruption
- Welcomes users to one of the best views on the site
- Fully accessible – all people can experience the site from this one location

LAKE LOOP

- Uses existing trail route, with minor modifications
- Current trail is very sandy – proposed accessible surface
- Decks and boardwalks connect people to the marsh edge and lake (not currently accessible)
- Overlook at high point along trail but away from eagle's nest

SAG/KAYAK LAUNCH AREA

- Uses existing gravel drive (former mining site access/haul road)
- Paved trail from day use area utilizes existing cleared power line corridor
- New boardwalk separated from roadway by grade change
- Boardwalk provides access to Sag for both wildlife viewing and pedestrian/bike linkage
- Utilizes existing building for information station/camper welcome center
- Launch located in quiet area on sag not on the river

GREENWAY CAMPING

- Located away from neighboring properties
- Topography of area (the bowl) helps to screen it from all adjacent uses
- All forms of camping consolidated for easier management
- Located near kayak launch and trail connection to support greenway activities
- Close to potential water taxi for access to Downtown Grand Haven

RECREATION AREA

- Ideal location for a multitude of passive and active recreation and educational activities requiring lake access
- Consolidates all lakefront activities in one location where support facilities and staff can be focused
- Sited to be screened completely from north area of the lake
- Nature play ties to education at pavilion

SOUTH DRIVE LOOP

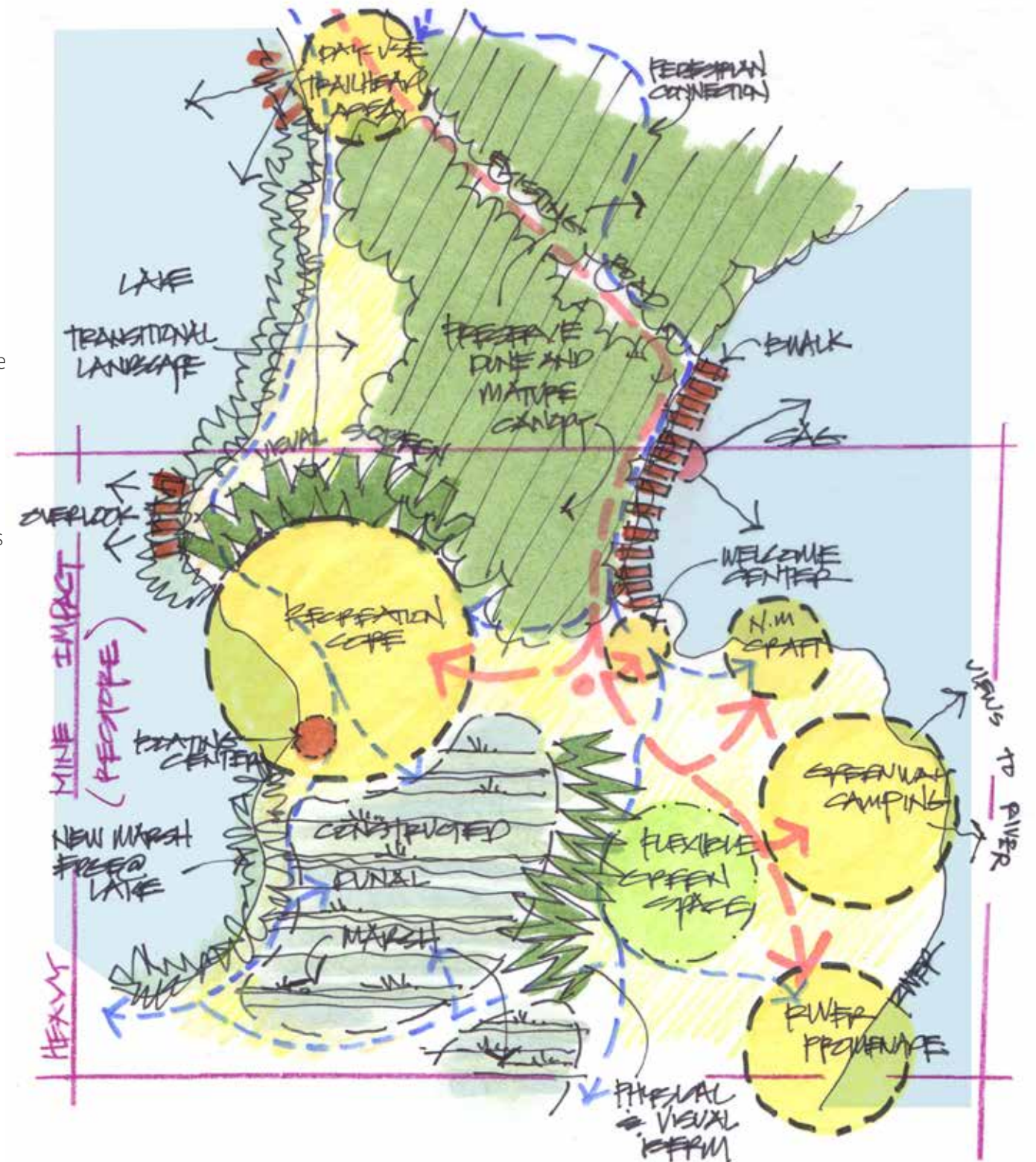
- Provides access to destinations on south side of site and other public lands to south
- Tower provides destination. Existing view on top of dune is good; tower makes it better
- Pier provides destination at south end of lake
- Open Lawn provides for activities related to kayak launch and riverfront. It is also screened by landform from more natural areas of the site
- Maintenance area relates well to open lawn

RIVERFRONT

- Utilizes highly disturbed area especially where shoreline needs stabilization/restoration
- Takes advantage of panoramic view of riverfront
- Utilizes historic breasting dolphins
- More active uses placed here are compatible with active riverfront
- Screened by landform from other areas of the site

GREENWAY TRAIL CONNECTIONS

- Utilizes most feasible route through dunes
- Tunnel located in natural low point below road level.
- North connection also provides safe pedestrian access to North Beach Park



PRELIMINARY USE DIAGRAM / PROGRAM RELATIONSHIPS

OVERALL SITE MASTER PLAN

LEGEND

- A IMPROVED ENTRY DRIVE AND TRAIL CONNECTION**
- B DAY-USE TRAIL HEAD AREA**
 - PARKING FOR 50 VEHICLES
 - BOARDWALK OVERLOOK
 - RESTROOM, +/- 600 SF (LIVING BUILDING)
 - WAYFINDING, ENVIRONMENTAL, AND HISTORICAL INTERPRETIVE SIGNAGE
 - DONOR RECOGNITION AREA
- C RECREATIONAL AREA**
 - MULTI-PURPOSE PAVILION, +/- 6,000 SF (LIVING BUILDING)
 - SAND BEACH AND SWIMMING AREA
 - PARKING FOR 65 VEHICLES
 - NATURE-BASED PLAY/DISCOVERY AREA
 - BOATING CENTER WITH CANOE/KAYAK RENTAL
 - BARRIER-FREE LAUNCH AND WATERCRAFT WASHING STATION
- D CONSTRUCTED DUNAL WET PRAIRIE & MARSH**
 - NATURE TRAIL WITH ELEVATED BOARDWALKS AND OBSERVATION DECKS
 - RESTORED EMERGENT, WET-TO-MESIC AND UPLAND NATIVE LANDSCAPES
 - INTERPRETIVE SIGNAGE
- E RIVER PROMENADE AREA**
 - GRAND RIVER AND COASTAL GREENWAY INTERPRETIVE PLAZA
 - MULTI-PURPOSE PAVILION TO ACCOMMODATE 250 (LIVING BUILDING)
 - TERRACED RIVER EDGE
 - COURTESY DOCKS
 - WATER TAXI ACCESS POINT
- F GREENWAY CAMPING AREA**
 - TENT PLATFORMS
 - TREEHOUSE CABINS (LIVING BUILDING)
 - YURT VILLAGE
 - OVERLOOK DECKS
 - RESTROOM SHOWER (LIVING BUILDING)
- G NON-MOTORIZED WATERCRAFT DOCK AND BARRIER-FREE LAUNCH**
- H PENINSULA GROVE**
 - SHADE STRUCTURE, NATURE TRAIL, AND WETLAND OBSERVATION DECK
- I DUNE OVERLOOK TOWER**
- J WELCOME/INFORMATION STATION**
- K UNDERPASS PEDESTRIAN TUNNEL**
 - CONNECTING NATURE TRAIL SYSTEM TO NORTH OTTAWA DUNES
 - STAIR ACCESS CONNECTS TO NORTH SHORE PAVED TRAIL



CORE ENLARGEMENT PLAN

LEGEND

- A** CONSTRUCTED DUNAL WET PRAIRIE & MARSH (+/- 18 ACRES)
- B** NON-PAVED NATURE TRAILS
- C** PAVED SHARED-USE TRAILS
- D** ELEVATED BOARDWALKS AND VIEWING DECKS
- E** GREENWAY CAMPGROUND (TENT PLATFORMS, TREEHOUSE CABINS, YURT VILLAGE)
- F** BEACH AND SWIMMING AREA
- G** MULTI-PURPOSE PAVILION WITH RESTROOMS
- H** NATURE-BASED PLAY / DISCOVERY AREA
- I** BOATING CENTER WITH CANOE AND KAYAK RENTAL
- J** NON-MOTORIZED WATERCRAFT DOCK AND BF LAUNCH
- K** WELCOME / INFORMATION STATION
- L** RIVER PROMENADE WALK AND TERRACED EDGE
- M** GRAND RIVER AND COASTAL GREENWAY PLAZA
- N** RIVER OVERLOOK PIERS AND COURTESY DOCKS
- O** PARK MAINTENANCE FACILITY
- P** PENNINSULA SHADE PAVILION
- Q** EVENT PAVILION WITH RESTROOM AND GREEN ROOF TERRACE
- R** OPEN LAWN AREA (+/- 2 ACRES)
- S** ENHANCED LANDFORM BUFFERS



DAY-USE TRAIL HEAD: EXISTING



DAY-USE TRAIL HEAD: PROPOSED



RECREATION CORE: EXISTING CONDITIONS



RECREATION CORE: PROPOSED



GREENWAY CAMPING: EXISTING CONDITIONS



GREENWAY CAMPING: PROPOSED



RIVER PROMENADE: EXISTING



RIVER PROMENADE: PROPOSED



PRECEDENT IMAGES (proposed park amenities)



BOARDWALK & OVERLOOK DECKS

EXPANDED NATURE TRAILS

MULTI-PURPOSE PAVILION

RIVER EDGE PROTECTION & ACTIVATION



10' WIDE PAVED TRAIL

PICNIC SHELTER

BARRIER-FREE CANOE & KAYAK LAUNCH



GREENWAY CAMPING

ACCESSIBLE TRAILS

OBSERVATION TOWERS

CONSTRUCTED WETLANDS & MARSHES

NATURE PLAYGROUND / DISCOVERY AREA

GREEN INFRASTRUCTURE PLAN







NATURAL SYSTEMS

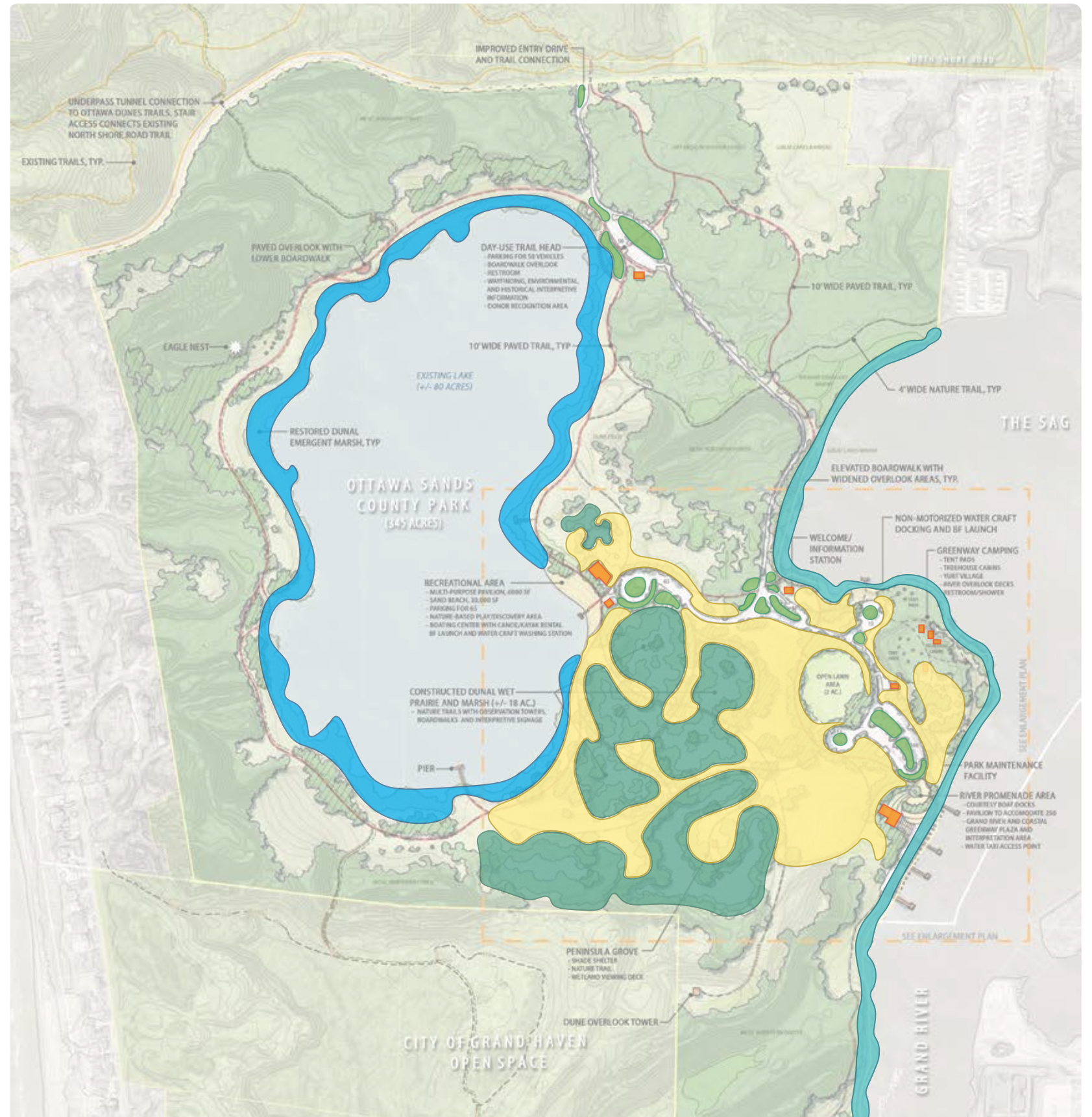
Natural Systems are an interconnected network of waterways, wetlands, woodlands, wildlife habitats, and other natural areas that support native species, maintain natural ecological processes, sustain air and water resources and contribute to the health and quality of our communities. Natural Systems are a cost-effective, resilient approach to managing rainfall and wastewater that provides many human and ecological benefits. While conventional piped drainage and water treatment systems are designed to move water away from the built environment, green infrastructure celebrates water as a resource by reducing, filtering, absorbing and re-using it at its source; delivering environmental, social, and economic benefits.

LIVING BUILDINGS

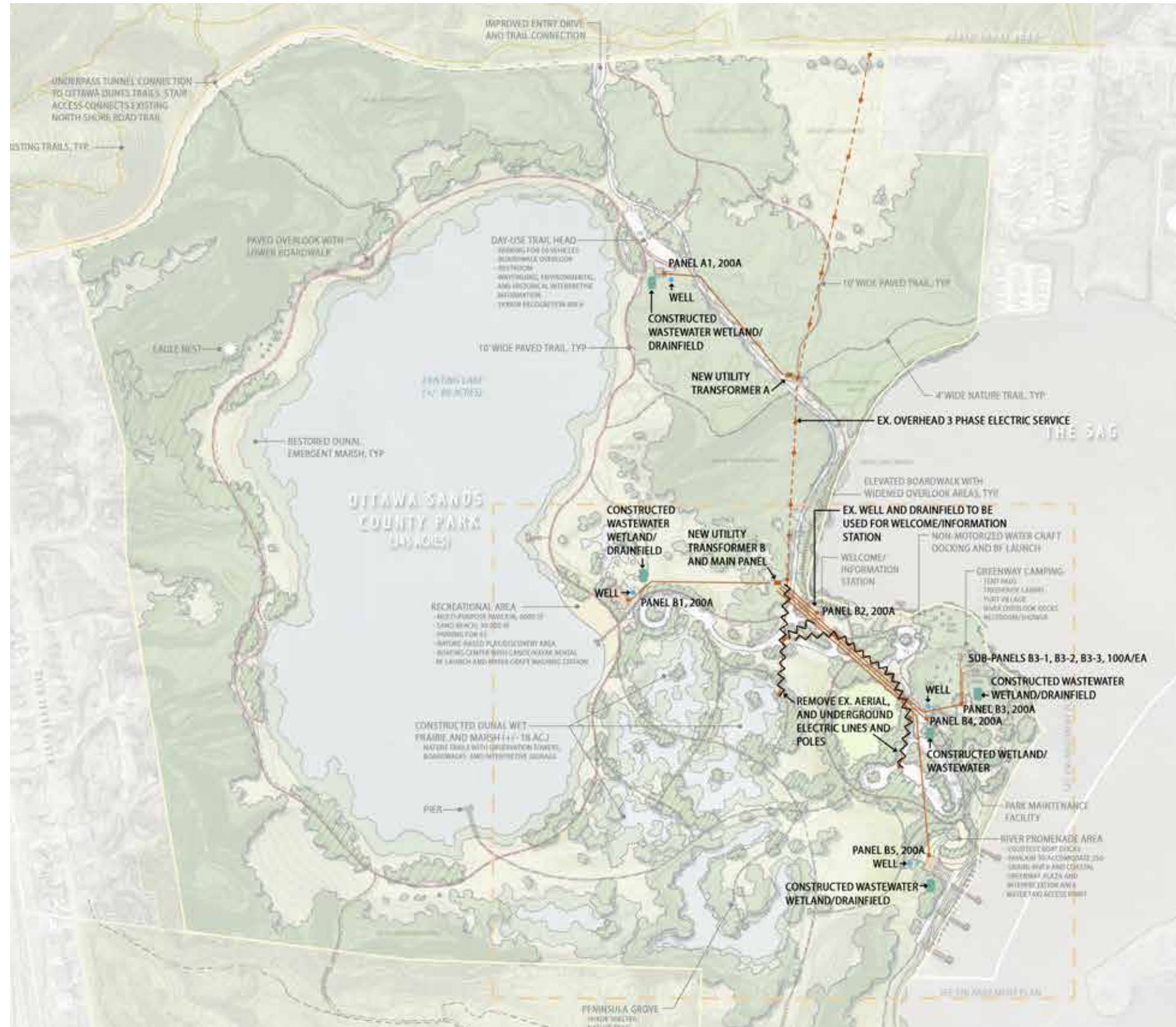
A living building generates all of its own energy, captures and treats its water, and operates cleanly and efficiently in harmony with nature. For the purpose of this master plan, The Living Building Challenge www.living-future.org principles are referenced as the benchmark for all new structures on site. The Living Building Challenge aims to change the way we think about sustainability and to develop buildings that are not just less bad but truly regenerative. A living building is built to mimic natural processes with the intent of improving the surrounding environment with a strong focus on Biophilic Design, intentionally fostering design features and architectural moments that connect people with nature.

LEGEND

-  **CONSTRUCTED LAKE MARSH AND EDGE BIO-ENGINEERING**
-  **RIVERINE MARSH ENHANCEMENTS AND EDGE BIO-ENGINEERING**
-  **CONSTRUCTED DUNAL WET PRAIRIE AND MARSH**
-  **RAIN GARDENS AND BIO-SWALES**
-  **UPLAND PRAIRIE AND DUNE RESTORATION (NOT LIMITED TO AREA SHOWN ON PLAN)**
-  **LIVING BUILDING W/ GREEN ROOF, PHOTOVOLTAIC PANELS, RAINWATER HARVESTING, AND WASTEWATER CONSTRUCTED WETLANDS**



UTILITY PLAN



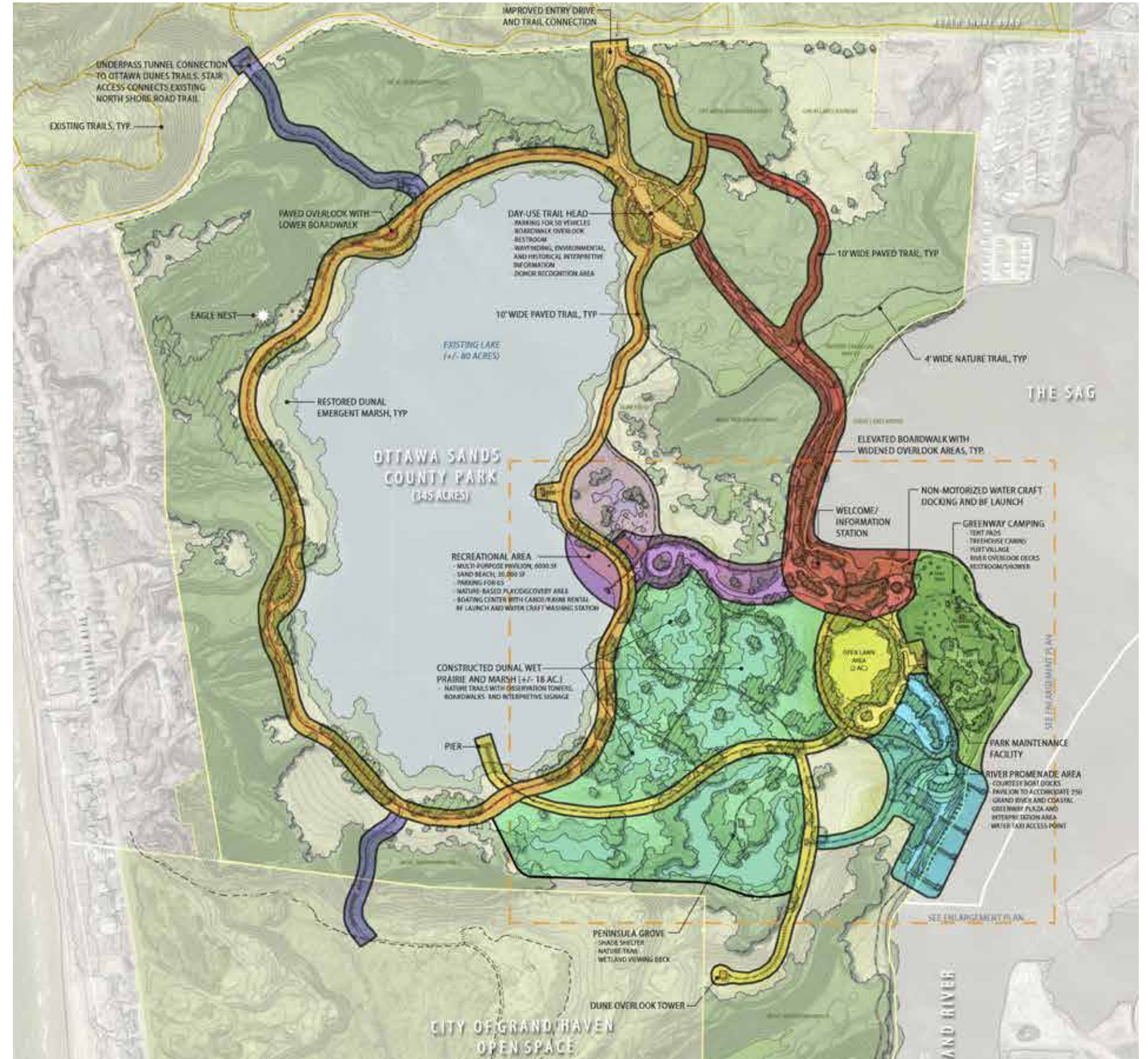
Phasing + Implementation

PHASING PLAN
OPINION OF PROBABLE COSTS

PHASING PLAN

PROJECT PHASING LEGEND

- DAY-USE TRAIL HEAD: ENTRY DRIVE, PARKING, RESTROOM, DONOR RECOGNITION, LAKE OVERLOOKS AND PAVED LOOP TRAIL
- ENTRY DRIVE, PAVED SHARED-USE TRAIL, WELCOME / INFORMATION STATION, PARKING, AND NON-MOTORIZED WATER CRAFT LAUNCH AND DOCK
- OPEN LAWN AREA, MAINTENANCE FACILITY, PARKING, SOUTH NATURE TRAILS, LAKE PIER AND DUNE OVERLOOK TOWER
- GREENWAY CAMPING: TREEHOUSE VILLAGE, TENT PADS, RESTROOM, YURT VILLAGE, AND RIVER OVERLOOKS
- RIVERFRONT PROMENADE: GREENWAY PLAZA, MULTI-PURPOSE PAVILION, COURTESY DOCKS, TERRACED RIVER SEATING, AND PARKING
- CONSTRUCTED DUNAL WET PRAIRIE AND MARSH: NATURE TRAILS, INTERPRETIVE SIGNAGE, ELEVATED BOARDWALKS AND OBSERVATION DECKS
- RECREATION AREA: PARKING, MULTI-PURPOSE PAVILION, SAND BEACH, BOATING CENTER WITH CANOE/KAYAK RENTAL, BARRIER-FREE LAUNCH, AND WATERCRAFT WASHING STATION
- NATURE PLAYGROUND AND DISCOVERY AREA
- GREENWAY TRAIL CONNECTIONS: NATURE TRAIL, AT-GRADE STEPS, STAIRS WITH HANDRAILS, TUNNEL UNDERPASS, AND WAYFINDING SIGNAGE



OPINION OF PROBABLE COSTS

PHASE: DAY-USE TRAILHEAD + LAKE LOOP

Item	Quantity	Unit	Unit Price	Total
Removals / Site Prep				
Pavement, Conc. & Misc. Removals	1	LS	\$15,000.00	\$15,000
Clearing	1.00	AC	\$12,000.00	\$12,000
			Subtotal	\$27,000
General Site Improvements				
Bituminous Entry Drive and Parking	5,338	SY	\$30.00	\$160,140
Pavement Markings	1	LS	\$4,000.00	\$4,000
Concrete Curb and Gutter @ North Shore Drive Entry	541	LF	\$27.00	\$14,607
Integral Curb Concrete Walk, 8' Wide	2,800	SF	\$15.00	\$42,000
Concrete Pavement	5,216	SF	\$5.00	\$26,080
Elevated Boardwalk/Overlook, 10' Wide	764	LF	\$700.00	\$534,800
Lake Loop Trail: 10' Wide Paved Trail	9,400	LF	\$35.00	\$329,000
Restroom	1	LS	\$250,000.00	\$250,000
Benches, Bike Loops, and Litter Receptacles	1	LS	\$23,000.00	\$23,000
Donor Recognition Area	1	LS	\$20,000.00	\$20,000
Signage	1	LS	\$15,000.00	\$15,000
			Subtotal	\$1,418,627
Landscaping				
Seeding / Restoration	170,000	SF	\$0.25	\$42,500
Constructed Lake Edge Marsh (Plugs)	0.75	AC	\$40,000.00	\$30,000
Stormwater Bio-Swales and Rain Gardens (Mix of plugs and seed)	0.50	AC	\$20,000.00	\$10,000
Trees	150	EA	\$300.00	\$45,000
Amended Soil and Fine Grade	600	CY	\$40.00	\$24,000
			Subtotal	\$151,500
Earthwork				
General Grading	11,000	CY	\$7.00	\$77,000
SESC Measures	1	LS	\$35,000.00	\$35,000
Boulder Riprap	100	Tons	\$250.00	\$25,000
			Subtotal	\$137,000
Utilities				
Storm Sewer Structures and Piping	1	LS	\$25,000.00	\$25,000
Domestic Water Service from North Shore Road	1	EA	\$38,000.00	\$38,000
Wastewater: Constructed Wetland "Living System"	1	LS	\$28,000.00	\$28,000
Electrical Service	1	LS	\$25,000.00	\$25,000
Site Lighting and Security	1	LS	\$30,000.00	\$30,000
			Subtotal	\$146,000
			Construction Subtotal	\$1,880,127
			Permitting, Mobilization, & General Conditions	\$244,417
			10% Contingency	\$188,013
			Construction Total	\$2,312,556
<i>Note: Construction total based on 2020 costs. Increase 4% per year for inflation.</i>				
			2% Survey, Geotech, and Construction Material Testing	\$46,251
			8% A&E Services	\$185,004
			Project Total	\$2,543,812

PHASE: ENTRY DRIVE + SHARED-USE TRAIL + SAG BOAT ACCESS

Item	Quantity	Unit	Unit Price	Total
Removals / Site Prep				
Pavement, Conc. & Misc. Removals	1	LS	\$15,000.00	\$15,000
Clearing	2.15	AC	\$12,000.00	\$25,800
			Subtotal	\$40,800
General Site Improvements				
Bituminous Entry Drive and Parking	8,784	SY	\$30.00	\$263,520
Paved Shared-Use Trail, 10' Wide	1,947	LF	\$35.00	\$68,145
Integral Curb Concrete Walk, 8' Wide	1,600	SF	\$15.00	\$24,000
Concrete Pavement	2,748	SF	\$5.00	\$13,740
Elevated Boardwalk with Overlooks	847	LF	\$800.00	\$677,600
Barrier Free Launch with Linear Dock	1	LS	\$55,000.00	\$55,000
Welcome/Information Station Renovation	800	SF	\$100.00	\$80,000
Pavement Markings	1	LS	\$2,000.00	\$2,000
Benches, Bike Loops, and Litter Receptacles	1	LS	\$45,000.00	\$45,000
Signage	1	LS	\$15,000.00	\$15,000
			Subtotal	\$1,244,005
Landscaping				
Seeding / Restoration	127,000	SF	\$0.25	\$31,750
Riverine Emergent Marsh Enhancements	0.33	AC	\$40,000.00	\$13,200
Trees	50	EA	\$300.00	\$15,000
Stormwater Bio-Swales and Rain Gardens (Mix of plugs and seed)	0.35	AC	\$20,000.00	\$7,000
River Edge Slope Bioengineering	7,000	SF	\$4.00	\$28,000
Amended Soil and Fine Grade	750	CY	\$40.00	\$30,000
			Subtotal	\$124,950
Earthwork				
General Grading	12,000	CY	\$7.00	\$84,000
SESC Measures	1	LS	\$45,000.00	\$45,000
Sand Portage Area	1	LS	\$10,000.00	\$10,000
Boulder Riprap	350	Tons	\$250.00	\$87,500
			Subtotal	\$226,500
Utilities				
Electrical Service	1	LS	\$12,000.00	\$12,000
Site Lighting and Security	1	LS	\$15,000.00	\$15,000
Ex Water and Septic Improvements	1	LS	\$10,000.00	\$10,000
Storm Sewer Structures and Piping	1	LS	\$25,000.00	\$25,000
			Subtotal	\$62,000
			Construction Subtotal	\$1,698,255
			Permitting, Mobilization, & General Conditions	\$220,773
			10% Contingency	\$169,826
			Construction Total	\$2,088,854
<i>Note: Construction total based on 2020 costs. Increase 4% per year for inflation.</i>				
			2% Survey, Geotech, and Construction Material Testing	\$41,777
			8% A&E Services	\$167,108
			Project Total	\$2,297,739

OPINION OF PROBABLE COSTS

PHASE: OPEN LAWN AREA + SOUTH NATURE TRAILS

Item	Quantity	Unit	Unit Price	Total
Removals / Site Prep				
Pavement, Conc. & Misc. Removals	1	LS	\$10,000.00	\$10,000
Clearing	0.75	AC	\$12,000.00	\$9,000
			Subtotal	\$19,000
General Site Improvements				
Bituminous Entry Drive and Parking	3,111	SY	\$30.00	\$93,330
Paved Shared-Use Trail, 10' Wide	855	LF	\$35.00	\$29,925
Integral Curb Concrete Walk, 8' Wide	3,600	SF	\$15.00	\$54,000
Concrete Pavement	2,160	SF	\$5.00	\$10,800
Park Maintenance Building	1,200	SF	\$175.00	\$210,000
Lake Overlook/Pier	1,840	SF	\$70.00	\$128,800
Pavement Markings	1	LS	\$2,000.00	\$2,000
Benches, Bike Loops, Picnic Tables and Litter Receptacles	1	LS	\$16,000.00	\$16,000
Dune Overlook Tower	1	LS	\$100,000.00	\$100,000
Dune Steps	250	LF	\$50.00	\$12,500
Overlook/Observation Deck	1	LS	\$14,000.00	\$14,000
Stone Chips and Fines Trail, 5' Wide	2,605	LF	\$9.00	\$23,445
Signage	1	LS	\$8,000.00	\$8,000
			Subtotal	\$702,800
Landscaping				
Seeding / Restoration	210,000	SF	\$0.25	\$52,500
Trees	60	EA	\$300.00	\$18,000
Stormwater Bio-Swales and Rain Gardens (Mix of plugs and seed)	0.25	AC	\$20,000.00	\$5,000
Native Landscaping	3,000	SF	\$4.00	\$12,000
Amended Soil and Fine Grade	2,800	CY	\$40.00	\$112,000
Irrigation System	1	LS	\$45,000.00	\$45,000
			Subtotal	\$244,500
Earthwork				
General Grading	23,000	CY	\$7.00	\$161,000
SESC Measures	1	LS	\$8,000.00	\$8,000
Boulder Riprap	50	Tons	\$250.00	\$12,500
			Subtotal	\$181,500
Utilities				
Electrical Service	1	LS	\$12,000.00	\$12,000
Domestic Water Service from Welcome/Information Station	1	EA	\$15,000.00	\$15,000
Wastewater: Constructed Wetland "Living System"	1	LS	\$15,000.00	\$15,000
Storm Sewer Structures and Piping	1	LS	\$8,000.00	\$8,000
			Subtotal	\$50,000
			Construction Subtotal	\$1,197,800
			Permitting, Mobilization, & General Conditions	\$155,714
			10% Contingency	\$119,780
			Construction Total	\$1,473,294
			2% Survey, Geotech, and Construction Material Testing	\$29,466
			8% A&E Services	\$117,864
			Project Total	\$1,620,623

Note: Construction total based on 2020 costs. Increase 4% per year for inflation.

PHASE: GREENWAY CAMPING

Item	Quantity	Unit	Unit Price	Total
Removals / Site Prep				
Pavement, Conc. & Misc. Removals	1	LS	\$15,000.00	\$15,000
Clearing	2.15	AC	\$12,000.00	\$25,800
			Subtotal	\$40,800
General Site Improvements				
Yurt Village Incl. Platform, Utilities, Bwalks/stairs, Fire Pit	1	LS	\$312,000.00	\$312,000
Treehouse Cabins Incl. Platform, Utilities, Bwalks/stairs, Fire Pit	1	LS	\$581,200.00	\$581,200
Tent Pads	10	EA	\$2,000.00	\$20,000
Restroom/Shower	1	LS	\$250,000.00	\$250,000
Stone Chips and Fines Trail, 5' Wide	1,971	LF	\$9.00	\$17,739
River Overlook Decks	2	EA	\$14,000.00	\$28,000
Benches, Bike Loops, and Litter Receptacles	1	LS	\$15,000.00	\$15,000
Signage	1	LS	\$10,000.00	\$10,000
			Subtotal	\$1,233,939
Landscaping				
Seeding / Restoration	150,000	SF	\$0.25	\$37,500
Riverine Emergent Marsh Enhancements	0.33	AC	\$40,000.00	\$13,200
Trees	60	EA	\$300.00	\$18,000
Stormwater Bio-Swales and Rain Gardens (Mix of plugs and seed)	0.35	AC	\$20,000.00	\$7,000
River Edge Slope Bioengineering	12,000	SF	\$4.00	\$48,000
Amended Soil and Fine Grade	944	CY	\$40.00	\$37,760
			Subtotal	\$161,460
Earthwork				
General Grading	22,000	CY	\$7.00	\$154,000
SESC Measures	1	LS	\$50,000.00	\$50,000
Boulder Riprap	200	Tons	\$250.00	\$50,000
			Subtotal	\$254,000
Utilities				
Electrical Service	1	LS	\$25,000.00	\$25,000
Site Lighting and Security	1	LS	\$10,000.00	\$10,000
Domestic Water Service from Welcome/Information Station	1	EA	\$15,000.00	\$15,000
Wastewater: Constructed Wetland "Living System"	1	LS	\$35,000.00	\$35,000
Storm Sewer Structures and Piping	1	LS	\$12,000.00	\$12,000
			Subtotal	\$97,000
			Construction Subtotal	\$1,787,199
			Permitting, Mobilization, & General Conditions	\$232,336
			10% Contingency	\$178,720
			Construction Total	\$2,198,255
			2% Survey, Geotech, and Construction Material Testing	\$43,965
			8% A&E Services	\$175,860
			Project Total	\$2,418,080

Note: Construction total based on 2020 costs. Increase 4% per year for inflation.

OPINION OF PROBABLE COSTS

PHASE: RIVERFRONT PROMENADE

Item	Quantity	Unit	Unit Price	Total
Removals / Site Prep				
Pavement, Conc. & Misc. Removals	1	LS	\$10,000.00	\$10,000
Clearing	0.10	AC	\$12,000.00	\$1,200
			Subtotal	\$11,200
General Site Improvements				
Bituminous Entry Drive and Parking	4,165	SY	\$30.00	\$124,950
Paved Shared-Use Trail, 10' Wide	278	LF	\$35.00	\$9,730
Integral Curb Concrete Walk, 8' Wide	4,768	SF	\$15.00	\$71,520
Concrete Pavement	23,000	SF	\$5.00	\$115,000
Stone Chips and Fines Trail, 5' Wide	989	LF	\$9.00	\$8,901
Breasting Dolphin Renovation	4	EA	\$150,000.00	\$600,000
Coutesy Docks	16	EA	\$15,000.00	\$240,000
Sheetpile River Edge	7,500	SF	\$60.00	\$450,000
River Edge and Hillside Seat/Wall Terracing	2,600	LF	\$300.00	\$780,000
Muli-Purpose Pavilion with Rooftop and Promenade Terrace	5,600	SF	\$207.00	\$1,159,200
Pavement Markings	1	LS	\$7,000.00	\$7,000
Benches, Bike Loops, Picnic Tables and Litter Receptacles	1	LS	\$60,000.00	\$60,000
River and Coastal Greenway Gateway Feature with Interpretive Signage	1	LS	\$45,000.00	\$45,000
Signage	1	LS	\$15,000.00	\$15,000
			Subtotal	\$3,686,301
Landscaping				
Seeding / Restoration	80,000	SF	\$0.25	\$20,000
Trees	80	EA	\$300.00	\$24,000
Stormwater Bio-Swales and Rain Gardens (Mix of plugs and seed)	1.00	AC	\$20,000.00	\$20,000
Native Landscaping	15,000	SF	\$4.00	\$60,000
Amended Soil and Fine Grade	1,500	CY	\$40.00	\$60,000
			Subtotal	\$184,000
Earthwork				
General Grading	100,000	CY	\$7.00	\$700,000
SESC Measures	1	LS	\$35,000.00	\$35,000
Boulder Riprap	350	Tons	\$250.00	\$87,500
			Subtotal	\$822,500
Utilities				
Electrical Service	1	LS	\$12,000.00	\$12,000
Site Lighting and Security	1	LS	\$80,000.00	\$80,000
Domestic Water Service New Well	1	EA	\$10,000.00	\$10,000
Wastewater: Constructed Wetland "Living System"	1	LS	\$28,000.00	\$28,000
Storm Sewer Structures and Piping	1	LS	\$25,000.00	\$25,000
			Subtotal	\$155,000
			Construction Subtotal	\$4,859,001
			Permitting, Mobilization, & General Conditions	\$631,670
			10% Contingency	\$485,900
			Construction Total	\$5,976,571
<i>Note: Construction total based on 2020 costs. Increase 4% per year for inflation.</i>				
			2% Survey, Geotech, and Construction Material Testing	\$119,531
			8% A&E Services	\$478,126
			Project Total	\$6,574,228

PHASE: DUNAL WET PRAIRIE & MARSH

Item	Quantity	Unit	Unit Price	Total
Removals / Site Prep				
Pavement, Conc. & Misc. Removals	0	LS	\$10,000.00	\$0
Clearing	2.00	AC	\$12,000.00	\$24,000
			Subtotal	\$24,000
General Site Improvements				
Elevated Boardwalk, 6' Wide	372	LF	\$420.00	\$156,240
Overlook/Observation Decks	5	LS	\$14,000.00	\$70,000
Shade Pavilion	1	LS	\$45,000.00	\$45,000
Stone Chips and Fines Trail, 5' Wide	3,311	LF	\$9.00	\$29,799
Signage	1	LS	\$15,000.00	\$15,000
			Subtotal	\$316,039
Landscaping				
Upland Seeding / Restoration	700,000	SF	\$0.25	\$175,000
Constructed Dunal Edge Marsh (Plugs and Seed)	10.00	AC	\$20,000.00	\$200,000
Trees	100	EA	\$300.00	\$30,000
Tree Downfall, Rock Outcropping, Logs and other Emergent Structures	1.00	LS	\$15,000.00	\$15,000
Amended On-Site Soil and Fine Grade	14,000	CY	\$20.00	\$280,000
Irrigation System	1	LS	\$45,000.00	\$45,000
			Subtotal	\$745,000
Earthwork				
General Grading	131,000	CY	\$7.00	\$917,000
SESC Measures/Dewatering Controls	1	LS	\$60,000.00	\$60,000
Boulder Riprap	500	Tons	\$250.00	\$125,000
			Subtotal	\$1,102,000
Utilities				
Storm Sewer Structures and Piping	1	LS	\$24,000.00	\$24,000
			Subtotal	\$24,000
			Construction Subtotal	\$2,211,039
			Permitting, Mobilization, & General Conditions	\$287,435
			10% Contingency	\$221,104
			Construction Total	\$2,719,578
<i>Note: Construction total based on 2020 costs. Increase 4% per year for inflation.</i>				
			2% Survey, Geotech, and Construction Material Testing	\$54,392
			8% A&E Services	\$217,566
			Project Total	\$2,991,536

OPINION OF PROBABLE COSTS

PHASE: RECREATION AREA + NATURE-BASED PLAY

Item	Quantity	Unit	Unit Price	Total
Removals / Site Prep				
Pavement, Conc. & Misc. Removals	0	LS	\$10,000.00	\$0
Clearing	0.20	AC	\$12,000.00	\$2,400
			Subtotal	\$2,400
General Site Improvements				
Bituminous Entry Drive and Parking	4,865	SY	\$30.00	\$145,950
Paved Shared-Use Trail, 10' Wide	436	LF	\$35.00	\$15,260
Integral Curb Concrete Walk, 8' Wide	4,288	SF	\$15.00	\$64,320
Concrete Pavement	5,970	SF	\$5.00	\$29,850
Boating Center Building	800	SF	\$150.00	\$120,000
Muli-Purpose Pavilion with Rooftop and Promenade Terrace	6,000	SF	\$207.00	\$1,242,000
Pavement Markings	1	LS	\$5,000.00	\$5,000
Benches, Bike Loops, Picnic Tables and Litter Receptacles	1	LS	\$32,000.00	\$32,000
Barrier-free Canoe/Kayak Launch	1	LS	\$15,000.00	\$15,000
Watercraft Cleaning Station	1	LS	\$13,000.00	\$13,000
Footwash/Exterior Shower	1	LS	\$12,000.00	\$12,000
Drinking Fountain	1	LS	\$8,000.00	\$8,000
Signage	1	LS	\$15,000.00	\$15,000
			Subtotal	\$1,717,380
Landscaping				
Seeding / Restoration	75,000	SF	\$0.25	\$18,750
Trees	60	EA	\$300.00	\$18,000
Stormwater Bio-Swales and Rain Gardens (Mix of plugs and seed)	0.75	AC	\$20,000.00	\$15,000
Native Landscaping	10,000	SF	\$4.00	\$40,000
Amended Soil and Fine Grade	700	CY	\$40.00	\$28,000
			Subtotal	\$119,750
Earthwork				
General Grading	18,000	CY	\$7.00	\$126,000
SESC Measures	1	LS	\$15,000.00	\$15,000
Sand Beach and Swimming Area	1	LS	\$20,000.00	\$20,000
Boulder Riprap	100	Tons	\$250.00	\$25,000
			Subtotal	\$186,000
Utilities				
Electrical Service	1	LS	\$12,000.00	\$12,000
Site Lighting and Security	1	LS	\$25,000.00	\$25,000
Domestic Water Service from Welcome/Information Station	1	EA	\$15,000.00	\$15,000
Wastewater: Constructed Wetland "Living System"	1	LS	\$35,000.00	\$35,000
Storm Sewer Structures and Piping	1	LS	\$25,000.00	\$25,000
			Subtotal	\$112,000
			Construction Subtotal	\$2,137,530
			Permitting, Mobilization, & General Conditions	\$277,879
			10% Contingency	\$213,753
			Construction Total	\$2,629,162
			2% Survey, Geotech, and Construction Material Testing	\$52,583
			8% A&E Services	\$210,333
			Project Total	\$2,892,078
Sub Project to Recreation Area:				
Nature Based Play/Discovery Area (Cost Based on BNC/LCWM Concept)	1	LS	\$650,000.00	\$650,000

Note: Construction total based on 2020 costs. Increase 4% per year for inflation.

PHASE: COASTAL GREENWAY TRAIL

Item	Quantity	Unit	Unit Price	Total
Removals / Site Prep				
Misc. Removals & Traffic Control	1	LS	\$20,000.00	\$20,000
Clearing	2.00	AC	\$12,000.00	\$24,000
			Subtotal	\$44,000
General Site Improvements				
Dune Steps, 5' Wide	488	LF	\$50.00	\$24,400
Dune Stairs with Handrail, 5' Wide	350	LF	\$200.00	\$70,000
Underpass Precast Concrete Box Culvert, 12'x12'	120	LF	\$5,500.00	\$660,000
Box Culvert Wing Walls	1	LS	\$80,000.00	\$80,000
Stone Chips and Fines Trail, 5' Wide	1,206	LF	\$9.00	\$10,854
Signage	1	LS	\$20,000.00	\$20,000
			Subtotal	\$865,254
Landscaping				
Seeding / Restoration	48,000	SF	\$0.25	\$12,000
			Subtotal	\$12,000
Earthwork				
General Grading	2,700	CY	\$7.00	\$18,900
SESC Measures/Dewatering Controls	1	LS	\$12,000.00	\$12,000
Boulder Riprap	100	Tons	\$250.00	\$25,000
			Subtotal	\$55,900
Utilities				
Storm Sewer Structures and Piping	1	LS	\$8,000.00	\$8,000
			Subtotal	\$8,000
			Construction Subtotal	\$985,154
			Permitting, Mobilization, & General Conditions	\$128,070
			10% Contingency	\$98,515
			Construction Total	\$1,211,739
			2% Survey, Geotech, and Construction Material Testing	\$24,235
			8% A&E Services	\$96,939
			Project Total	\$1,332,913

Note: Construction total based on 2020 costs. Increase 4% per year for inflation.

Appendices

APPENDIX A: BACKGROUND/SUPPORTING PLANS

COASTAL TRAIL CONCEPT PLAN - OCPRC
LAKE MICHIGAN COASTAL CORRIDOR PLAN - OCPRC
MINING IMPACT PLAN - OCPRC
CONCEPTUAL WETLANDS RESTORATION PLAN - AES

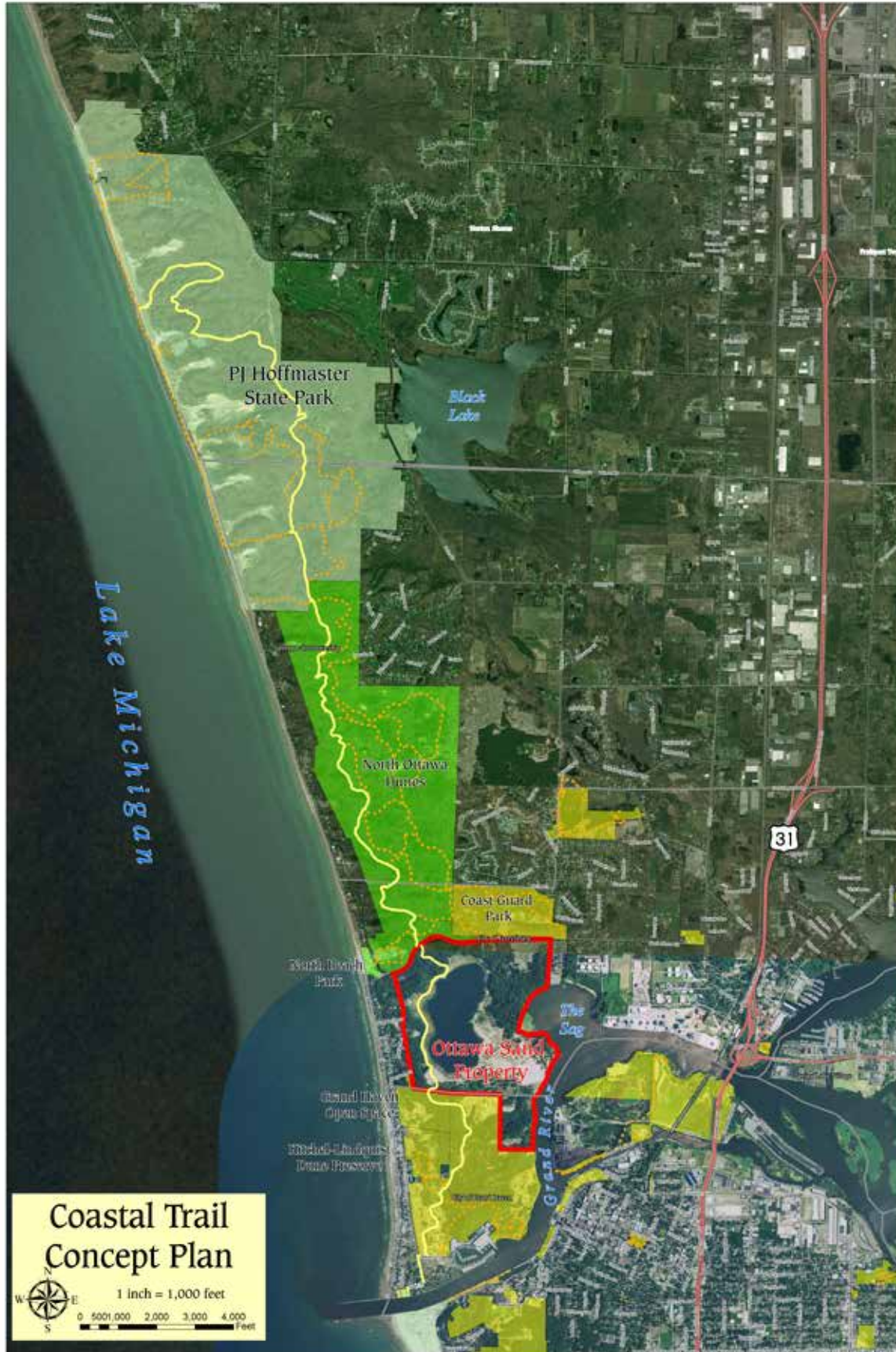
APPENDIX B: NATURAL FEATURES AND DEVELOPMENT

HERPETOLOGICAL ASSESSMENT TABLE S - HRM
NATURAL FEATURES INVENTORY SUMMARY - WILLIAM MARTINUS
PRE AND POST DEVELOPMENT COMPARISON

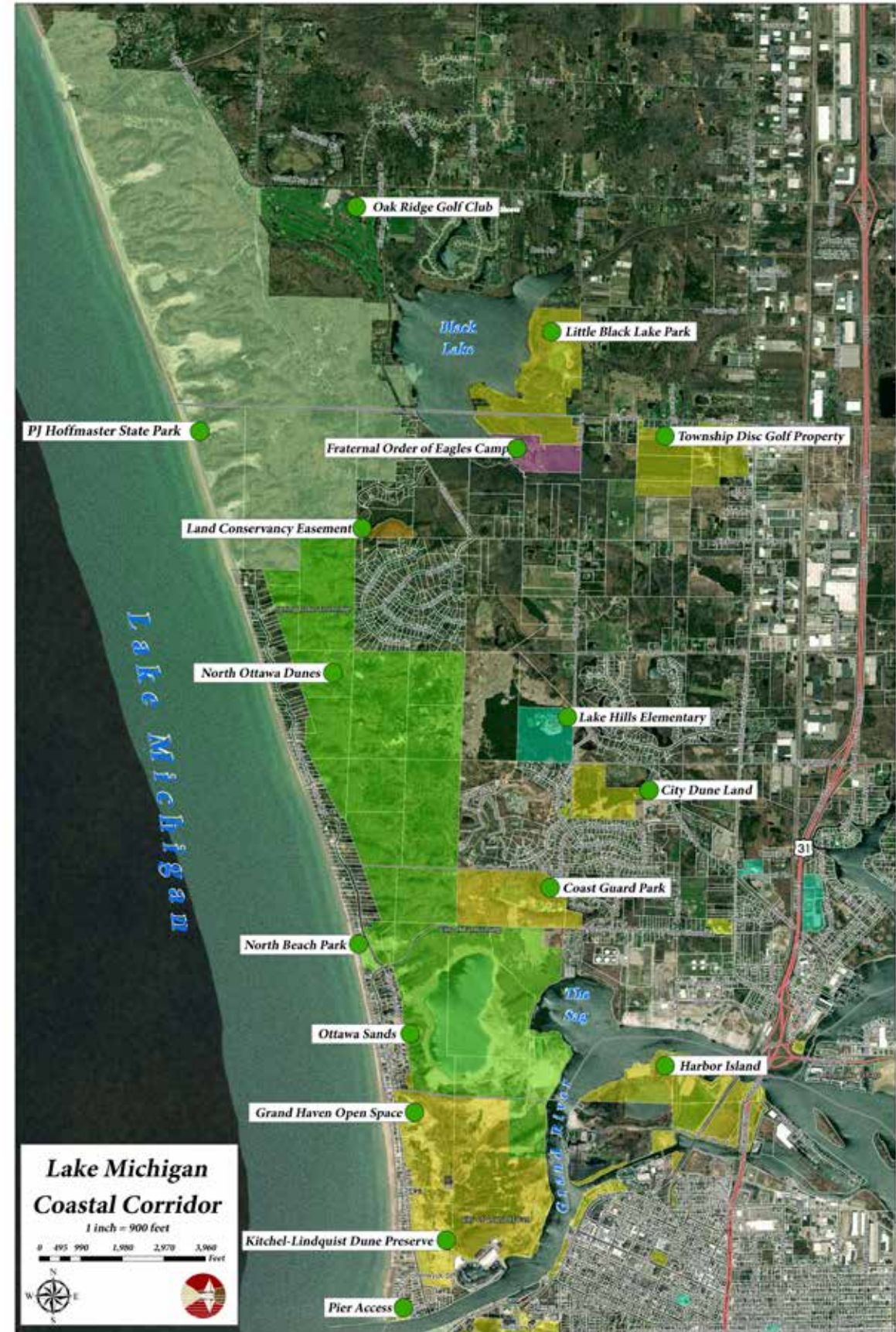
APPENDIX C: COMMUNITY ENGAGEMENT NOTES

OTTAWA COUNTY DUNE AND WETLAND CORRIDOR RESPONSES
FOCUS GROUP NOTES
FIELD DAY NOTES
ON-LINE SURVEY SUMMARY
OPEN HOUSE SUMMARY

APPENDIX A : BACKGROUND / SUPPORTING PLANS

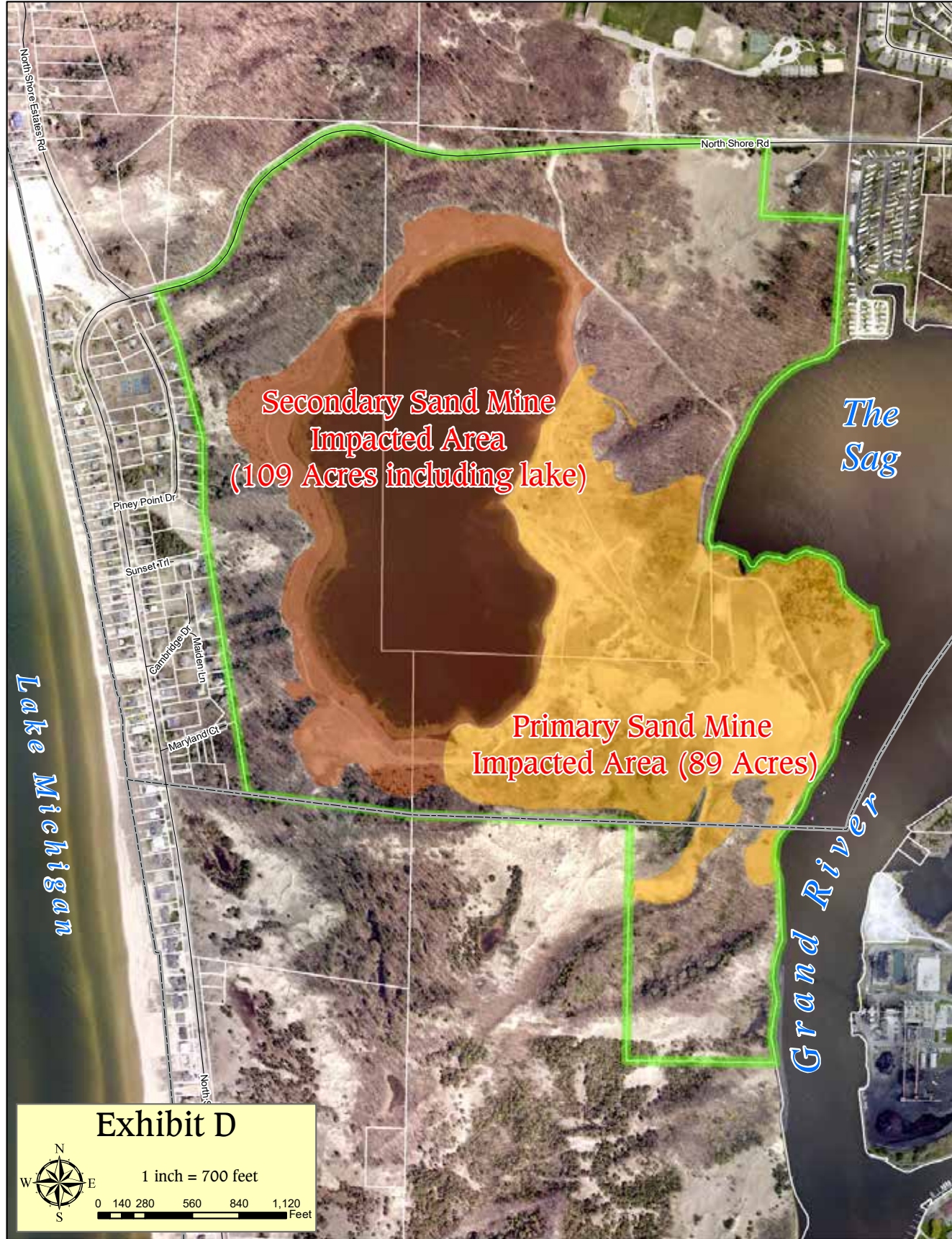


COASTAL TRAIL CONCEPT PLAN: SOURCE - OTTAWA COUNTY PARKS

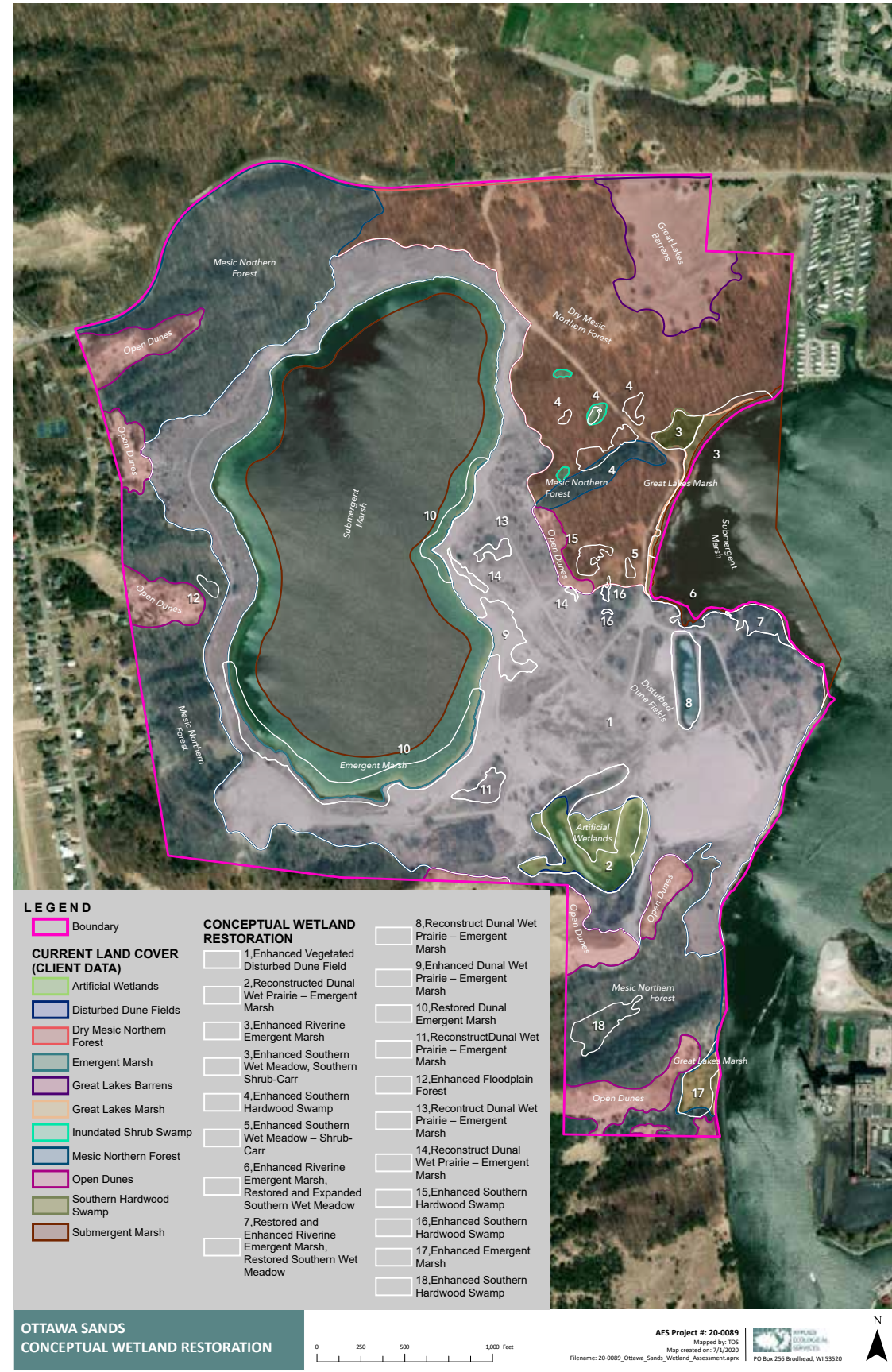


LAKE MICHIGAN COASTAL CORRIDOR PLAN: SOURCE - OTTAWA COUNTY PARKS

APPENDIX A : BACKGROUND / SUPPORTING PLANS



SAND MINING IMPACT PLAN: SOURCE - OTTAWA COUNTY PARKS



CONCEPTUAL WETLAND RESTORATION: SOURCE - APPLIED ECOLOGICAL SERVICES (AES)

APPENDIX B : NATURAL FEATURES AND DEVELOPMENT

Ottawa Sands Herpetofauna Richness				
Common Name	Species Name	Observed Species	Potential Species	State Status
Black (Gray) Rat Snake	<i>Pantherophis obsoletus</i>		X	Special Concern
Blue Racer	<i>Coluber constrictor foxii</i>		X	SGCN
Eastern Garter Snake	<i>Thamnophis sirtalis sirtalis</i>		X	
Eastern Hog-nosed Snake	<i>Heterodon platirhinos</i>		X	SGCN
Northern Brown Snake	<i>Storeria dekayi dekayi</i>	X		
Northern Ribbon Snake	<i>Thamnophis sauritus septentrionalis</i>		X	
Northern Water Snake	<i>Nerodia sipedon sipedon</i>			
Northern Ring-necked Snake	<i>Diadophis punctatus edwardsii</i>		X	SGCN
Eastern Smooth Green Snake	<i>Opheodrys vernalis</i>		X	SGCN
Eastern Snapping Turtle	<i>Chelydra serpentina</i>	X		
Midland Painted Turtle	<i>Chrysemys picta</i>		X	
Eastern Box Turtle	<i>Terrapene carolina carolina</i>		X	Special Concern
Eastern Spiny Softshell Turtle	<i>Plethodon cinereus</i>		X	
Eastern American Toad	<i>Anaxyrus americanus</i>	X		
Fowler's Toad	<i>Anaxyrus fowleri</i>	X		Special Concern
Green Frog	<i>Rana clamitans</i>	X		
Northern Leopard Frog	<i>Rana pipiens</i>	X		SGCN
Wood Frog	<i>Rana sylvaticus</i>		X	
Bull Frog	<i>Rana catesbeianus</i>		X	
Gray Treefrog	<i>Hyla versicolor</i>		X	
Blanchard's Cricket Frog	<i>Acris blanchardi</i>		X	Threatened
Red-backed Salamander	<i>Plethodon cinereus</i>		X	
Eastern Newt	<i>Notophthalmus viridescens</i>		X	

Table 1. Observed and potential reptile species at Ottawa Sands County Park.

Ottawa Sands Initial Habitat Improvement Recommendations	
Action	Target
Remove invasive species with emphasis on <i>Phragmites</i>	Increase ecological integrity of the site and provide opportunities for increased spatial distribution and reduce habitat fragmentation
Provide basking logs	Aid in thermoregulation of reptiles
Place small multi-branched limbs in open water	Provide adherence points for amphibian eggs and cover for a variety of wildlife
Create terrestrial nesting areas	Increase recruitment and population viability of turtle and snake populations
Place flat basking structures	Aid in thermoregulation of reptiles
Grade near shore banks	Improve accessibility of upland habitat to herpetofauna
Plant aquatic emergent and submergent vegetation	Provide refuge and a food source for wildlife and combat invasive species
Create hibernacula	Offer overwintering habitat for snakes to encourage species persistence
Use wildlife friendly erosion control post construction	Reduce herpetofauna fatalities from getting caught in erosion netting
Create shallow swales and interdunal pools	Provide breeding and nursery habitat for coastal species
Add large woody debris to upland areas	Provide cover and basking opportunities as well as nesting locations for certain species
Integrate wildlife crossing signage and structures at key proposed roads	Proactively decrease the number of transportation related herpetofauna fatalities
Add educational signage about native herpetofauna	Educate park patrons on the natural landscape around them and the value of preserving it
Provide waste receptacles along trails	Mitigate the amount of fishing materials and pet waste left behind by park patrons

Table 2. Habitat restoration recommendations generated based on the preliminary 2020 site assessment.

APPENDIX B : NATURAL FEATURES AND DEVELOPMENT

**Ottawa County Parks: Ottawa Sands
Natural Features Inventory Summary**

Compiler: William Martinus

Overview: (all species personally observed by Wm Martinus)

Total Species: 392 + 1 hybrid, 1 form
 Native Species: 278
 Non-native Species: 114 29% (Cf. 34% of MI flora is non-native)
 Floristic Quality Assessment Score: 56

Plants: 390 Species
 - Ferns: 11 Species
 - Sedges: 34 Species
 - Grasses: 49 Species
 Amphibians: 9 Species
 Reptiles: 5 Species
 Mammals: 9 Species

Natural Plant Communities State Rank & Global Rank

Palustrine

Submergent Marsh S4, GU
 Emergent Marsh S4, GU
 Great Lakes Marsh S3, G4
 Intermittent Wetland S3, G3
 Inundated Shrub Swamp S3, G4
 Northern Shrub Thicket S5, G4
 Southern Hardwood Swamp S3, G3

Terrestrial

Mesic Northern Forest S3, G4
 Dry-Mesic Northern Forest S3, G4 (Successional Forest)
 Great Lakes Barrens S2, G3
 Open Dunes S3, G3

Artificial Plant Communities

Artificial Lake
 Artificial mixed wetlands
 Disturbed dune fields

Natural Features Highlights and Statistics

- Great Lakes Dunes
 - One mile of Grand River frontage (5,585feet)
 - 345 acres
 - 80 acre inland lake

Endangered, Threatened, and Special Concern Species

Species	Status	State & Global Rank	Date observed
<i>Falco peregrinus</i> , Peregrine Falcon	Endangered	S3, G4	8/1/18, 5/19/20
<i>Setophaga discolor</i> , Prairie Warbler	Endangered	S3, G5	5/19/20
<i>Falco columbarius</i> , Merlin	Threatened	S3, G5	4/15/20, 7/1/20 nesting
<i>Gavia immer</i> , Common Loon	Threatened	S3, G5	4/15/20, 6/3/20 on pond
<i>Cirsium pitcheri</i> , Pitcher's Thistle	Federally Threatened	S3, G2G3	2019-2020
<i>Hydroprogne caspia</i> , Caspian Tern	Threatened	S2, G5	9/15/19, 5/20/20
<i>Haliaeetus leucocephalus</i> , Bald Eagle	Special Concern	S4, G5	8/1/18, 2/23/20 nesting
<i>Pandion haliaetus</i> , Osprey	Special Concern	S4, G5	5/21/20
<i>Melanerpes erythrocephalus</i> , Red-headed Woodpecker	Special Concern	S3, G5	8/1/18, 2/23/20 nesting
<i>Protonotaria citrea</i> , Prothonotary Warbler	Special Concern	S3, G5	5/19/20
<i>Anaxyrus fowleri</i> , Fowler's Toad	Special Concern	S3S4, G5	10/7/19, 6/30/20
<i>Triplasis purpurea</i> , Sand Grass	Special Concern	S2, G4G5	10/4/19
<i>Corispermum americanum</i> , American Bugseed	Special Concern	SNR, G5?	10/7/19
<i>Corispermum pallasii</i> , Siberian Bugseed	Special Concern	SNR, G4?	10/7/19

Historical

- Logging: late 1830s - 1920s
 - pine for lumber
 - hardwood for lumber and industry
 - cordwood for train steamengines, steamships, and as fuel for homes (cooking & heating)
 - Railroad Depot; 1858
 - Shipwreck graveyard
 - Sand Mine
 - Dune Scooner rides

Geological

- Sand to ~60 feet below Lake surface
 - Barrier Dunes ~4000-5000 years old? (Thermal Luminescent dating)
 - Back Dunes ~6000-7000 years old? (Thermal Luminescent dating)
 - Ancient pre-Grand River Channel
 - Marshal Sandstone ~206' below inland lake (core samples)
 - Coldwater Shale at ~215' below inland lake (core samples)
 - Numerous glacial clays, gravel layers

APPENDIX B : NATURAL FEATURES AND DEVELOPMENT

Current Conditions

<u>Plan Area</u>	<u>Acreage (% of total)</u>
Lake	80 (23%)
Recently Disturbed	108 (31%)
Relatively Natural	<u>157 (46%)</u>
TOTAL	345 (100%)

There are currently approximately 4 miles of natural or gravel surface trails in the recently disturbed and relatively natural areas.

Proposed Conditions with Full Master Plan Development

<u>Plan Area</u>	<u>Acreage (% of total)</u>
Lake	80 (23%)
Master Plan “Hard” Facility Areas*	19 (6%)
Roads (3.2 acres)	
Paved Paths (4.6 acres)	
Day Use Area (1.4 acres)	
Lake Recreation Area (2.8 acres)	
Kayak Access Area (1.4 acres)	
Southern Loop (0.9 acres)	
Riverfront (4.4 acres)	
Master Plan “Soft” Facility Areas	8 (2%)
Greenway Camping (3 acres)	
Multi-use Greenspace (3 acres)	
Nature Play Area (2 acres)	
Intensive Restoration	26 (8%)
Lake Shoreline (8 acres)	
Dunal Wetland/Prairie (18 acres)	
Natural (managed with minor restorations)	<u>212 (61%)</u>
TOTAL	345 (100%)

*Includes paved and building areas, internal planted areas (restorations, rain gardens, green infrastructure), and buffer zones.

Proposed plan shows approximately 4.5 miles of paved, gravel, and natural surface trails.

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

OTTAWA COUNTY DUNE AND WETLAND CORRIDOR RESPONSES

Priorities for conservation:

- Continued management of and removal of invasive species (see species list below)
- Shoreline preservation and softening, while maintaining access to waterfronts for recreational opportunities
- Reforestation in riverine and stream corridors and areas where regeneration is stunted
- Maintenance of existing restored and preserved areas through stewardship and monitoring
- Wild Rice maintenance and plantings along the Grand River, Kalamazoo River, and Pigeon River
- Lake Sturgeon population maintenance within Grand River and Kalamazoo River
- Land management for mudflats and shorebird migration
- Harbor Island wetlands restoration and remediation
- Incorporating habitat conservation and connectivity in discussions about climate resiliency, water infrastructure, city planning and green and blue infrastructure

Threats to natural areas:

- Invasive species
 - o Species of concern: Frogbit, Narrowleaf Cattail, potential for lamprey (Gun Lake Tribe, Stearns Bayou, Grand River overall), Purple Loosestrife, Phragmites, Garlic Mustard (City of Grand Haven, Hoffmaster State Park), Spotted Knapweed, Japanese Barberry, Honeysuckle (Dunes Preserve, Hoffmaster State Park), Hemlock woolly adelgid (Hoffmaster State Park, Muskegon County, City of Grand Haven), Scotch and Austrian Pine (Hofma Park and Preserve), Black Swallow Wort, Oriental Bittersweet, Emerald Ash-borer (City of Grand Haven)
 - o Note: while most stakeholders highlighted invasive species as a top threat, some also felt that that management of invasive species by the local CISMA and Ottawa County partnerships was also a strength (Norton Shores, Grand Haven Township)
- Climate Change
 - o High surface water levels (all), storm water management (all), impacts to infrastructure (for public and private lands – City of Grand Haven)
 - Has primarily been reactive – need for resiliency planning
 - o Unknown impacts on plant communities and the wildlife that relies on them to thrive – need for monitoring
- Water Quality
 - o Wetlands restoration of Harbor Island and containment and remediation of contaminants
 - o Nutrient runoff and contaminants, including plastics, microplastics and PFAS/PFOS (Muskegon County, Norton Shores, City of Grand Haven)
- Erosion (Spring Lake, Norton Shores, Muskegon State Park, Grand Have Township)
 - o From high water, but also recreational uses of the area: dirt bikes, mountain bikes, hikers – most comply with reducing their footprint and sticking to trails, but some don't (Muskegon State Par, City of Grand Haven)
- Development (general)
 - o City of Grand Haven, Ferrysburg – little space remaining for development
 - Aiming to build up, rather than out, so surrounding townships can preserve farmland and remaining open spaces

- o Muskegon County wants to increase their population, and there are concerns that an increase in development will occur with poor community resilience and open space planning
- Disease
 - o Oak Wilt
- Deer
 - o Spring ephemerals were once thriving on several properties and now have very few only where trees prevent deer access
 - o Forest regeneration stunted up near Hoffmaster and in parts of City of Grand Haven
- Other (mentioned by only 1 stakeholder, each):
 - o Grand River restoration dam removal and dredging could cause problems with invasive species and contaminants
 - o Conflicts between noise pollution, which can impact breeding bird behavior, and recreational uses (i.e. helicopter tours along the shoreline)
 - o Off-shore wind turbines and their impacts on migratory birds

Program or outreach needs:

- EDI focus to engage under-represented communities (nearly all)
 - o Current limited capacity organization-by-organization to do more and build relationships with more diverse communities, but interest is there
 - o Some stakeholders would like to see a more robust outreach and engagement program with several local city and township partners, YMCA's and other community groups
- Interest in place-based learning through stewardship and monitoring at priority conservation sites and Important Bird Areas (Muskegon County)
- Additional educational and outreach resources could be beneficial on the following topics:
 - o Invasive species identification and spread prevention (Frog-bit especially); best practices for community members living in sensitive areas (including private landowners); benefits of wetlands and swamps for people and birds; benefits of natural area preservation (i.e. not seeing natural areas as fallow); how to be a good steward while recreating in natural areas; updates on current and ongoing conservation work (Grand Haven Township, Muskegon County)
- Accessibility for those with mobility issues is limited at Dunes Preserve and seems to be a priority for most Cities and Townships Parks and Recreation Departments
 - o Michiganders are moving to the area to retire or are retiring in place – accessibility and recreation for older demographics is needed (opportunities for bird watching to be expanded and highlighted)
- Outdoor Recreation primarily lead by partnerships with NORA (limited in natural areas, primarily youth-oriented in manicured parks with athletic facilities)

Strengths:

- Ottawa County community has keen awareness of and pride in natural places, storm water, and water resources management
- Lots of existing preserved green space and public access to green space
- Good diversity of habitat and topography
- Lake Michigan is an ecological asset and migratory corridor that helps moderate the climate
- Lake Michigan shoreline and dune access for recreation, tourism
- Park millage exists for County Parks

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FOCUS GROUP NOTES - CITY OF FERRYSBURG

PROJECT: **miOTTAWA
SANDS PARK**

MEETING DATE: March 11, 2020

A meeting was held at Ferrysburg City Hall to discuss the Ottawa Sands County Park project. The following summarizes items discussed at the meeting.

1. Curt TerHaar with Ottawa County Parks and Recreation Commission (OCPRC) gave an introduction about Ottawa Sands County Park:
 - a) First property purchase was in 2018, and the second was in July of 2019.
 - b) OCPRC opened a trail system in the park which is currently open to the public, and now are deciding what to do with the land through a Master Plan process. This will be a year-long process and they are excited for this great opportunity.
 - c) This is the start of the process, where we talk with important stakeholders to identify what we need to talk about with the public.
2. VIRIDIS Design Group (VIRIDIS) is the design consultant that OCPRC has retained for the master plan process, through a Coastal Management Program grant. They communicated that in these focus group sessions, we will develop a framework of your thoughts such as concerns about development and connectivity. We will be gathering information and listening, and will use this to inform the master plan. Input is the most important thing for the master plan.
 - a) We will engage participants in an inclusive and open process; we need to know your points of view and what's important to you, since this is your community.
 - b) We will consider all points of view to create a plan that addresses environmental, cultural, and recreation resource needs to reclaim this former industrial site. This is a unique opportunity due to the park's location within the context of the coastal corridor.
 - c) We will incorporate low-impact, sustainable site development principles that will support proposed improvements and programming.
 - d) Proposed development shall be considered within the context of the entire coastal corridor and encourage long-term collaborative planning and land management.
 - e) We will research the City of Ferrysburg and other local jurisdictions' plans and services, including the Tri-Cities Rec Plan, to ensure that we are not duplicating efforts.
3. Phase 1 of the Master Plan process begins with Analysis and Programming. VIRIDIS has a campground expert on their team to conduct a feasibility study if camping is desired at Ottawa Sands. OCPRC is also having natural features, herpetology and wetlands inventories completed.
 - a) This phase also includes the first public community input session, which will be held on site. The event is scheduled for June 13, 2020.
 - b) A photo vision challenge will also take place. This is a way to engage a larger group of people; potentially a younger demographic. Submitted photos will be displayed in Instagram, a photo sharing app. The photos may be of ways that the user enjoys using the park currently, ideas of things they'd like to do in the park, or examples of great parks/recreation that they've seen someplace else. The photos will be used throughout the design process, and printouts of the images will be used at the community input sessions. This will also help to give the community a sense of ownership in the process.
4. Phase 2 is for plan development. VIRIDIS will take the input received from phase 1 and begin to craft several design concepts.
 - a) A second community input session will be held at a location off-site, to be determined, to display the concepts and get feedback. Input from each concept option will be recorded and used as a guide to help shape the preferred option that will be developed in phase 3.
5. Phase 3 will be plan finalization. VIRIDIS will prepare cost estimates and a phasing plan. The final plan will be revealed at an open house at the end of November and go to the Parks Commission for approval at the end of December.
6. Any ideas are welcome; we don't want to discourage ideas at this point based on cost. VIRIDIS will take the input and identify what is the best fit with the land and principles identified for this project. OCPRC does not currently have funds allocated to implement phases of the master plan; once complete, they will look at the phasing to determine what projects they may be able to implement. This master plan will be a flexible document that is a road map for the County.
7. Curt said OCPRC is working on a planning process for their entire park system to identify priorities. They are also updating their five year master plan, which is a longer term process, planned out carefully. There are already a lot of people using Ottawa Sands County Park for passive recreation; components of this park can be inserted into the OCPRC's five year master plan.
8. This project offers an amazing opportunity with the coastal corridor. Ottawa Sands property is now 345 acres. The dune was interrupted by mining activities.
 - a) We will document the evolution of land use on site to tell the story. There are some remnant dunes on the west side of the lake with ecological complexities that are only achieved over 500-800 years. This same ecosystem can be found along the entire lakeshore. Flora, fauna and insects are the best indication of overall ecology; they don't respect boundaries.
 - b) With a long-term management plan in place that is stewarded and sustained, we can achieve improvement on the park's ecology over time.
 - c) Left alone, the shore/dune ecology will decline. It is not currently on a positive trajectory as there is some erosion. One dune was created from spoil sands from mining activities. There was some restoration after the mining retreat, but the site is currently in a holding pattern. Approximately 85-90 acres of the park was disturbed by mining. This would be the first place to

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FOCUS GROUP NOTES - CITY OF FERRYSBURG

- look to incorporate development. A building with a well, septic field and power still remains on site by the sag.
- d) The lake was created through the removal of minerals. This is an opportunity to restore wetland and water edges, create safer edges and more biodiversity through things like a wetland shelf, as the mining permit is still open for the lake. There is a shelf and some very deep areas (60') in addition to aquatic organisms. Looking at the site through a restoration lens can help us to locate recreation sites. This lake is 'perched' - it is contained by clay and sits higher than Lake Michigan.
 - e) The southern parcel of the site is in the City of Grand Haven, and is relatively undisturbed.
9. Development of any paths/surfaces would need to be done in a way that's restorative. VIRIDIS will come up with a design that bridges gaps while protecting and enhancing habitat.
 10. The park has 3-phase power to the existing building. There are public utilities in North Shore Drive.
 - a) Sanitary sewer from the east ends at the North Shore MHC & RV Resort.
 - b) There is no sanitary in North Shore Drive; all properties here have septic systems.
 - c) Watermain is continuous along North Shore Drive.
 11. Craig said camping at Ottawa Sands could put a lot of strain on the sanitary system if connected. He expressed concern about people disturbing ecologically sensitive areas. David said it would be important to provide access so people won't stray from the paths.
 12. Richard expressed concern that anything along the lakeshore gets destroyed by kids and the increased traffic/parking issues a campground could bring.
 13. VIRIDIS said this is a good opportunity for education, especially with the retreating shoreline. People can be respectful when they understand why. VIRIDIS will study the traffic/parking needs as well as pedestrian and vehicular interaction. They will also think about viewsheds, as there are some valuable, inspirational view corridors through Ottawa Sands. And they will study access, parking areas deeper in the site, and planned queuing and parking.
 14. Erosion also comes into play when considering access to the park. Would adjacent residents walk right in, or people walk through the properties to get to North Shore Rd.? A unified route connectivity plan would help, to inform the public where people should be.
 15. Debbie said there are already traffic issues on North Shore Drive in the summer. She also mentioned the overflow parking for Ottawa Sands is in Coast Guard Park, which is paid for by Ferrysburg residents.
 16. Curt said that OCPRC would ensure that adequate parking was on site. They will also study what number of people the site and infrastructure can handle and staffing levels required.
 17. The City of Ferrysburg had a population of 2,892 as of the 2010 census.
 18. Ideas for Ottawa Sands County Park:
 - a) Debbie asked about whether there would be a state or county park sticker for access to the park? Curt said if there was a beach at Ottawa Sands, they would use the sticker system, but we don't know what the final program elements will be.
 - b) Richard suggested this could be an opportunity for composting toilets. VIRIDIS will study the capacity of future uses and can look for natural decomposition systems. He mentioned a public forum that was held a couple of years ago where mountain bikers wanted a trail from PJ Hoffmaster south through the Grand Haven open space property. Neither PJ Hoffmaster nor Grand Haven allows mountain biking. He wants to see pedestrians only on footpaths in the site, not people tearing the site up and removing wood for fires.
 - c) David said we work through some of these key issues through our process. An ecological framework gives an unbiased understanding of what's working or not. We use this lens to determine what level of activity or intensity is appropriate as well as understanding the best locations for circulation and access. He did note that the deer population is overgrazing.
 - d) VIRIDIS said connectivity is important, but doesn't mean that the surface type or width must be uniform. Topographical challenges will help us to determine best routes as is appropriate.
 - e) The City has ecological studies they will share with the team, as well as KLH Dunes Preserve.
 - f) Gene asked about whether a wildlife study was being conducted as part of the master plan. OCPRC is conducting floristic and herpetology studies. They are also trying to engage the Audubon Great Lakes staffer.
 - g) Curt said OCPRC has programmed bird hikes through Ottawa Sands, and they have seen up to 60 species. He also mentioned that some plants need a little disturbance for long term health and propagation, which is an interesting issue. It is OCPRC's hope that through this process, they will develop partners with the focus groups that will manage the ecology together.
 - h) Craig offered ideas to have a lodge, kayaking, meetings/weddings like Grand Ravines and a satellite for nature programs. He said he understood there were critical dunes to protect as well as beautiful views that needed to be maintained.
 - i) Debbie suggested a kayak launch on the river. She mentioned a kayak trail in Ludington and asked about having something similar on the inner lake. Curt said OCPRC has four kayak launches, and the City of Grand Haven also has one. There is concern about introducing invasive species from small boats.
 - j) Jason talked about the idea of being able to have a kayak trip from Grand Rapids with camping spots along the way. VIRIDIS also mentioned a recreational opportunity with the existing breasting dolphins as a final destination for small craft.
 - k) Debbie asked about OCPRC using goats in Ottawa Sands, as they are not permitted within the City. Jason said they use them for invasive species control, especially in locations they can't get mechanical equipment or workers into, but they don't anticipate using goats at Ottawa Sands. They are generally needed with underbrush, which isn't present here.
 - l) Debbie asked about whether movement of the dunes would affect the west side of the lake. David said that would be an important reason to get vegetation established.

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- m) There is an opportunity for historic interpretive education, reflecting the culture and history of the community. This could include lumbering, fishing, the Sag, and being a vibrant pass-through port.
19. Things at Ottawa Sands County Park that are not desired:
- a) Richard said the park doesn't fit their master plan and has been taken off the tax roll. Increased vehicular traffic to the park and traffic through KLH Dunes Preserve make him concerned.
 - b) Debbie said her concern would be about traffic. Also Dogwood Drive has traffic issues. With the additional traffic comes maintenance of roads and utilities. She asked whether the system could handle it, and also whether emergency services could access the required areas within Ottawa Sands County Park. Curt said that we will look at traffic through the master plan process. OCPRC would also develop a plan for emergency access, working with local agencies.
 - c) Craig asked if there is an RV park at Ottawa Sands, how is it going to be managed, and would there be a need for increased police presence? Curt said that County resident surveys have identified a desire for camping facilities, but they hadn't found the right site until now.
 - d) Richard said the only camping competition would be Grand Haven State Park, but there is demand for camping.
 - e) Rebecca said it is important to keep the ecological integrity at all costs, keeping invasive species out of the lake and dealing with disturbance from dogs.
 - f) Gene said park users leaving Ottawa Sands have been walking through adjacent neighbors' backyards.
 - g) Matt said the fire department has expressed concern about access if there are buildings in the back of the park, and said a dry barrel fire hydrant would be important to have.
20. Community Engagement
- a) Beginning today, the team is holding a series of focus group meetings with local stakeholders.
 - b) Photovision Challenge: on Instagram, park users can submit pictures of their use of Ottawa Sands County Park, things/recreation they'd like to see, or examples of other places/ideas that they like. This will be promoted with a sign at the park as well as on the OCPRC website. #miOttawaSands This is not framed as a contest at this time, but there may be some small incentives such as a park pass or small local coffee shop gift card.
 - c) An online survey for the regional community to give input will be available.
 - d) A series of community meetings will be held to gain input for the project:
 - i. Community Input #1 will be held on site with activities and food. The goal will be to understand what types of recreation the community wants to see at this park. 3-4 concepts will be developed based on the input collected.
 - ii. Community Input #2 will be held later in the summer to share the concepts and to get votes on the different ideas in them to be able to compile the input into a preferred concept. This will be held off-site and is anticipated to be open-house style.
 - iii. Community Input #3 will be held at the end of November off-site to present the preferred concept.
 - iv. Child care will be available at the open houses.
- v. VIRIDIS asked if the City had any ideas for venues for the second and third input sessions. Ferrysburg gym was a possibility.
- e) City events that can advertise for the input sessions or have boards available for additional input include the Spring Lake Farmer's Market and 4th of July. The mayor has a breakfast on the 4th at William Ferry Park.
 - f) Ferrysburg will host their annual Cops and Cones event on June 13 from 1-3 pm at Ala mode Ice Cream Shop; VIRIDIS will ensure there is minimal overlap for the Park Community Input session. Ferrysburg can incorporate the Ottawa Sands event into their Cops and Cones flyer.
 - g) VIRIDIS will coordinate with Craig to advertise for the Park Community Input session in the City's spring newsletter. The next newsletter will be in the fall, and Community Input #3 can be advertised in that edition.
 - h) The City also has reader boards and website that they can share information about this project.
21. The VIRIDIS team asked the participants to fill out the comment cards provided. Any other thoughts can be e-mailed to Curt TerHaar with OCPRC; the input received will help inform how we ask questions of the public.

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FOCUS GROUP NOTES - CITY OF GRAND HAVEN

PROJECT: **miOTTAWA
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MEETING DATE: March 11, 2020

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 - a) We will engage participants in a transparent and open process that allows significant input and multiple feedback loops.
 - b) We will consider all points of view to create a plan that addresses environmental, cultural, and recreation resource needs.
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 - d) The lake was created through the removal of minerals. This is an opportunity to restore wetland and water edges, create beaches or wetland shelves as the mining permit is still open for the lake. There is a shelf and some very deep areas currently. Looking at the site through a restoration lens can help us to locate recreation sites.
 - e) The southern parcel of the site is in the City of Grand Haven, and is relatively undisturbed.
7. Mike F. said the City just completed a master plan update, completed by PM Blough, Inc. VIRIDIS should review this to avoid duplication of recreational opportunities. Jason has a copy and will forward to VIRIDIS.
8. Pat was interested in the connectivity that could be achieved along the coast for pedestrians, bikes and wheelchairs. The City property south of Ottawa Sands County Park currently has no trails and minimal maintenance. Pat asked about potential for taxable value on the City open space site, citing

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- a need for balance. He suggested identifying a corridor that works with the topography for a trail connection between Ottawa Sands and Kitchel-Lindquist-Hartger (KLH) Dunes Preserve. There is also a DNR property at the channel that is available for City use. Residents don't have a sidewalk along North Shore Drive. He wants to see an accessible connector that is not for off-road vehicles.
9. Mike noted that we hardly have this opportunity for trail connectivity, so he would hate to close off the City open space property. The dune is always moving, so a paved trail would be difficult to maintain.
 10. Jason said this is an exciting opportunity and suggested recreation opportunities like camping and a boat taxi and dock.
 11. Robert said the KLH Dunes Preserve is designated to be held as a nature preserve in perpetuity. He asked how long it would take to evolve from a natural gravel trail to a paved trail, maybe 15 years?
 12. Curt said he heard support for a trail connection for the Grand Haven open space, at least a hiking trail. This helps to promote a healthy lifestyle for users.
 13. VIRIDIS indicated that starting off with a chips and fines trail would be helpful, then observe how the trail gets used before committing to a paved surface. For the trail surface type, it is vital to think about long term management.
 14. Bob's view is that the Grand Haven open space is relatively natural and he wants to keep it that way. We need defined trails, not just free form public use. He isn't excited about hard surface trails because it disrupts nature. He prefers a more natural surface trail. He said we've got a real gem of an area, let's not screw it up. He wants to be able to show future generations the dunes. He mentioned that KLH Dunes Preserve has done extensive features inventories.
 15. Curt said the OCPRC general approach is to provide equivalent experiences for all, but sometimes it's not possible to have accessible paths, like at Rosy Mound.
 16. Jason said that it's pretty neat that they can get someone with mobility challenges to Ottawa Sands lake.
 17. VIRIDIS said they would continue to look at the Ottawa Sands park with a lens of access. A universally accessible trail loop would be possible here. Sometimes you can do more harm trying to fit accessibility into a site like this.
 18. Mike F shared that historically, Grand Haven started on the other side of the Grand River. Additional historic data can be collected from Jeanette Weiden at the library and Julie Bunke at the Museum. He is in favor of a nature trail in the Grand Haven open space, and acknowledged that future City Councils may make changes to the land use. This is the only long trail opportunity in this area.
 19. Jennifer suggested a connection from downtown Grand Haven to a trail connector.
 20. VIRIDIS asked the group what types of camping they could envision in Ottawa Sands County Park.
 - a) Jennifer suggested types other than RVs, such as yurts, glamping, or tents on platforms to preserve the dunes.
 - b) Jason said the campground consultant's feasibility study would include looking at economic viability of the various types of camping in the area.
 - c) Bob said the City had a feasibility study done years ago for Harbor Island, and RV camping was one potential use that was not pursued as it had a 13-year payoff.
 - d) Pat will share Harbor Island feasibility study by the 3rd Street bridge with OCPRC.
 21. Harbor Island belongs to the City and contains a mitigated wetland from a former industrial airport, landfill site and a marina.
 - a) The power plant is going to be demolished in phases, this summer and next year. There's a two year mitigation plan for the site.
 - b) Future use for the property may include utilities, such as a sub station, control facility or snow melt.
 - c) Mike D said most of the island is below the 100-year floodplain and will be a swamp.
 - d) Mike F said there is a lot of industrial waste on the island.
 - e) Open space on the island was a disposal site for the Army Corps of Engineers' river dredgings, including the existing soccer fields.
 - f) There is a boat launch and four finger piers, and is the closest public launch to Lake Michigan. Fishermen who go to the big lake depart from this location in early morning, while recreational craft (16'-35') use the launch later in the day.
 22. Curt mentioned the local consultant may be willing to do a natural features inventory for the Grand Haven Open Space site. If an endangered species is identified, there will be potential restrictions on developing the property.
 23. Ideas for Ottawa Sands County Park:
 - a) Robert asked about a potential boat launch; the Grand Haven boat launch may not be usable long-term because of the water table.
 - b) Pat said the City has closed their boat launch while it's underwater, as the pavement gets beat up. The marina will have to shut off power due to the high water level.
 - c) Pat suggested an access dock where people could back and forth across the river to Harbor Island and the downtown area. A water taxi could offload at the marina.
 - d) Curt said there may be ways to get to Dewey Hill from Ottawa Sands or KLH Dunes Preserve, where there is a cool overlook. Pat said they currently discourage foot traffic on Dewey Hill due to erosion. Maybe have some boardwalks and re-vegetation or a crushed limestone path to help keep the dune together. We need to be careful not to be victims of our own success by having too many people on the dune; we need to channel people where we want them to go.
 - e) Pat said formal programming for natural components/education would be positive.

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- f) Curt said OCPRC had talked about the Ottawa Sands County Park's existing building housing a satellite for staff for naturalist programming.

24. Engagement

- a) Beginning today, the team is holding a series of focus group meetings with local stakeholders.
- b) Photovision Challenge: on Instagram, park users can submit pictures of their use of Ottawa Sands County Park, things/recreation they'd like to see, or examples of other places/ideas that they like. This will be promoted with a sign at the park as well as on the OCPRC website.
- c) An online survey for the regional community to give input will be available.
- d) A series of community meetings will be held to gain input for the project:
 - i. Community Input #1 will be held on site with activities and food. The goal will be to understand what types of recreation the community wants to see at this park. 3-4 concepts will be developed based on the input collected.
 - ii. Community Input #2 will be held later in the summer to share the concepts and to get votes on the different ideas in them to be able to compile the input into a preferred concept. This will be held off-site and is anticipated to be open-house style.
 - iii. Community Input #3 will be held at the end of November off-site to present the preferred concept.
 - iv. Child care will be available at the open houses.
 - v. VIRIDIS asked if the City had any ideas for venues for the second and third input sessions.
- e) City events that can advertise for the input sessions or have boards available for additional input include Memorial Day weekend, Earth Day, 4th of July, or the Farmer's Market. Jennifer also mentioned having a powerpoint slide before Zoning meetings this spring. She said the City does not get much participation with Facebook posts. The City would be interested in having VIRIDIS/OCPRC get the word out about their Mission Pier project. Jennifer will follow up with VIRIDIS.

25. Robert said that Instagram was a great platform for the photovision challenge, and thought it is interesting that we will be asking for external ideas.

26. The VIRIDIS team asked the participants to fill out the comment cards provided. Any other thoughts can be e-mailed to Curt TerHaar with OCPRC; the input received will help inform how we ask questions of the public.

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FOCUS GROUP NOTES - KITCHEL LINDQUIST HARTGER DUNE PRESERVE, MDNR

PROJECT:



MEETING DATE:

March 11, 2020

A meeting was held at Ferrysburg City Hall to discuss Ottawa Sands County Park project. The following summarizes items discussed at the meeting.

1. Curt TerHaar with Ottawa County Parks and Recreation Commission (OCPRC) gave an introduction about Ottawa Sands County Park:
 - a) First property purchase was in 2018, and the second was in July of 2019.
 - b) OCPRC opened a trail system in the park which is currently open to the public, and now are deciding what to do with the land through a Master Plan process. This will be a year-long process and they are excited for this great opportunity. We will have a lot of opportunities to get public input.
 - c) This is the start of the process, where we talk with important stakeholders to identify what we need to talk about with the public.
2. VIRIDIS Design Group (VIRIDIS) is the design consultant that OCPRC has retained for the master plan process, through a Coastal Management Program grant. They communicated that in these focus group sessions, we will develop a framework of your thoughts such as concerns about development and connectivity. We will be gathering information and listening, and will use this to inform the master plan. Input is the most important priority for the master plan.
 - a) We will engage participants in an inclusive and open process; we need to know your points of view and what's important to you, since this is your community.
 - b) We will consider all points of view to create a plan that addresses environmental, cultural, and recreation resource needs to reclaim this former industrial site. This is a unique opportunity due to the park's location within the context of the coastal corridor.
 - c) We will look at this park through an ecological lens, studying ecology and geologic studies. Bill Martinus is doing a floristic study. Index is around 45; for reference, KLH Dunes Preserve is at 70.
 - d) We will incorporate low-impact, sustainable site development principles that will support proposed improvements and programming.
 - e) Proposed development shall be considered within the context of the entire coastal corridor and encourage long-term collaborative planning and land management. It is important to think of the sites as being connected.

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FOCUS GROUP NOTES - KITCHEL LINDQUIST HARTGER DUNE PRESERVE, MDNR

- f) We will research the City of Ferrysburg and other local jurisdictions' plans and services, including the Tri-Cities Rec Plan, to ensure that we are not duplicating efforts.
3. Phase 1 of the Master Plan process begins with Analysis and Programming. VIRIDIS has a campground expert on their team to conduct a feasibility study if camping is desired at Ottawa Sands. OCPRC is also having natural features, herpetology and wetlands inventories completed.
 - a) This phase also includes the first public community input session, which will be held on site. The event is scheduled for June 13, 2020.
 - b) A photo vision challenge will also take place. This is a way to engage a larger group of people; potentially a younger demographic. Submitted photos will be displayed in Instagram, a photo sharing app. The photos may be of ways that the user enjoys using the park currently, ideas of things they'd like to do in the park, or examples of great parks/recreation that they've seen someplace else. The photos will be used throughout the design process, and printouts of the images will be used at the community input sessions. This will also help to give the community a sense of ownership in the process.
4. Phase 2 is for plan development. VIRIDIS will take the input received from phase 1 and begin to craft several concepts.
 - a) A second community input session will be held at a location off-site, to be determined, to display the concepts and get feedback. Input from each concept option will be recorded and used as a guide to help shape the preferred option that will be developed in phase 3.
5. Phase 3 will be plan finalization. VIRIDIS will prepare cost estimates and a phasing plan. The final plan will be revealed at an open house at the end of November and go to the Parks Commission for approval at the end of December.
6. Fred suggested having the KLH Dunes Preserve mission statement strongly influence this process: To operate, maintain, and safeguard forever the Kitchel-Lindquist-Hartger Dunes Preserve in its natural state for scientific, educational, and aesthetic purposes. He also wanted to emphasize the importance of protecting sensitive dunes. He shared that Kitchel-Lindquist-Hartger (KLH) Dunes Preserve has an outdoor classroom with restrooms, which is a great resource.
7. VIRIDIS said north-south pedestrian connectivity had been identified in previous stakeholder meetings today. At KLH Dunes Preserve, they only allow hiking, and have trouble keeping people on the trail and not on the crest, which promotes erosion.
8. Fred said the KLH Dunes Preserve has some stairs and steps, but the trails are just earth and sand. He also expressed concern about movement of invasive seeds and plants. KLH Dunes Preserve is working with Melanie at OCPRC to mitigate invasives. He is enthused about the opportunity for connectivity with the Grand Haven open space and Ottawa Sands, and hopes that education about invasive species can be incorporated.
9. North Ottawa Dunes is a good example of keeping people on the path.
10. The North Shore Road construction project is adding a 5' paved shoulder on each side. This matches Ferrysburg's road section.
11. Pat said they only allow pedestrian use on the trails at PJ Hoffmaster State Park. They have earth trails, not paved, and a 300-site campground. They just added signage last year with mileage for their trail system. Curt suggested the idea of uniform signage throughout the coastal corridor.
12. Richard said a big concern they deal with at KLH Dunes Preserve is people browsing for firewood.
13. Mountain bikes are not allowed at KLH Dunes Preserve or PJ Hoffmaster State Park. They have a negative effect on the trails such as erosion and conflicts with other users.
14. Pat said they are working to educate visitors about habitat in the woods. He said they used to have a yearly deer hunt at the State Park but haven't done one for 4-5 years. Invasives are an issue, including Garlic Mustard. He said they had trouble with Oak wilt, but have treated the trees.
15. KLH Dunes Preserve has a mixed view from their board regarding deer; Fred said he feels there are too many and they ravage the dunes.
16. OCPRC said they hosted deer hunts for two weekends last fall at North Ottawa Dunes and Ottawa Sands. 40 deer were taken.
17. Fred expressed interest in coordinating efforts with invasives. He also said they currently have very little interpretive signage at KLH Dunes Preserve, but it could be advantageous for more signage to educate on erosion and invasives. VIRIDIS said signage could talk about resiliency of the shoreline. Curt added signage could share interesting community history.
18. Richard suggested other history: lumbering that happened, fishing with shanties and drying fish on the shore, and shipwrecks. He suggested contacting Jared at the Museum for more information.
19. Tim recommended using a GPS location on the signage to help from a safety standpoint, giving an example of a skier that was injured and took work from multiple agencies to locate.
20. Ideas for Ottawa Sands County Park:
 - a) Fred wants to see a campground, protection of the dunes, and educational opportunities. He also wanted to explore opportunities for classes at the KLH Dunes Preserve outdoor classroom.
 - b) Richard wants to see connectivity, camping and access to the Grand River mouth.
 - c) Pat said people want multi-day camping, this could be a good opportunity for that. He wants to complement the trail.
 - d) Tim said access to the campground in emergency situations would be vital as well as incorporating a fire hydrant for emergency crews.
 - e) The City of Grand Haven may want emergency crew ATV access to Dewey Hill. Tim suggested that the City could partner with Ottawa County for ATV fire access.

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FOCUS GROUP NOTES - KITCHEL LINDQUIST HARTGER DUNE PRESERVE, MDNR

- f) Fred said any vehicle marks on the dunes takes years to heal.
- g) Tim mentioned a homeowner on North Shore Drive had runoff from Ottawa Sands in their backyard.

21. Community Engagement

- a) Beginning today, the team is holding a series of focus group meetings with local stakeholders.
- b) Photovision Challenge: on Instagram, park users can submit pictures of their use of Ottawa Sands County Park, things/recreation they'd like to see, or examples of other places/ideas that they like. This will be promoted with a sign at the park as well as on the OCPRC website. #miOttawaSands This is not framed as a contest at this time, but there may be some small incentives such as a park pass or small local coffee shop gift card.
- c) An online survey for the regional community to give input will be available.
- d) A series of community meetings will be held to gain input for the project:
 - i. Community Input #1 will be held on site with activities and food. The goal will be to understand what types of recreation the community wants to see at this park. 3-4 concepts will be developed based on the input collected and shared with stakeholders prior to the second input session.
 - ii. Community Input #2 will be held later in the summer to share the concepts and to get votes on the different ideas in them to be able to compile the input into a preferred concept. This will be held off-site and is anticipated to be open-house style.
 - iii. Community Input #3 will be held at the end of November off-site to present the preferred concept.
 - iv. Child care will be available at the open houses.
 - v. VIRIDIS said they've used color coding at public input events before to signify geographic location and to give hierarchy to near neighbors.
- e) Pat said he could post information about Ottawa Sands events at TJ Hoffmaster State Park and on their Facebook page.

22. The VIRIDIS team asked the participants to fill out the comment cards provided. Any other thoughts can be e-mailed to Curt TerHaar with OCPRC; the input received will help inform how we ask questions of the public.

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FOCUS GROUP NOTES - OTTAWA COUNTY PARK STAFF

PROJECT: 

MEETING DATE: July 13, 2020

PRESENT: Jason Shamblin, Ottawa County Parks and Recreation Commission
 Curt TerHaar, Ottawa County Parks and Recreation Commission
 Aaron Bodbyl-Mast, Ottawa County Parks and Recreation Commission
 Jessica VanGinhoven, Ottawa County Parks and Recreation Commission
 Eric Frifeldt, Ottawa County Parks and Recreation Commission
 Jason Boerger, Ottawa County Parks and Recreation Commission
 Collin Zackrison, Ottawa County Parks and Recreation Commission
 Jeremy Cook, Ottawa County Parks and Recreation Commission
 Kristen Hintz, Ottawa County Parks and Recreation Commission
 Curtis Dykstra, Ottawa County Parks and Recreation Commission
 Bob Reichel, Ottawa County Parks and Recreation Commission
 Melanie Manion, Ottawa County Parks and Recreation Commission
 Nealy Molheok, Ottawa County Parks and Recreation Commission
 Kyle Roffey, Ottawa County Parks and Recreation Commission
 David Yocca, Ecological Planner
 Trevor Bosworth, VIRIDIS Design Group
 Lindsey Gadbois, VIRIDIS Design Group
 SuLin Kotowicz, VIRIDIS Design Group

A virtual meeting was held via Zoom to discuss the Ottawa Sands County Park project. The following summarizes items discussed at the meeting.

1. Curt TerHaar with Ottawa County Parks and Recreation Commission (OCPRC) gave an introduction about Ottawa Sands County Park:
 - a) First property purchase was in 2018, and the second was in July of 2019.
 - b) VIRIDIS Design Group (VIRIDIS) is the design consultant that OCPRC has retained for the master plan process, through a Coastal Management Program grant.
2. Trevor with VIRIDIS described the process to date:

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FOCUS GROUP NOTES - OTTAWA COUNTY PARK STAFF

- a) We started the master plan process in January 2020. We will complete the process by the end of the year, per the grant. We are still in Phase 1, Analysis and Programming.
 - b) David Yocca, landscape architect and ecological planner, is part of the VIRIDIS team, along with Gerry Wilhelm, botanist, to help the team use the redevelopment process to restore and enhance the ecology in the park.
 - c) Focus for the master plan process includes:
 - i. We will engage participants in an inclusive and open process; we need to know your points of view and what's important to you, since this is your community. We don't want to duplicate types of programming with other local amenities
 - ii. We will consider all points of view to create a plan that addresses environmental, cultural, and recreation resource needs to reclaim this former industrial site. This is a unique opportunity due to the park's location within the context of the coastal corridor.
 - iii. We will incorporate low-impact, sustainable site development principles that will support proposed improvements and programming.
 - iv. Proposed development shall be considered within the context of the entire coastal corridor and encourage long-term collaborative planning and land management.
 - d) A migratory bird study is also being completed concurrently by the Audubon Society.
 - e) Our first community input session will be July 18.
 - f) Phase 2 is for Plan Development, and will go from the end of July through October. We will incorporate input from focus groups, stakeholders, and the public and bring several concepts to the public for feedback at our second public input session, mid-September.
 - g) With input received, VIRIDIS will prepare a preferred plan by the end of October for review and final feedback with OCPRC. Phase 3 will be plan finalization, with a final plan reveal for the public at the end of November. The final plan and report will be presented to the Parks Commission for approval in December.
3. The July 18 Community Input Session will be a Field Day at the park from 10 am - 2 pm. It will be a family-friendly event. The public also has a chance to weigh in through other outlets, including an online survey. We've received around 300 responses so far; OCPRC staff should take the survey. Another opportunity for input is the Community Photovision Challenge, an Instagram photosharing campaign allowing the public to share what they like, how they use the park currently, what they'd like to see, and what they'd like to change. There will be five input stations at the Field Day event with educational opportunities along a 1.5 mile loop.
 - a) Station 1: Site History/Background, to share information about the sand mining and predevelopment ecology
 - b) Station 2: Riverfront Activation, to get feedback on types of water activities desired
 - c) Station 3: Camping, to get feedback on types of camping desired, or whether no camping in the park is preferred
 - d) Station 4: Habitat and Ecology, to educate about ecology on site
 - e) Station 5: Recreation, to get feedback on the types of activities desired in the park
 - f) The Facebook event can be shared from OCPRC's page.
 - g) Participants will drive into the check in station location by the existing building/Sag. For participants unable to make the 1.5 mile hike, they will be able to share input at the check in station
 4. Ideas for Active/Passive Recreation at Ottawa Sands County Park:
 - a) Jason B. - would like to see multiple types of camping types, including unique, tent, and RV on a small portion of the site, a playground, a day-use/camper-use swimming beach, kayak, canoe, paddleboard rental, and contain recreation to the 80 acres disturbed by mining
 - b) Melanie - highest priority is to provide boardwalks along the Sag for bird watchers, camping has scored high on previous surveys, and there's a need in the community for it, scuba diving (including having volunteers help remove invasive species from the lake), no fishing as it's not sustainable. The fish are stunted and there's not a lot of energy in the lake; OCPRC would need guidance for a stocking program.
 - c) Bob - agrees about fishing not being sustainable, could only do catch and release, boats under 16' with an electric trolling motor - launch by hand, likes the idea of boardwalks on the Sag, keep natural areas natural, and wants a camping spot
 - d) Kristen - agrees with boardwalks for birding, would like to see a lot of the park natural, OCPRC provided rentals such as kayaks and paddle boards, concerned about park visitors bringing in own watercraft due to invasive species, likes tent camping but is worried about air quality with campfires, is concerned about access if we're bringing a lot of people in to the site, and it would be nice to have a trail/boardwalk for visitors in wheelchairs, and a satellite nature center on site
 - e) Curtis D - would like to see access along the Sag for birding, perhaps a boardwalk, camping but low-use with only tents and spread-out sites, wondered about doing something in the open dune area viewed from North Shore Drive, building to be a rentable facility with restrooms, maybe a gathering place for campers or school groups
 - f) Melanie - we've had a school group from Detroit visiting to learn about dune ecology, so improvements should be accessible for large buses
 - g) Trevor mentioned that in the City of Ferrysburg focus group, they mentioned that they like the existing viewsheds into the park
 - h) Kristen - suggested archery as a unique recreational opportunity, maybe OCPRC could offer classes
 - i) Jessica - would like to have a staffed center for education, since Ottawa Sands is at the intersection of two major greenways, this could be a hub of activity. Suggested snorkeling, climbing wall, cross country skiing, ice skating, making use of the areas impacted by mining, use the park as an opportunity to connect kids with nature, teaching them how to engage with nature
 - j) Melanie - deer hunting, connect to the urban centers around us (Muskegon, Grand Rapids, Holland) to get more people to visit and connect to the natural areas, diversify the park users, she mentioned the Audubon Society's Indigo project
 - k) Bob - campground opportunity; across the river is downtown Grand Haven; we could offer a shuttle service for campers to the Grand Haven marina
 - l) Jessica - tourists have expressed interest in a water taxi

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FOCUS GROUP NOTES - OTTAWA COUNTY PARK STAFF

- m) Jason B - a water taxi could have a lot of uses, see Spring Lake, tour the channel, educational harbor tours, school groups, and bird watching boat tours
 - n) Melanie - concern about the highly erodable nature of this stretch of the river
 - o) Trevor said that edge ecology must be taken into consideration with future uses; river dredging may be a management strategy
5. Thoughts about Maintenance, Management and Infrastructure Opportunities/Concerns:
- a) Melanie - Pitcher Thistle is a rare species present because of the mining disturbance, potential for erosion on the dunes if more people go where there's no vegetation
 - b) Jason B - staffing will be required with the addition of active recreation. Camping helps toward financial sustainability. Tents vs RVs; you get more income from RVs
 - c) Bob - hard to talk about maintenance and management before the master plan and an understanding of what programs will be here. They have had trouble with treated lumber on top of the sand only lasting 10-15 years; they've seen more decay
 - d) Kyle - avid camper, would like to have a divider between day users and campers, including parking areas, no motorized boats on the lake, kayak launch on the Sag, trees for shade in some extensive prairie areas, consider space for the entry booth
 - e) Jessica - lakeshore parks don't have a 'fast pass' lane, which is very frustrating, should have that at Ottawa Sands
 - f) Bob - agree about the extra lane
 - g) Kristen - likes Canada campgrounds where the camping is dispersed and RVs are separated from tents
 - h) Jessica - Sleeping Bear Dunes is a good example facility, they have camp sites right on the trail
 - i) Jason B - different types of campers have different expectations, tents need trees
 - j) Bob - agrees that different types of camping should have separation, wondered about group camping or rustic sites for backpackers
6. Any other thoughts can be e-mailed to Curt TerHaar with OCPRC; the input received will help inform how we ask questions of the public.

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FOCUS GROUP NOTES - OTTAWA COUNTY PARK LEADERSHIP

- PROJECT: 
- MEETING DATE: July 13, 2020
- PRESENT: Jason Shamblin, Ottawa County Parks and Recreation Commission
Curt TerHaar, Ottawa County Parks and Recreation Commission
Aaron Bodbyl-Mast, Ottawa County Parks and Recreation Commission
Jessica VanGinhoven, Ottawa County Parks and Recreation Commission
Rick Bosch, Friends of Ottawa County Parks
Greg DeJong, County Commissioner & Parks Commission Member
Pete Esser, OCPRC Foundation
Matt Fenske, County Commissioner
Cathy Feyt, OCPRC Foundation
Jane Longstreet, OCPRC Board Member
Bobbie Sabine, OCPRC Foundation
Brian Stauffer, OCPRC Foundation
Marjie Viveen, OCPRC Foundation
Anita Yoder, OCPRC Foundation
David Yocca, Ecological Planner
Trevor Bosworth, VIRIDIS Design Group
Lindsey Gadbois, VIRIDIS Design Group
SuLin Kotowicz, VIRIDIS Design Group

A hybrid meeting was held via Zoom and at OCPRC to discuss the Ottawa Sands County Park project. The following summarizes items discussed at the meeting.

1. Curt TerHaar with Ottawa County Parks and Recreation Commission (OCPRC) gave an introduction about Ottawa Sands County Park:
 - a) First property purchase was in 2018, and the second was in July of 2019.
 - b) OCPRC opened a trail system in the park which is currently open to the public, and now are deciding what to do with the land through a Master Plan process. This will be a year-long process and they are excited for this great opportunity.
 - c) This is the final focus group meeting, where we talk with important stakeholders to identify what we need to talk about with the public.

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FOCUS GROUP NOTES - OTTAWA COUNTY PARK LEADERSHIP

- d) VIRIDIS Design Group (VIRIDIS) is the design consultant that OCPRC has retained for the master plan process, through a Coastal Management Program grant.
2. Trevor with VIRIDIS described the process to date:
- We started the master plan process in January 2020. We will complete the process by the end of the year, per the grant. We are still in Phase 1, Analysis and Programming.
 - David Yocca, landscape architect and ecological planner, is part of the VIRIDIS team, along with Gerry Wilhelm, botanist, to help the team use this fantastic opportunity showcase and restore the ecology in the park for lasting value.
 - Focus for the master plan process includes:
 - We will engage participants in an inclusive and open process; we need to know your points of view and what's important to you, since this is your community.
 - We will consider all points of view to create a plan that addresses environmental, cultural, and recreation resource needs to reclaim this former industrial site. This is a unique opportunity due to the park's location within the context of the coastal corridor.
 - We will incorporate low-impact, sustainable site development principles that will support proposed improvements and programming.
 - Proposed development shall be considered within the context of the entire coastal corridor and encourage long-term collaborative planning and land management.
 - A migratory bird study is also being completed concurrently by the Audubon Society.
 - Our first community input session will be July 18.
 - Phase 2 is for Plan Development, and will go from the end of July through October. We will incorporate input from focus groups, stakeholders, and the public and bring several concepts to the public for feedback at our second public input session, mid-September.
 - With input received, VIRIDIS will prepare a preferred plan by the end of October for review and final feedback with OCPRC. Phase 3 will be plan finalization, with a final plan reveal for the public at the end of November. The final plan and report will be presented to the Parks Commission for approval in December. This document will also be useful for outreach and fundraising.
3. The July 18 Community Input Session will be a Field Day at the park from 10 am - 2 pm. It will be a family-friendly event. The public also has a chance to weigh in through other outlets, including an online survey. We've received around 300 responses so far; focus group participants should take the survey. Another opportunity for input is the Community Photovision Challenge, an Instagram photosharing campaign allowing the public to share what they like, how they use the park currently, what they'd like to see, and what they'd like to change. There will be five input stations at the Field Day event with educational opportunities along a 1.5 mile loop.
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 - Station 4: Habitat and Ecology, to educate about ecology on site
 - Station 5: Recreation, to get feedback on the types of activities desired in the park
 - With COVID-19 and the quarantine, people have been getting out and experiencing parks
 - All input from the focus groups, public input event, surveys, etc. will inform the concepts that VIRIDIS will develop in Phase 2.
 - Parks Foundation will share the event on their Facebook page
4. Ideas for Active/Passive Recreation at Ottawa Sands County Park:
- Bobbie - this park offers a critical link to connect open spaces, ecological restoration is vital to the master plan, she cringes at the idea of RVs on site, prefers tent camping, wants to create a special, unique destination by creating six tree houses accessible by kayak near the Sag, and any restoration plan must include deer management
 - Brian - concerned about RVs on site, likes the idea of tree houses and suggested they could be accessed by a hiking trail, and wondered about a portage between the river and the lake. He wants to keep the park as natural as possible.
 - Anita - agrees with keeping the park as natural as possible, and suggested having tent camping with very few sites, maybe some camping sites on the river with boardwalk, a riverwalk boardwalk, access the park from a kayak, lake water vessels, but is worried about invasive species
 - Trevor suggested a rental-based water activity for the lake would prevent invasives from personal watercraft
 - Curt - the current rules for the lake were made out of caution, though the lake is not as pristine as we originally thought
 - Marjie - it is important to tell the long history of sand mining in Ottawa County. She is concerned about motorized boat traffic in the river and how that affects kayakers, is concerned about hiking around the lake, as it is difficult in the loose sand, would like to see an elevated boardwalk and swimming. Camping has economic advantages but also comes with more maintenance
 - Curt - we've always considered swimming because of the clean water, just need to create a safe shelf
 - Jane - likes the idea of boardwalks, since there are accessibility issues for some users, but doesn't see the value in offering camping since there's lots of camping in the area at State Parks. She also feels that accessibility for trails is important
 - Bobbie - boardwalks help keep people on the trail, and she wondered if there is a no-wake zone in the Sag
 - Trevor mentioned Holland has been successful with activation, separating pedestrians and non-motorized water activities
 - Brian - uses this in Holland, and noted it is also right in front of Coast Guard so has direct supervision
 - Pete - the Sag is a good opportunity for kayaking and he enjoys seeing the eagle nest but is concerned about how increased activity will affect wildlife

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FOCUS GROUP NOTES - OTTAWA COUNTY PARK LEADERSHIP

- m) Rick - likes the idea of considering enhancements to the Grand Haven open space through the Ottawa Sands master plan, recreation around the bend, wide open area, campground should be unique
- n) Marjie - suggested a hammock garden, though has heard other places have had problems with hammocking
- o) Bobbie - has seen hammocking on the other side of the channel
- p) Curt - OCPRC does regulate hammocking in their parks
- q) David - we have some opportunities with the interesting range of ecosystems in a compact area, the intersection of greenways, some remnant dunes that have been unaltered, the serenity of the site and the diverse range of natural landscapes. In some ways, we have a blank slate where the mining operations occurred that need to be stabilized and managed
- r) Greg - fishing dock or platform for catch and release fishing, multiple overlook docks, boardwalk for seniors and young kids or paved opportunities, maybe offer golf carts
- s) Jane - also thought about golf carts
- t) Marjie - concessions for food and drink, kayak rentals, or golf carts. In Florida, concessions folks start campfires for you
- u) Brian - need a balance to environmental purists and being able to enjoy the site
- v) Bobbie - Grand River Park has fishing that's accessible
- w) Jason - we have an opportunity at Ottawa Sands to have outdoor education to get kids close to the water
- x) We should get school kids engaged, have a pavilion for groups, organize a walk or tour and teach people about the site
- y) Marjie - what about a day camp like at Pigeon Creek, meet some educational goals
- z) Brian - share history of the riverwalk, trading post, logging, working with the Little River Band of Ottawa Indians on the greenway to bring history alive, camping to bring in own water, have pit toilets?
- aa) Greg - dog park opportunity with open water
- ab) Jason - Coast Guard Park across the street has a dog park
- ac) Pete - winter activities like cross country skiing and ice skating
- ad) Trevor asked if there were any outdoor public ice skating opportunities nearby
- ae) Cathy - Grand Haven and Ferrysburg have eliminated their ice skating, so there aren't any public rinks
- af) Curt - would like winter activities like snowshoeing
- ag) Marjie - maybe sledding
- ah) Bobbie - how much parking will we need?
- ai) Jason - we can consider that once we know what development we're looking at
- aj) VIRIDIS will consider parking and traffic backups on North Shore Drive with the master plan concepts
- ak) Curt - we will need to look at a safe pedestrian connection to Coast Guard Park
- al) Marjie - will there be a connection to North Beach Park?
- am) Curt - we are looking at a possible connection
- an) Pete - Holland State Park has put in flashing lights for crossing, might think about that on North Shore Drive

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FIELD DAY NOTES - STATION 1

FIELD DAY NOTES - STATION 1

PROJECT: Ottawa Sands County Park

MEETING DATE: July 18, 2020

PRESERVE

Red

- Preserve everything except invasive species
- Dark sky. Don't add lights
- People like the way it is now. No cabins, tents.
- No camping
- Keep everything natural. No development. No camping
- No outside fish
- Nature beauty, no cars, bikes
- As is
- Keep the park as it is - completely natural. Pls no camping
- Clean water

Yellow

- Keep it as natural as it is now - but provide modern bathrooms and a picnic area and parking area
- Keep a balance between natural and developed areas.
- Preserve the park as natural as possible. No campgrounds!
- Preserve the whole site
- No camping
- No camping
- Preserve lake
- Preserve the natural aspect of trails
- Preserve natural elements
- Preserve the wildlife
- Keep it natural possibly pave one path for handicaps
- Night sky (appropriate lighting)

Green

- The lake (in as undisturbed condition as possible)

Blue

- All of it
- No access to River
- Keep as natural as possible
- Keep it essentially as is. Not much improvement; definitely no camping
- Lake + vistas

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FIELD DAY NOTES - STATION 1

- Clean water. Natural environment
- No RVs, no motorized boats on Ottawa Sands Lake
- The lake
- Views, tree canopy, dark sky, no RV camping

ENHANCE

Red

- Good as is
- Handicap path
- Enhancements: signs to I.D. plants, No camping, NO motorized anything, NO pavement
- Pave trail around lake
- Hiking trails
- Envision: I'd like to bike here but I think it would not be good for the park
- If you put some kind of quiet air in the lake the fish could grow
- Connecting walking trail down to K-L Dunes and up to Hoffmaster
- Envision: add a fishing pier where the docks are

Yellow

- Handicap access to lake
- Connection to Kitchell Dune
- Place gravel to make paths more walkable
- Possible swimming
- A nice campground by the lake
- Improve trail around lake
- Playground (for older kids)
- Provide some stopping/destination points - to rest
- Benches by the lake
- Paved trail ADA
- Let people/kayaks into the water
- Signs: native vs invasive plants

Green

- The natural shoreline along the Grand River
- More trails, would love to see scenery areas

Blue

- Wooded trails/narrow, programs for kids
- Good signage - well marked trails. Keep it natural.
- Native vegetation
- Swimming
- Clear out invasive plant species. Promote natives
- Enhance environ. for animals
- More bark trails
- Spotted napweed out, captured lake (even if created by sand mining)
- Lake needs name
- Zip line (across lake?), paddle boats. To limit traffic on lake; no outside boats due to contamination concerns
- Trails

TRANSFORM

Red

- Good as is
- Art stations, adult supervision of camping
- Permit kayaking and canoe in Sag and lake
- No spotted knapweed
- Shouldn't be here, too many deer, eating out the trilliums, spotted knapweed
- Avoid "the tragedy of the commons", supervise camping
- Environmental camping

Yellow

- Back path very wet
- Nothing has to go
- Access to water for kayaks
- Tent camping
- Permanent Restrooms (like at Rosy Mound), outhouses near the "dock" end of the park, near the channel
- Make breasting dolphins (docks) to be usable for fishing off them

Green

- The dolphins into a point of water access

Blue

- Yes to adventure camping
- Mooring of boats, keep walking paths as fundamental, no RV camping, tent/pop-up ok
- Make handicapped accessible
- Trails
- Interpretation
- River shoreline
- Geocaching, playground, bike connections from Ferrysburg/Spring Lake
- Beach on west facing side of beach

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FIELD DAY NOTES - STATION 2

FIELD DAY NOTES: STATION 2 - RIVER ACTIVATION

PROJECT: Ottawa Sands County Park

MEETING DATE: July 18, 2020

VOTES:**WATER ACCESS**

Non-Motorized: 5 Red, 7 Yellow, 1 Green, 2 Blue + 1 black marker (16 total)
 Floating Boat Slips: 2 Red, 4 Yellow, 1 Blue (7 total)
 Water Taxi To/From Grand Haven: 5 Red, 8 Yellow, 1 Green, 3 Blue + 2 black marker (19 total)
 Riverfront Boardwalk: 3 Red, 11 Yellow, 3 Blue + 2 black marker (19 total)

BUSINESS AMENITIES

Restroom Facilities: 8 Red, 11 Yellow, 1 Green, 6 Blue + 2 black marker (28 total)
 General Store: 1 Red (1 total)
 Snack Shop/Restaurant Docking: 1 Red, 2 Yellow, 1 Blue (4 total)
 Recreation Rentals: 6 Red, 7 Yellow, 2 Blue + 2 black marker (17 total)

STRUCTURES & BUILDINGS

Outdoor Recreation Hub: 1 Red, 1 Yellow, 1 Blue (3 total)
 Event Space: 2 Red, 1 Yellow, 1 Blue (4 total)
 Picnic Shelters: 4 Red, 6 Yellow, 1 Green, 4 Blue + 1 black marker (16 total)
 Nature Center: 3 Red, 7 Yellow, 1 Green, 3 Blue + 1 black marker (15 total)

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FIELD DAY NOTES - STATION 3

FIELD DAY NOTES: STATION 3 - CAMPING

PROJECT: Ottawa Sands County Park

MEETING DATE: July 18, 2020

TOKEN VOTES:

Mod RV: 1 Yellow (1 total)

Rustic: 5 Yellow, 4 Blue (9 total)

Mod Tent: 3 Red, 4 Yellow (7 total)

Glamp: 1 Red, 5 Yellow, 1 Blue (7 total)

Day Camp: 2 Red, 2 Yellow, 1 Green, 5 Blue (10 total)

No Camping: 2 Red, 4 Yellow, 1 Blue (7 total)

Other Notes:**Reasons for no camping:**

1. Impacts
2. Trash
3. Noise
4. Environment

Accommodations:

1. Dogs - Beach/Clean up/Water
2. Internet

Mud RV
 Group Camping

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FIELD DAY NOTES - STATION 4

FIELD DAY NOTES: STATION 4 - HABITAT/ECOLOGY

PROJECT: Ottawa Sands County Park

MEETING DATE: July 18, 2020

Selective Thinning/Harvesting of Trees to Maintain a Healthy Understory? (26 Votes)

1. YES: 7 Red, 8 Yellow, 6 Blue (21` total)
2. MAYBE: 1 Yellow, 3 Blue, (4 total)
3. NO: 1 Red (1 total)

Hunting In Ottawa Sands as a Way of Managing Deer Population? (29 Votes):

1. YES: 8 Red, 9 Yellow, 9 Blue (26 total)
2. MAYBE: 1 Blue (1 total)
3. NO: 1 Yellow, 1 Blue (2 total)

Ecological Land Stewardship Practices including Controlled Burning? (29 Votes):

1. YES: 8 Red, 9 Yellow, 9 Blue, (26 total)
2. MAYBE: 1 Yellow, 1 Blue, (2 total)
3. NO: 1 Yellow (1 total)

Invasive Species Management? (108 Votes)

1. YES: 8 Red, 11 Yellow, 10 Blue (29 total)
2. MAYBE: 0
3. NO: 0

ADDITIONAL NOTES:

1. Off-Leash Dog use possible? if time-restricted? Dog access to lake?
2. Keep boats out of water, especially motorized boats, to avoid invasive species contamination (from private watercraft)

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FIELD DAY NOTES - STATION 5

FIELD DAY NOTES: STATION 5 - RECREATION

PROJECT: Ottawa Sands County Park

MEETING DATE: July 18, 2020

1. (Maybe Wanda Gerber from set up crew, who said she lived very close by - RED) Kayaking/Canoeing, Interpretive Signage, Hiking Trails and Bird Blind
2. (Maybe Wanda Gerber's brother from set up crew, who also lives close by - RED) Nature Play, Fishing, Bird Blind, Hiking Trails, Kayaking/Canoeing
3. (Friend of Anita Yoder, lives in Grand Haven Township ~10 miles - GREEN) Sand Volleyball Courts
4. (Friend of Anita Yoder, lives in Robinson Township ~12-15 miles - BLUE) Connection to KLH Dunes Preserve, Add trails to the west on the hilltop a couple of ridges away from the eagle's nest, trails on the south side of the lake, sign trail for the U-shaped ridge, kayaking and swimming, trail on the water's edge, additional trails in the NE area that's wooded
5. (Jason Boerger's wife, Spring Lake ~2 miles - YELLOW) Nature Play, Archery, Bird Blinds, Interpretive Signage, Beach (no biking)
6. (RED - two grandparents and granddaughter in pink shirt) Nature Play, Hiking Trails, Swimming, Interpretive Signage, Paddle boarding
7. (YELLOW - adult) Swimming, Kayaking/Canoeing, Paddle Boarding, Bird Blind, Hiking Trails, Archery
8. (YELLOW - adult) Disc Golf, Zip line into the water, Cross Country Skiing
9. Gary - additional ideas: dogs in the park - water access and an off-leash area designated by the river, ridge trails, connect to KLH Dune Preserve, no motorized boats in the lake, paved trail around the lake to accommodate people of all abilities (strollers, wheelchairs, bikes), more shade
10. (YELLOW - adult) additional ideas: Rental Paddleboats, Beach Volleyball; Votes - Swimming, Hiking Trails, Interpretive Signage, Fishing, Scuba Diving
11. (YELLOW - adult) Swimming, Kayaking/Canoeing, Scuba Diving, Paddle Boarding, Archery
12. (Two adults with two kids, not registered, from Norton Shores ~6 miles - GREEN) Nature Play, Hiking, Canoeing, Swimming, Fishing
13. (BLUE - adult) additional idea: Dog facilities
14. (YELLOW - adult) Paddle Boarding
15. (Adult ~5 miles - YELLOW) Kayaking/Canoeing, Fishing, Biking, Hiking, Nature Play

RAW BOARD VOTES

ACTIVE: Nature-Inspired Play: 3 Blue
 ACTIVE: Fishing: 5 Blue, 1 Red (6 total)
 ACTIVE: Archery: 1 Yellow
 ACTIVE: Biking: 1 Red

PASSIVE: Hiking Trails: 5 Yellow, 2 Red, 6 Blue (13 total)
 PASSIVE: Bird Blind: 1 Blue

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

FIELD DAY NOTES - STATION 5

Field Date Notes - Station 5 - Recreation - July 18, 2020
Ottawa Sands County Park

PASSIVE: Intimate Gathering Spots: 3 Blue, 1 Yellow (4 total)
PASSIVE: Interpretive Signage: 4 Blue, 1 Yellow (5 total)

WATER ACCESS: Swimming/Sunbathing: 3 Blue, 3 Yellow, 1 Red (7 total)
WATER ACCESS: Kayaking/Canoeing: 5 Blue, 4 Yellow, 2 Red (11 total)
WATER ACCESS: Paddle Boarding: 2 Yellow
WATER ACCESS: Scuba Diving: 4 Blue, 1 Red (5 total)

VOTES WITH HANDWRITTEN ENTRIES:

ACTIVE: Nature-Inspired Play: 2 Red, 2 Yellow, 3 Blue, 1 Green (8 total)
ACTIVE: Fishing: 2 Red, 2 Yellow, 1 Green, 5 Blue (10 total)
ACTIVE: Archery: 4 Yellow (4 total)
ACTIVE: Biking: 1 Red, 1 Yellow (2 total)

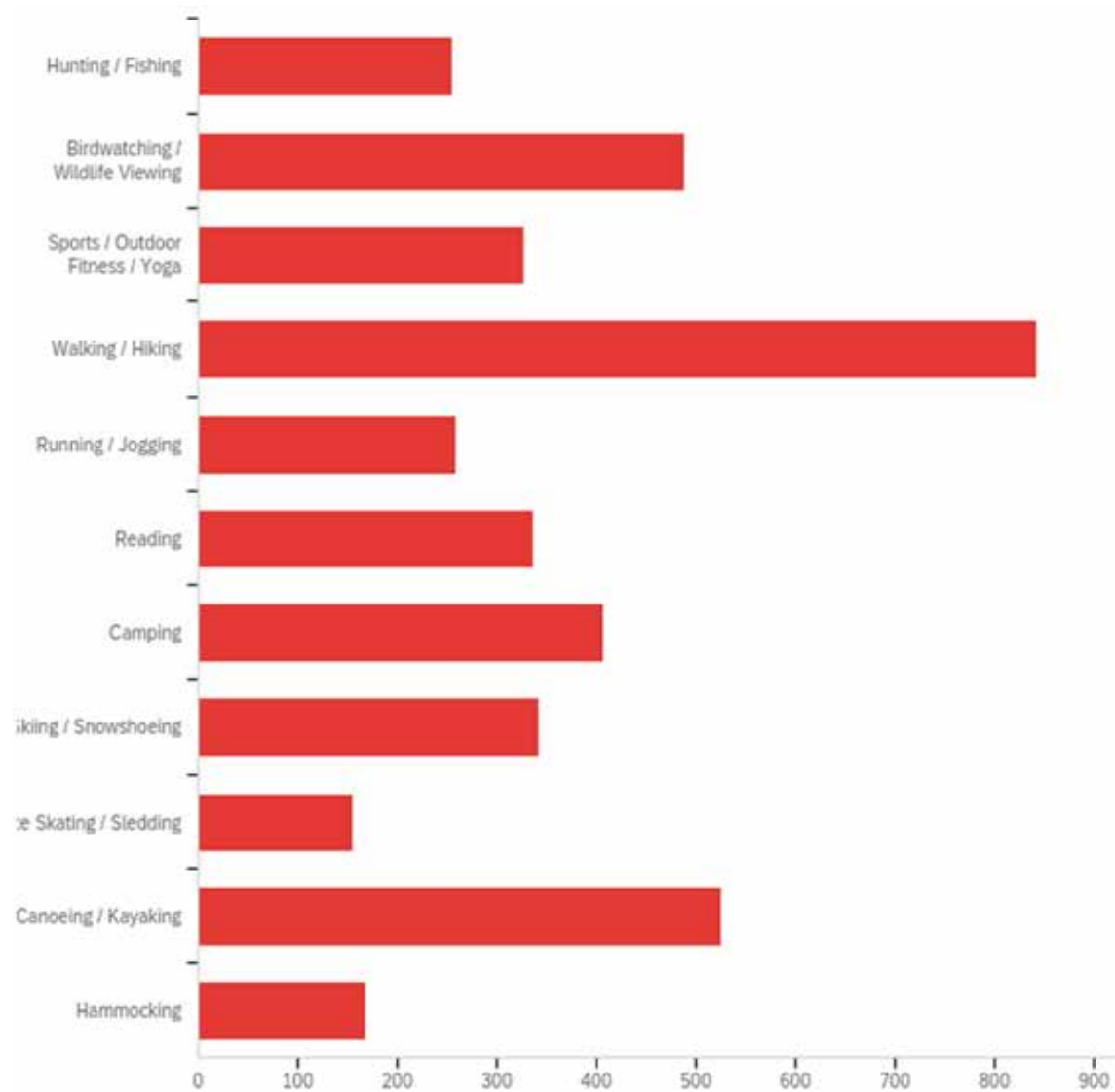
PASSIVE: Hiking Trails: 5 Red, 8 Yellow, 7 Blue, 1 Green (21 total)
PASSIVE: Bird Blind: 2 Red, 2 Yellow, 1 Blue (5 total)
PASSIVE: Intimate Gathering Spots: 3 Blue, 1 Yellow (4 total)
PASSIVE: Interpretive Signage: 2 Red, 3 Yellow, 4 Blue (9 total)

WATER ACCESS: Swimming/Sunbathing: 2 Red, 8 Yellow, 4 Blue, 1 Green (15 total)
WATER ACCESS: Kayaking/Canoeing: 4 Red, 6 Yellow, 6 Blue, 1 Green (17 total)
WATER ACCESS: Paddle Boarding: 1 Red, 5 Yellow (6 total)
WATER ACCESS: Scuba Diving: 1 Red, 2 Yellow, 4 Blue (7 total)

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

ON-LINE SURVEY SUMMARY

Q1 - How do you spend time outdoors? (select all that apply)



#	Answer	%	Count
1	Hunting / Fishing	6.21%	255
2	Birdwatching / Wildlife Viewing	11.89%	488
3	Sports / Outdoor Fitness / Yoga	7.97%	327
4	Walking / Hiking	20.54%	843

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

ON-LINE SURVEY SUMMARY

5	Running / Jogging	6.29%	258
6	Reading	8.21%	337
7	Camping	9.91%	407
8	Skiing / Snowshoeing	8.33%	342
9	Ice Skating / Sledding	3.75%	154
10	Canoeing / Kayaking	12.81%	526
11	Hammocking	4.09%	168
	Total	100%	4105

Q2 - What prevents you from spending time in nature?

SCHEDULE: (work, family plans, lack of time) – 264

WEATHER: (heat, humidity, rain, snow, cold) – 128

OVERCROWDING: (lack of seclusion, no parking, noise) – 92

ENVIRONMENT: (insects, lack of shade, poison ivy) – 70

LOCATION: (distance from home) – 54

ACCESSIBILITY: (non-accessible trails, lack of entry points, no paved paths for strollers) – 50

COVID-19 – 43

HEALTH ISSUES (age, illness, physical restrictions) – 38

DOG ACCESS: (lack of dog-friendly trails/open space, inability to bring dog to park) – 21

LACK OF FACILITIES: (no restroom, drinking water, benches) – 15

OFF-LEASH DOGS: (owners disobeying leash rules) - 9

LACK OF MAINTENANCE (trails, garbage) – 8

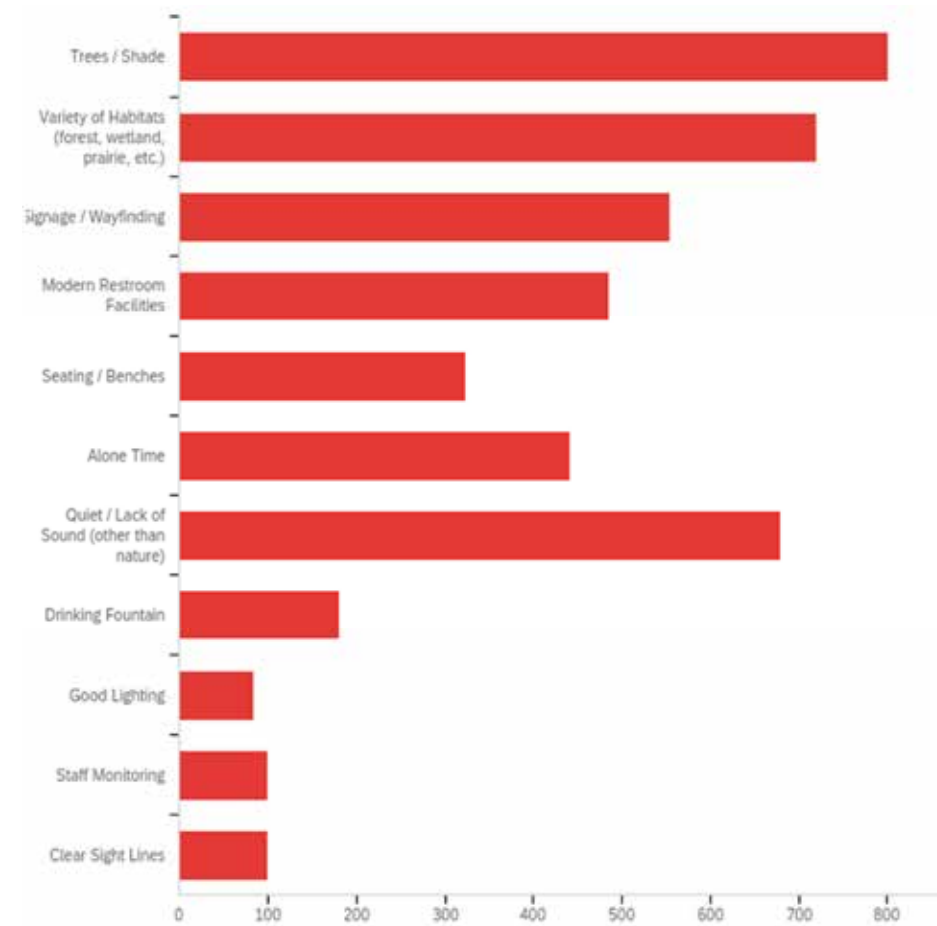
LACK OF MOUNTAIN BIKE TRAILS – 8

5 or less:

- Money (park entry fees, gas)
- Disruptive young kids
- Flooded parks
- Lack of awareness of park availability
- Lack of non-motorized boat launches

- Lack of RV parks
- Safety/being alone
- Beach erosion
- Lack of available water activities/rentals
- Park closures/restrictions
- Hunting in close proximity

Q3 - What experiences create a comfortable experience in nature for you? (select all that apply)



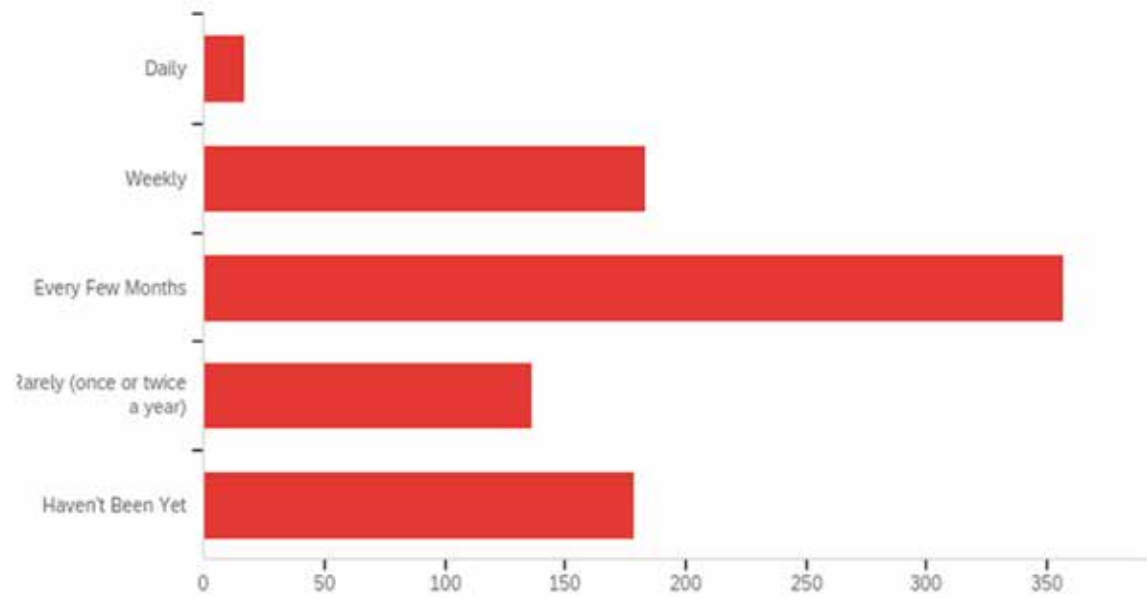
#	Answer	%	Count
2	Variety of Habitats (forest, wetland, prairie, etc.)	16.11%	720
1	Trees / Shade	17.92%	801
10	Staff Monitoring	2.22%	99

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

ON-LINE SURVEY SUMMARY

3	Signage / Wayfinding	12.42%	555
5	Seating / Benches	7.25%	324
7	Quiet / Lack of Sound (other than nature)	15.22%	680
4	Modern Restroom Facilities	10.87%	486
9	Good Lighting	1.86%	83
8	Drinking Fountain	4.03%	180
11	Clear Sight Lines	2.22%	99
6	Alone Time	9.89%	442
	Total	100%	4469

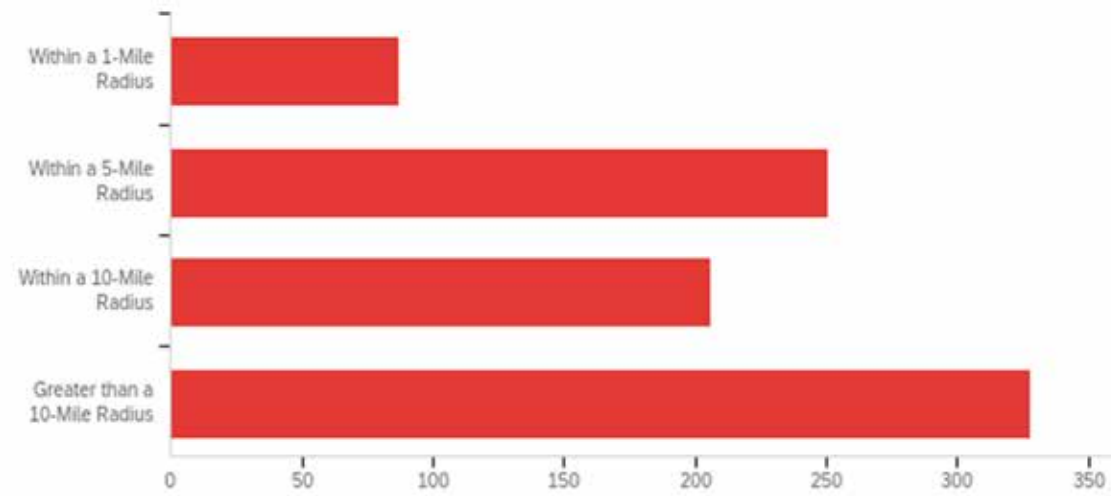
Q4 - How often do you visit Ottawa Sands County Park?



#	Answer	%	Count
1	Daily	1.95%	17
2	Weekly	20.99%	183
3	Every Few Months	40.94%	357

4	Rarely (once or twice a year)	15.60%	136
5	Haven't Been Yet	20.53%	179
	Total	100%	872

Q5 - How close do you live to Ottawa Sands?

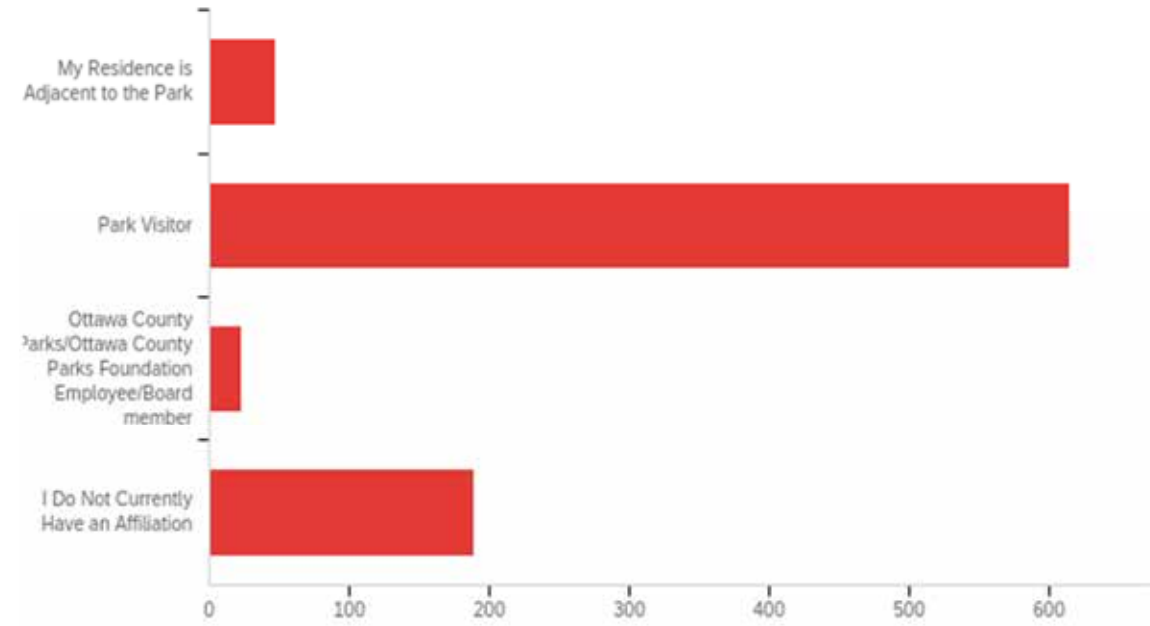


#	Answer	%	Count
1	Within a 1-Mile Radius	9.98%	87
2	Within a 5-Mile Radius	28.78%	251
3	Within a 10-Mile Radius	23.62%	206
4	Greater than a 10-Mile Radius	37.61%	328
	Total	100%	872

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

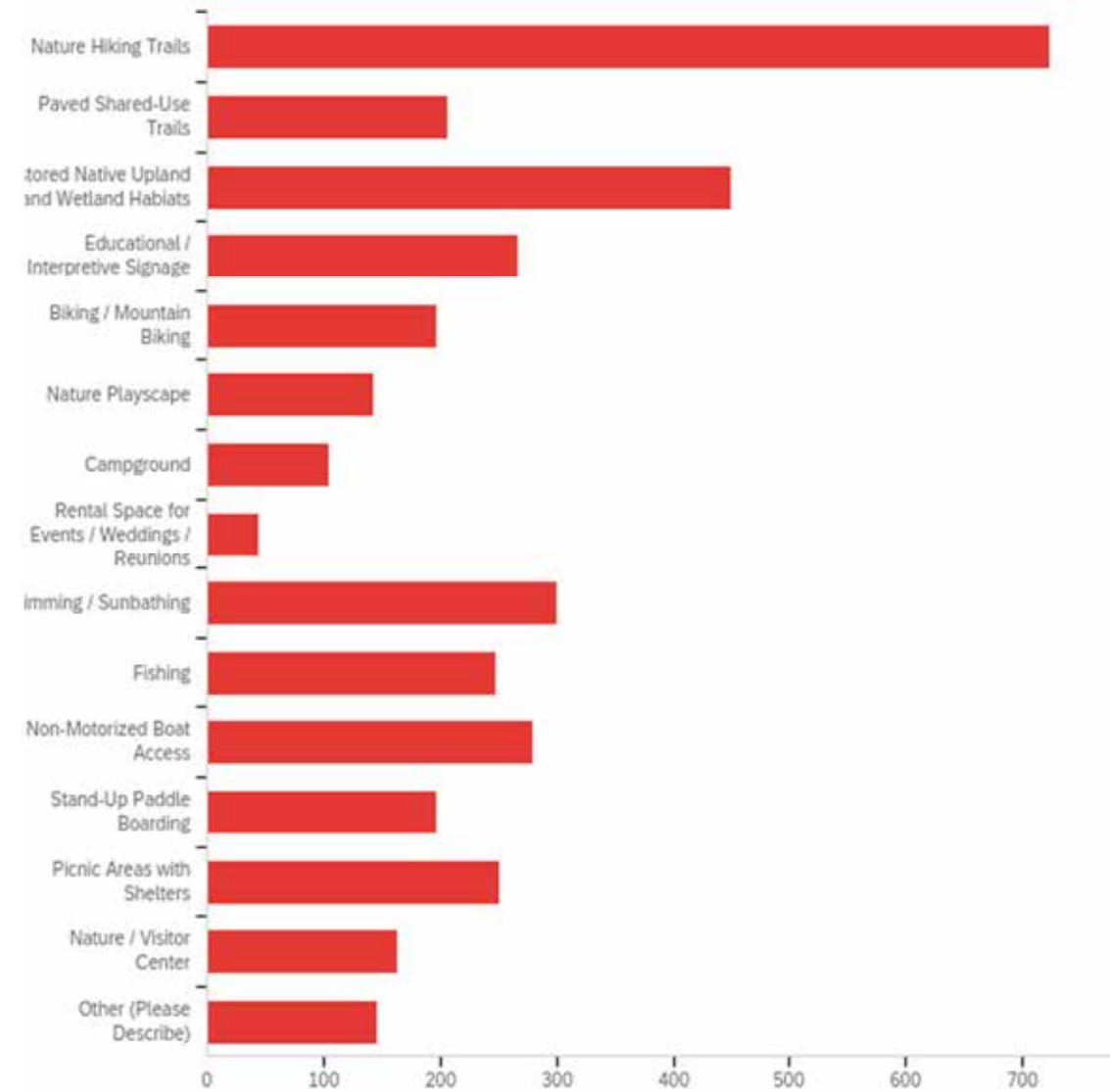
ON-LINE SURVEY SUMMARY

Q6 - Which best describes your affiliation with Ottawa Sands?



#	Answer	%	Count
1	My Residence is Adjacent to the Park	5.28%	46
2	Park Visitor	70.53%	615
3	Ottawa County Parks/Ottawa County Parks Foundation Employee/Board member	2.52%	22
4	I Do Not Currently Have an Affiliation	21.67%	189
	Total	100%	872

Q7 - What would you strongly LIKE to have at Ottawa Sands? (pick up to 5)



#	Answer	%	Count
1	Nature Hiking Trails	19.47%	724
2	Paved Shared-Use Trails	5.54%	206
3	Restored Native Upland and Wetland Habitats	12.10%	450
4	Educational / Interpretive Signage	7.15%	266
5	Biking / Mountain Biking	5.27%	196

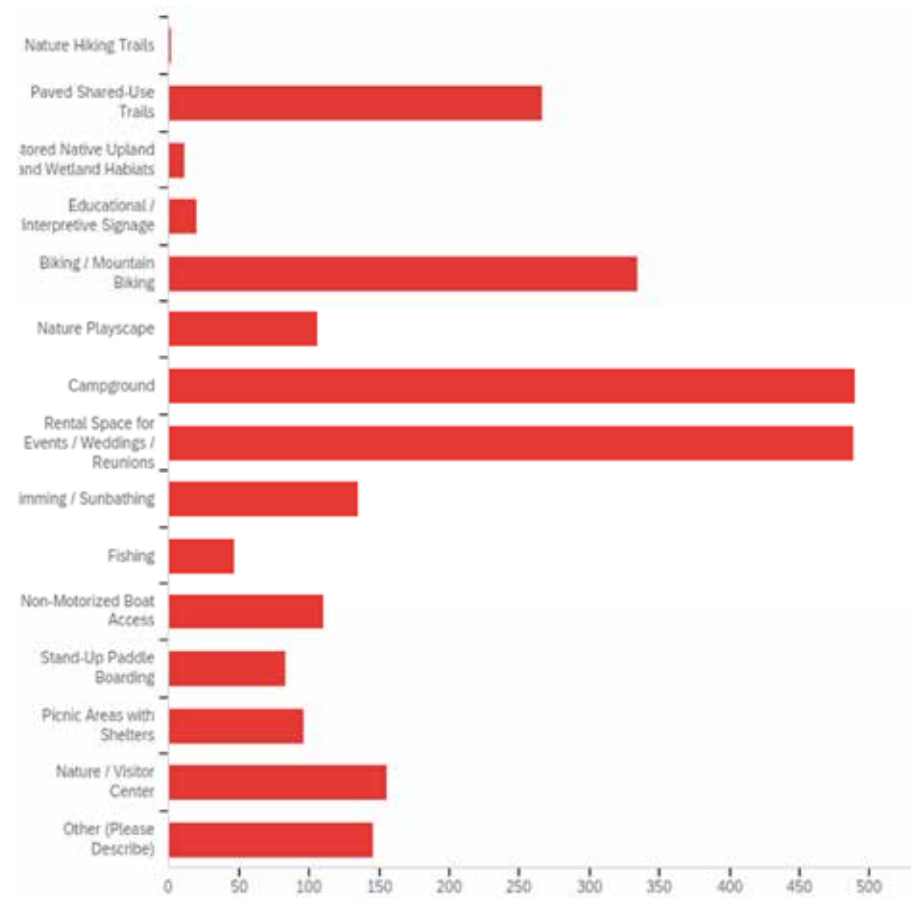
APPENDIX C : COMMUNITY ENGAGEMENT NOTES

ON-LINE SURVEY SUMMARY

6	Nature Playscape	3.85%	143
7	Campground	2.82%	105
8	Rental Space for Events / Weddings / Reunions	1.18%	44
9	Swimming / Sunbathing	8.10%	301
10	Fishing	6.67%	248
11	Non-Motorized Boat Access	7.53%	280
12	Stand-Up Paddle Boarding	5.27%	196
13	Picnic Areas with Shelters	6.75%	251
14	Nature / Visitor Center	4.38%	163
15	Other (Please Describe)	3.90%	145
	Total	100%	3718

#	Answer	%	Count
1	Nature Hiking Trails	0.08%	2
2	Paved Shared-Use Trails	10.71%	267
3	Restored Native Upland and Wetland Habitats	0.44%	11
4	Educational / Interpretive Signage	0.80%	20
5	Biking / Mountain Biking	13.43%	335
6	Nature Playscape	4.25%	106
7	Campground	19.65%	490
8	Rental Space for Events / Weddings / Reunions	19.61%	489
9	Swimming / Sunbathing	5.41%	135
10	Fishing	1.88%	47
11	Non-Motorized Boat Access	4.41%	110
12	Stand-Up Paddle Boarding	3.33%	83
13	Picnic Areas with Shelters	3.89%	97
14	Nature / Visitor Center	6.26%	156
15	Other (Please Describe)	5.85%	146
	Total	100%	2494

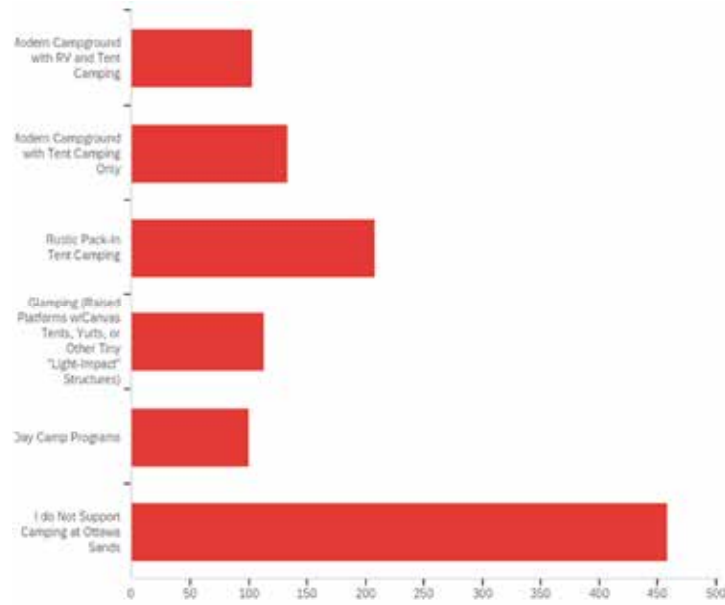
Q8 - What would you strongly NOT WANT to have at Ottawa Sands? (pick up to 5)



APPENDIX C : COMMUNITY ENGAGEMENT NOTES

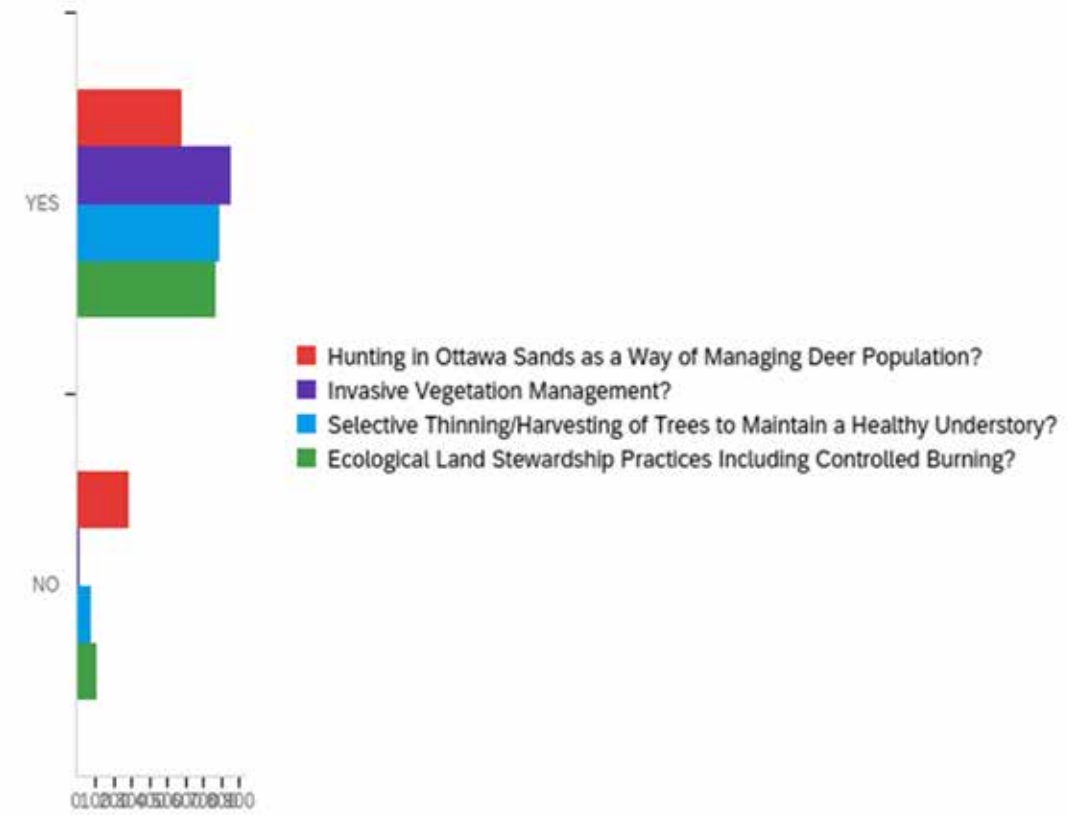
ON-LINE SURVEY SUMMARY

Q9 - What types of camping scenarios are you interested in having at Ottawa Sands?



#	Answer	%	Count
1	Modern Campground with RV and Tent Camping	9.29%	104
2	Modern Campground with Tent Camping Only	11.96%	134
3	Rustic Pack-In Tent Camping	18.66%	209
4	Glamping (Raised Platforms w/Canvas Tents, Yurts, or Other Tiny "Light-Impact" Structures)	10.18%	114
5	Day Camp Programs	8.93%	100
6	I do Not Support Camping at Ottawa Sands	40.98%	459
	Total	100%	1120

Q10 - Would you support measures to manage the habitat/ecology at Ottawa Sands, including:

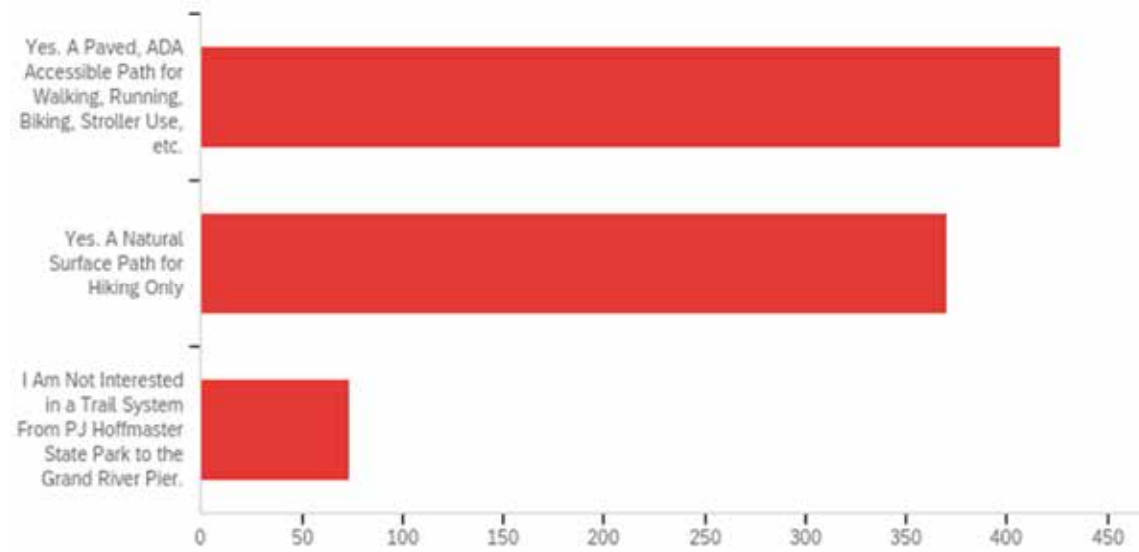


#	Question	YES	NO	Total
1	Hunting in Ottawa Sands as a Way of Managing Deer Population?	66.63%	33.37%	872
2	Invasive Vegetation Management?	97.71%	2.29%	872
3	Selective Thinning/Harvesting of Trees to Maintain a Healthy Understory?	90.48%	9.52%	872
4	Ecological Land Stewardship Practices Including Controlled Burning?	87.84%	12.16%	872

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

ON-LINE SURVEY SUMMARY

Q12 - Would you support a connected non-motorized trail system from PJ Hoffmaster State Park to the Grand River Pier?



#	Answer	%	Count
1	Yes. A Paved, ADA Accessible Path for Walking, Running, Biking, Stroller Use, etc.	48.97%	427
2	Yes. A Natural Surface Path for Hiking Only	42.55%	371
3	I Am Not Interested in a Trail System From PJ Hoffmaster State Park to the Grand River Pier.	8.49%	74
	Total	100%	872

Q13 – Name 2 opportunities for public use you are excited about at Ottawa Sands:

HIKING: (walking, natural paths, boardwalks, more/improved trails) – 222

NON-MOTORIZED BOATING: (kayaks, canoes, paddle boarding) – 84

SWIMMING: (inland lake access, beach) – 77

WILDLIFE VIEWING: (birdwatching, views, photography, eagle’s nest) – 76

HABITAT: (minimal to no development, restoration, quiet) – 73

CAMPING: (glamping, yurts, RVs, rustic, tents, primitive) – 62

FISHING – 56

MOUNTAIN BIKING/BIKING TRAILS – 49

ACCESS: (paved trails, ADA, multi-use) – 30

REGIONAL TRAILS: (connect to PJ Hoffmaster, trail to canal, trail through KL) – 28

PICNIC SHELTERS – 18

EDUCATION: (interpretive signage, Native-American history, site ecology) – 14

HUNTING (deer) – 13

GRAND RIVER ACCESS (non-motorized boat access, fishing piers, motor boat slips, views of river) – 13

MODERN RESTROOM – 12

RENTAL SPACE/NATURE CENTER – 8

OFF-LEASH DOG AREA – 7

BENCHES – 6

SCUBA/SNORKLING – 6

5 OR LESS:

- Inline skating
- Day camps
- Archery
- X-country skiing/snow shoeing
- Disc golf
- Night activities
- More parking
- Water taxi
- Horseback riding
- Ice skating
- Yoga/exercise programming
- Playground/nature play

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

ON-LINE SURVEY SUMMARY

Q14 – Name 2 issue you are concerned about regarding Ottawa Sands:

OVERUSE: (crowds, trash, noise, lack of safety, local treasure, too small of a site) – 181

CAMPING: (tourists, RVs, no camping) – 175

OVERDEVELOPMENT: (buildings, shelters, events, pavement, commercialized, modernized, play areas) – 120

HABITAT LOSS: (destruction, invasive species, keep natural/quiet, pollution, erosion) – 106

LAKE ACCESS: (disturbing pristine lake, erosion, no swimming, no boating of any kind, no beaches) – 39

PARKING/TRAFFIC: (not enough parking, too much paved parking, increased traffic) – 36

ANIMAL DISTURBANCE: (hunting, over-fishing, protect eagle’s nest) – 36

BIKERS: (no bike trails, dangerous, no mixed-use trails) – 29

MOTOR VEHICLES: (boats, cars, ATVs, etc) – 22

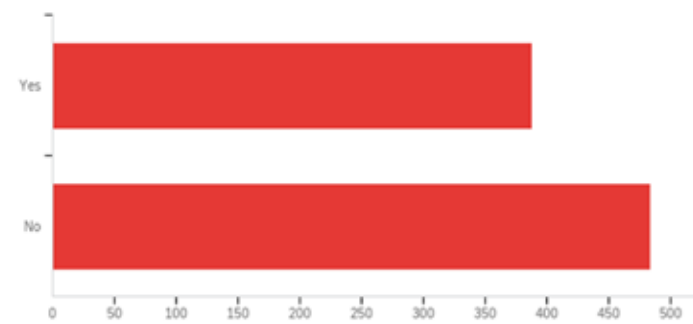
OFF-LEASH DOGS – 6

5 or less:

- Moving through the master planning process too quickly
- Lack of shade
- Charging entrance fee
- Hammock colonies
- Social distancing
- No biking trails
- Louder voices drowning out park potential
- River access (both motor & kayak)
- Lack of ADA access
- Campfires
- No off-leash area
- Vegetative burning
- Lack of staff monitoring
- Increased taxes/cost
- Lake level rising

- Taking away fishing
- Lack of park maintenance
- Encroachment on private property
- Controlling the deer population

Q15 - Would You Be In Support of a Water Taxi Between Ottawa Sands and Grand Haven?

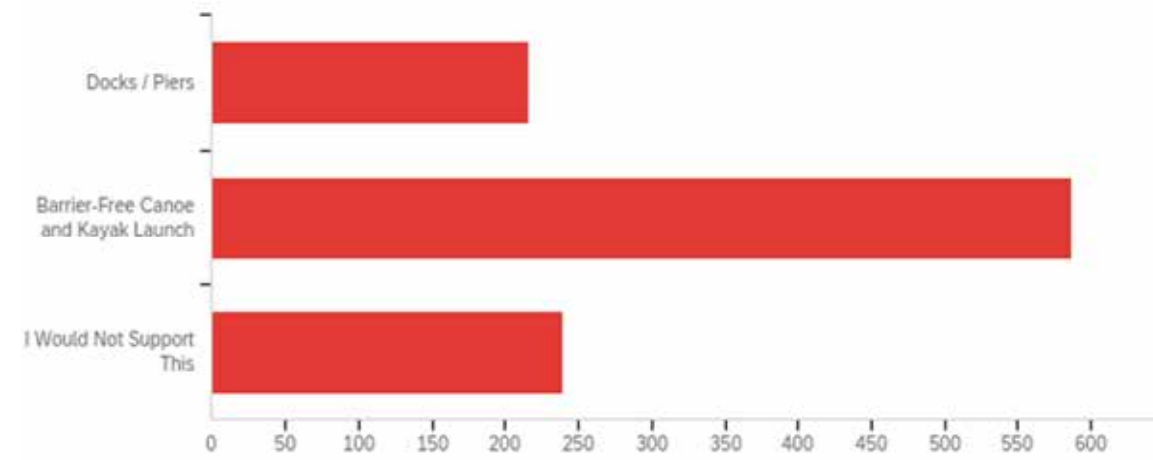


#	Answer	%	Count
1	Yes	44.50%	388
2	No	55.50%	484
	Total	100%	872

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

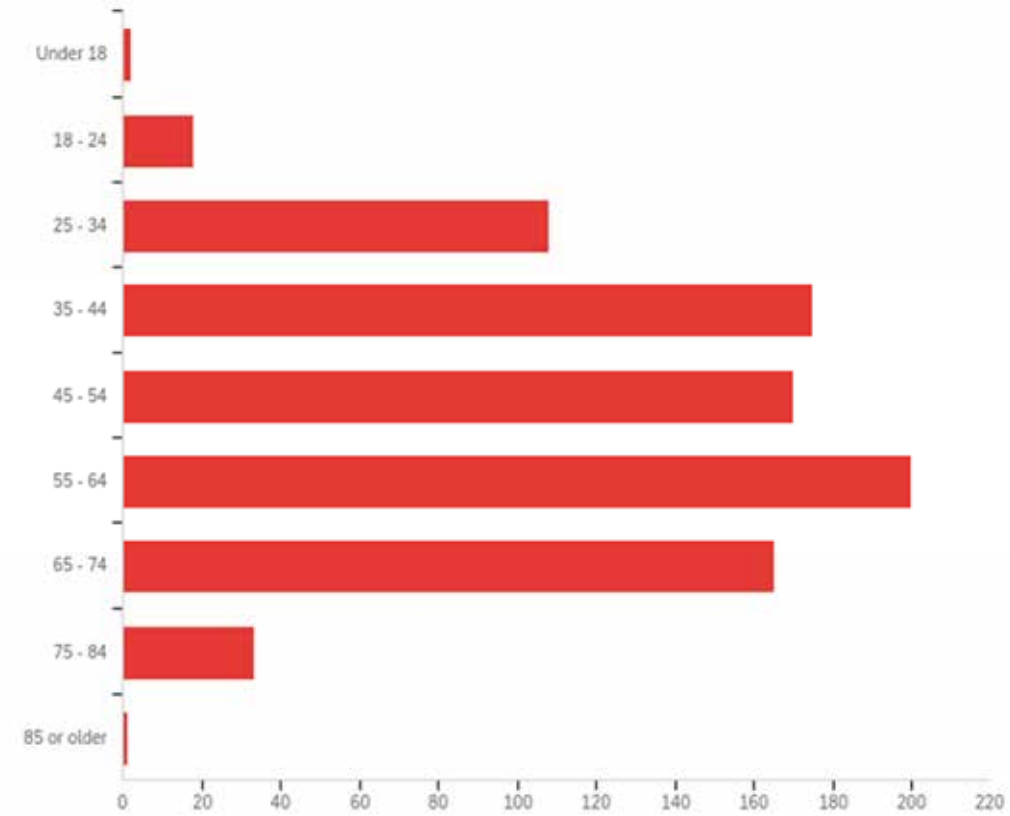
ON-LINE SURVEY SUMMARY

Q16 - Would You Be In Support of Watercraft Access to Ottawa Sands from the Grand River? Select All That Apply:



#	Answer	%	Count
1	Docks / Piers	20.73%	216
2	Barrier-Free Canoe and Kayak Launch	56.33%	587
3	I Would Not Support This	22.94%	239
	Total	100%	1042

Q17 - What is Your Age Range?

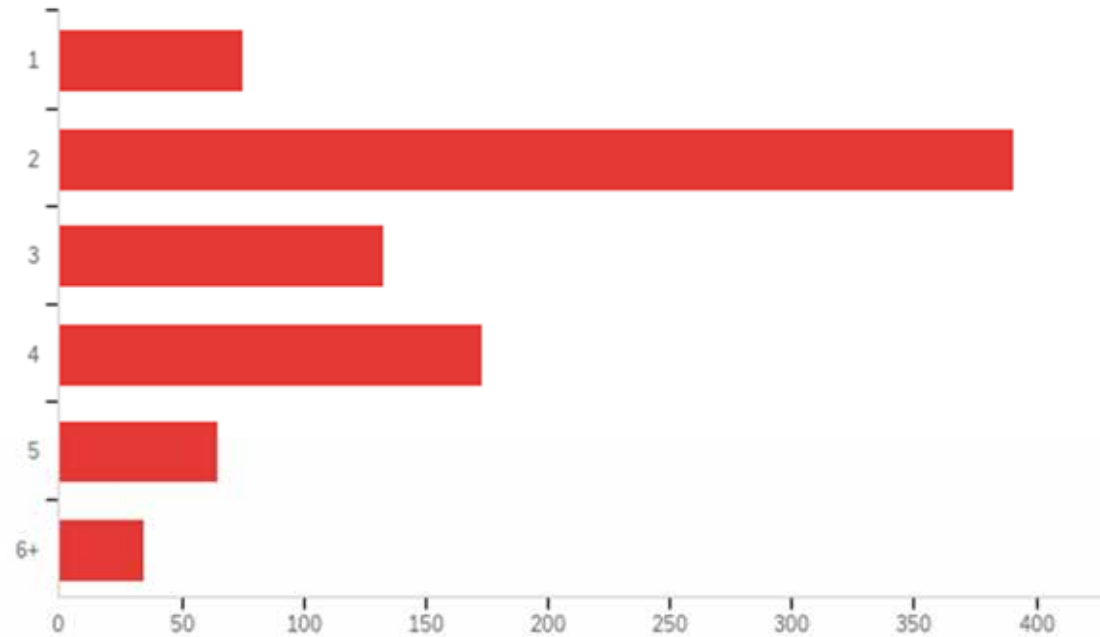


#	Answer	%	Count
1	Under 18	0.23%	2
2	18 - 24	2.06%	18
3	25 - 34	12.39%	108
4	35 - 44	20.07%	175
5	45 - 54	19.50%	170
6	55 - 64	22.94%	200
7	65 - 74	18.92%	165
8	75 - 84	3.78%	33
9	85 or older	0.11%	1
	Total	100%	872

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

ON-LINE SURVEY SUMMARY

Q19 - Amount of People in Your Household:



#	Answer	%	Count
1	1	8.60%	75
2	2	44.84%	391
3	3	15.25%	133
4	4	19.84%	173
5	5	7.45%	65
6	6+	4.01%	35
	Total	100%	872

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

OPEN HOUSE NOTES

OPEN HOUSE 2: PUBLIC FEEDBACK & COMMENT CARD RESPONSES

PROJECT: **miOTTAWA SANDS PARK**

MEETING DATE: October 3, 2020

PRESENT: Jason Shamblin, Ottawa County Parks and Recreation Commission
 Curt TerHaar, Ottawa County Parks and Recreation Commission
 Aaron Bodbyl-Mast, Ottawa County Parks and Recreation Commission
 Jessica VanGinhoven, Ottawa County Parks and Recreation Commission
 David Yocca, Ecological Planner
 Trevor Bosworth, VIRIDIS Design Group
 Lindsey Gadbois, VIRIDIS Design Group
 SuLin Kotowicz, VIRIDIS Design Group
 Timothy Britain, VIRIDIS Design Group

A second public input session was held at Coast Guard Park to gain community feedback on two proposed design schematics for the Ottawa Sands County Park Master Plan. Participants were shown findings of the ecological analysis of the site and results of community feedback to date, and how they formed an ecological framework and programming plan for the designs. Common feedback themes are described below:

1. SITE DEVELOPMENT & WATERFRONT PROMENADE
 - a) Courtesy docks could be a problem –might get people trying to use them overnight, especially if public marina is full. Will need staffing/management.
 - b) A number of people like the open space of option B

APPENDIX C : COMMUNITY ENGAGEMENT NOTES

OPEN HOUSE NOTES

- c) Too much development – not good for birds. People should have to walk in to keep it isolated.
- d) No performances on riverfront... concerned about noise/disturbance of large gatherings
- e) Provide dog-friendly off-leash areas along the river

2. ECOLOGY

- a) Concern about a beach and why swimming is so important.... Disruptive to wildlife.
- b) New wetlands should have islands for wildlife.
- c) Make sure not to disturb eagles with construction.
- d) Keep site remote, preserve its character and integrity, one person considered it “pristine”
- e) Manage deer population
- f) Kayak/canoe/stand-up paddleboard use of lake... rentals only; ensure lake is protected from invasive species contamination

3. CAMPING

- a) Concern about noise and conduct related to camping... Ranger on-site 24/7
- b) Some comments about test run for tent camping to see if it works before any development.
- c) “Greenway Camp” ... not just a paddlers camp.
- d) No intensive (RV) camping, minimize impact from camping uses

4. ACCESS

- a) Inclusive & accessible access... paved trail around lake – even gravel is not always good enough for a wheelchair.
- b) Improve and expand trail system
- c) Fully accessible trail around lake so that all, especially seniors and those with limited mobility can enjoy it; provide shady sections also
- d) Trail connection to south through Grand Haven open space along river if feasible
- e) Keep vehicular access minimized, OK to park near perimeter and walk in

5. OTHER

- a) Concern about impact to Ferrysburg existing infrastructure - roads, traffic, etc.
- b) Should have solar panels, even a field of them.
- c) Should review plans with diversity alliance.
- d) County should take over Coast Guard Park and address flooding problems