ELKHART
ENVIRONMENTAL CENTER MASTER PLAN

PROGRAMMING, PERFORMANCE, AND SPATIAL RECOMMENDATIONS

CITY of ELKHART - DEPARTMENT of PUBLIC WORKS
TROYER GROUP

2017

The City of Elkhart:
Public Works and Utilities Department

Working With:
The Elkhart Environmental Center

Master Plan and Report for :

Elkhart Environmental Center

1717 E Lusher Ave | Elkhart, IN. 46516

Winter 2017

ACKNOWLEDGEMENTS:

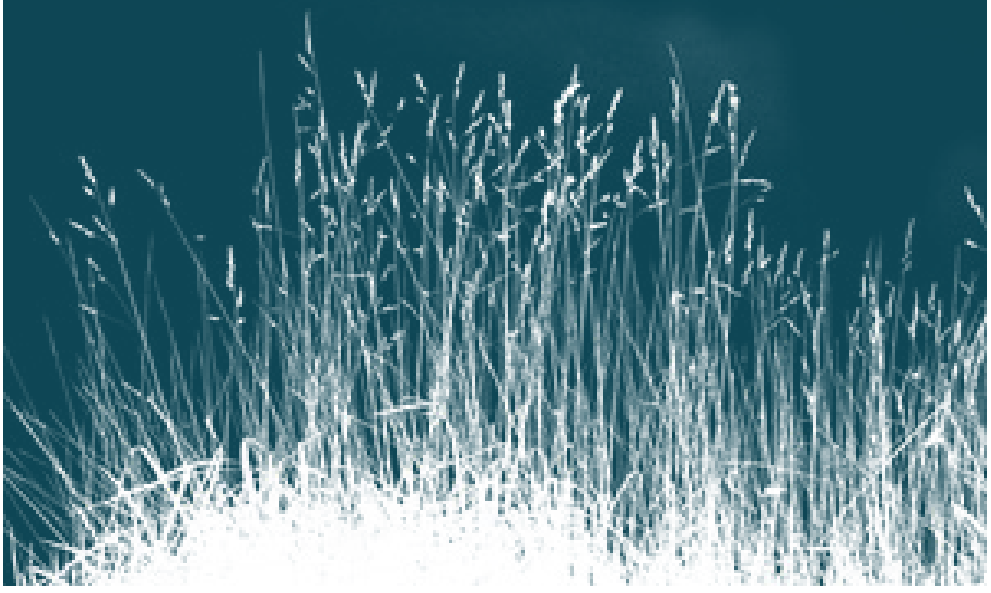
City of Elkhart
Mayor Tim Neese

Elkhart Common Council
District 1: Dr. Richard Lewis Shively
District 2: Brian A. Thomas
District 3: David E. Henke
District 4: Dwight Fish
District 5: H. Brent Curry
District 6: Pam Kurpgeweit
At Large: Mary M. Olson
At Large: Brian Dickerson (President)
At Large: Adam Bujalski

Public Works and Utilities Department
Laura Kolo, Utility Services Manager
Mike Machlan, Engineering Service Manager

Elkhart Environmental Center
Ericka Popovich, Environmental Center Supervisor
Rocio Gutierrez, Environmental Center Program Coordinator

Board of Public Works
Michael Machlan, President
Carol McDowell, Vice-President
Arvis Dawson, Member
Ronnie Davis, Member
Chad Crabtree, Member



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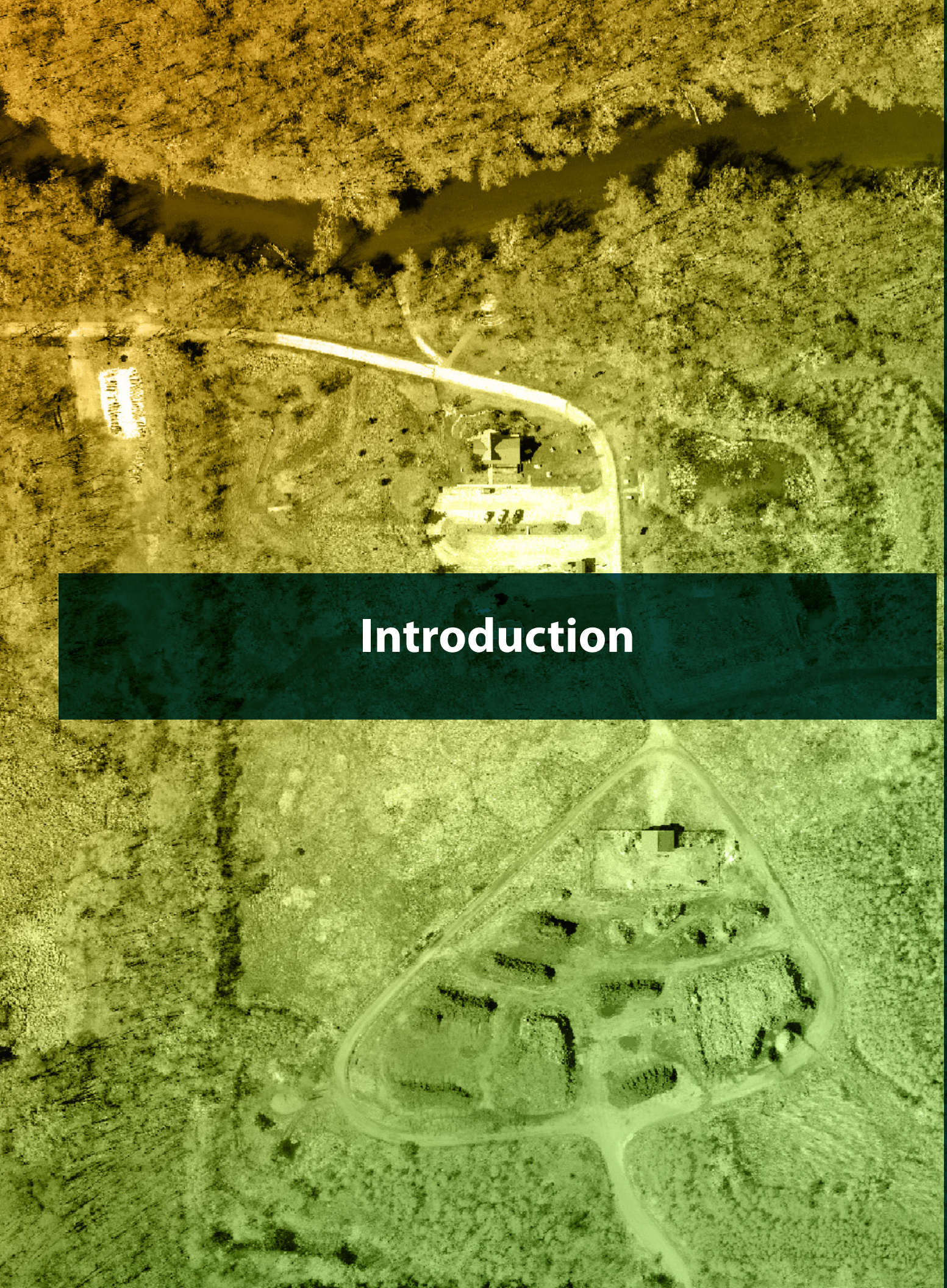


Introduction

KEY TERMINOLOGY

Lexicon
1. Of or relating to the words or vocabulary of a language.

2. A collection of visual elements - such as symbols, materials, colors, etc. - that contribute to spatial descriptions.

Connecting to Context
1. Refers to linking to physical conditions - landmarks, neighborhoods, and amenities - to amplify the value of the element, the EEC Site, or those off-site conditions.

Greensward
1. Literally "grass-covered ground".

2. Linked Green Spaces - such as river corridors, forested areas, parks, golf courses, and wetlands.

Node
1. A point at which lines or pathways intersect or branch; a central or connecting point.

2. Important or key location.

Transit Oriented Development (TOD)
1. A type of community development that includes a mixture of housing, office, retail and/or other amenities integrated into a walkable neighborhood and located within a half-mile of quality public transportation.

Ecotone
1. A transition area between two biomes. It is where two communities meet and integrate. It may be narrow or wide, and it may be local (the zone between a field and forest) or regional (the transition between forest and grassland ecosystems). An ecotone may appear on the ground as a gradual blending of the two communities across a broad area, or it may manifest itself as a sharp boundary line.

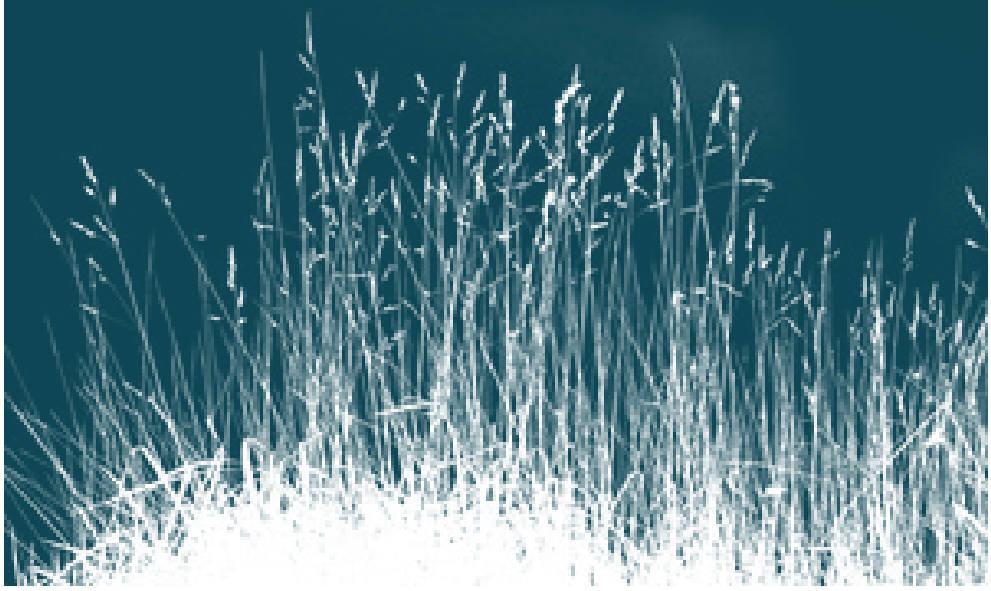
Immersive
1. Refers to the using physical surroundings to create a deeper connection and more lasting impact.

Immersive learning creates high-impact experiences that leave an enduring mark. For the last 25 years, such is the role that the Elkhart Environmental Center (EEC) has played for the community, teaching thousands of children and adults about their impact on the local and regional ecosystem. Accomplishing this came through a hands-on approach in exposing visitors to ecological systems and networks. As environmental education has evolved, so too has the EEC, continuing to create a niche within Elkhart and the surrounding area, that focuses on improving ecosystem/ environmental health and supporting human stewardship of the local environment.

At this landmark moment in the history of the EEC, the City has the opportunity to look both at the impact of the Center throughout its history and chart a pathway for the next 25 years. This process enables a response to contemporary trends, the position of the EEC within the community, and the need within Elkhart.

In addition to the role within Elkhart, the EEC makes an important contribution in linking greenspaces along the Elkhart River. These greenspaces, part of the Lake Michigan Watershed and Mississippi Flyway, provide critical habitat corridors for a variety of species, including pollinators. Coupled with the programmatic improvement recommendations, physical site improvements that address healthy ecosystems are of critical importance.

A focused effort to further establish the Center as an asset, especially within the neighboring community, punctuates the environmental education mission of the EEC. Ultimately, in highlighting systemic interaction of people and the environment, Elkhart can better showcase this critical community resource.



General Project Approach:

Stemming from the feedback gathered before and during the process, an understanding of Gaps and Strengths influenced the overall planning approach and led to four general approaches to the Master Plan:

1. Refine the Role of the Center
The EEC has always straddled the line between park space and public works site. By focusing on a passive recreation approach and highlighting the unprogrammed aspects of the site, meaning the aspects that do not require staff involvement or the spaces that have a broad spectrum of uses, this open space will better support the adjacent active recreation spaces (trails and parks), while reinforcing the environmental education niche of the center, and ultimately strengthening this unique amenity to the community.

2. Make the Center an Asset to the Surrounding Neighborhoods
Currently, the Elkhart Environmental Center is isolated and difficult to find. Better connecting it to both the nearby transportation networks and the surrounding community will increase use and ultimately strengthen the value of the EEC.

3. Site and Programmatic Improvements
The City of Elkhart has recently undergone several extensive planning processes that took an indepth analysis of community resources as well as transportation networks. From the Vibrant Communities Initiative to the Regional Cities effort to the Active Transportation Plan, injecting the EEC into those discussions will supplement their progress and demonstrate value the added by the Center. Improvements to the site and overall programming of the EEC reinforce the recommendations from these concurrent planning efforts and make the Center more of an asset to the community.

4. Focus on the People
From immersive learning environments to environmental justice, amplifying the value of the EEC remains a key tactic in its longevity. Shifting the perspective of the EEC to be seen as an equitable space that showcases environmental education for Elkhart, through physical and operational changes, better defines its past and future role. The EEC sits in an area with low median household incomes and home values. By connecting this open space to nearby greenspaces as well as active recreation amenities and other significant elements in the area, the improvements at the EEC will strengthen the surrounding community. The focus on people will create a stronger, more vibrant, healthier, and ultimately more just community will emerge.

"[Focusing on Context helps define] what the Environmental Center could be."

VISION

The Elkhart Environmental Center is an environmental education entity that actively contributes to a sustainable society and economy in the city and the region.

MISSION

The Elkhart Environmental Center works together with citizens, community groups, city entities, and other organizations to protect and improve the local environment and advance community-wide environmental responsibility through public education and outreach, stewardship of its site, and partnerships.

KEY TERMINOLOGY (Continued)

Niche
1. A unique or particularly suitable position within a marketplace

2. An ability to distinguish oneself from competition or similar organizations.

Environmental Justice
1. Refers to the fair treatment and meaningful involvment of all people in the development, implementation, and enforcement of environmental laws, regulations, and policies.

2. Refers to the economic or programmatic support and equitable distribution of open or natural areas within a community.

Equity
1. Exhibiting fair, not just equal, treatment with all groups engaged with or served by the Environmental Center.

Quality of Place
1. Refers to a combination of aesthetic value, openness (perceived equity), and diversity of opportunities that lead to greater civic satisfaction.

In-Situ
1. Situated in the original, natural, or existing place or position.

2. Kept in a localized state, undisturbed or conditioned to reduce disruption to surrounding environment due to cost or potential impact to system.

Key Performance Indicators (KPIs)
1. Qualitative or Quantitative measures used to evaluate the success of an organization or person in meeting objectives and responsibilities.

Examples of quantitative KPIs include the amount of people or the diversity of organizations engaged by the EEC in a year. Examples of qualitative KPIs include the EEC's connectedness to the community or the overall coverage of programming within the community (not just amount of programming offered).

The Elkhart Fire Deptment Examines the Lusher Avenue City Dump

A Brief History of Environmental Remediation and the EEC
From the first air pollution and water quality studies in the early 1900s, environmental remediation has come a long way. It was not until the 1970s and 1980s that modern environmental and hazardous waste laws were put into place. While much legislation surrounds clean water (specifically drinking water), environmental remediation can be summarized in two key efforts: 1. Managing pollution source and impact and 2. Restoration of pre-polluted conditions versus management of the current condition. The Resource Conservation and Recovery Act (RCRA) governs hazardous and non-hazardous landfills, including the monitoring process after they are closed. This specifically deals with the liner and cap system and observation of the refuse degradation.

In-Situ Capping (ISC) is a non-removal remediation technique, often utilized for contaminated sediment, isolating it from the surrounding environment to eliminate spread to the adjacent ecosystems. It is primarily used as an option when other treatments become cost prohibitive. Design of the cap, including use of geotechnical components such as fabrics, is determined by site evaluation. This technique was employed at the EEC, with site development starting in 1989. Also that year, wetlands were constructed on the site, supplemental to existing drainage areas, to assist in site drainage and contribute to water quality concerns given the close proximity to the Elkhart River. The existing cabin was constructed in 1991, leading to the EEC's programmatic role within the community.

RESOURCES

Environmental Management History
www.environmentalscience.org

In-Situ Capping
"Assessment and Remediation of Contaminated Sediments (ARCS) Program" - United States Environmental Protection Agency

Resource Conservation and Recovery Act
www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act

Elkhart Environmental Center - City Webpage
www.elkhartindiana.org/EEC


Wolf Lake Boardwalk - Hammond, IN


American Chemical Service Superfund Site - Griffith, IN


Gas Works Park - Seattle, WA

Case Study: Reclaimed Sites

Several best practices of environmental remediation were examined throughout this process. These were selected because of their dual function as reclaimed sites and passive recreation parks. Each of the three - Wolf Lake Boardwalk (and connected development), the American Chemical Service Superfund Remediation Site, and Gas Works Park - provides varying degrees of immersive environmental experiences. First and foremost, each site operates as environmental remediation, managing both important clean-up and system needs, such as stormwater management. Each site also concerned with introducing visitors to the naturalized areas with sensitivity, but seizing the opportunity to give visitors an up-close perspective of natural systems. Finally, these three case studies showcase an intimate relationship with water, using minimal intervention techniques, such as on-grade path systems and elevated viewing areas. Utilizing water in this way, gives each site a multilayered and purpose driven program, resonating with visitors and amplifying value for their surrounding communities.

Given the proximity to the Elkhart River, the EEC's history as a remediated landscape, and its current capacity as a passive recreation learning center, these award-winning and renowned case studies provide insight on more successfully introducing people to reclaimed sites.

Wolf Lake Boardwalk

- Founded: 2008
- Located: Hammond, IN
- Size: 1200 LF of boardwalk
- Style: Passive Recreation Park

ACS Superfund Site

- Founded: 1989
- Located: Griffith, IN
- Size: 23 acres
- Style: Wetlands/Native Areas

Gas Works Park

- Founded: 1975
- Located: Seattle, Wa.
- Size: 21 acres
- Style: Passive Recreation Park

Other Recent Planning Initiatives

VIBRANT COMMUNITIES
ACTION AGENDA Elkhart County, IN

The Vibrant Communities process was initiated to engage the communities of Elkhart County in a discussion on quality-of-place. Over a six-month program nearly a thousand participants shared close to 4,000 unique ideas and comments. The Action Agenda produced for Elkhart included programming and events, youth engagment, remediation projects, connecting amenities, and promoting engagment with the river (among other items).

For more information:
vibrantelkhartcounty.org/

REGIONAL CITIES
OF NORTHERN INDIANA

The Regional Development Plan draws upon research and insights gained from the Indiana Economic Development Corporation's Regional Cities Report, as well as a growing body of knowledge within the emerging discipline of place-based development. These strategies work to align and improve both the physical environment in which people live and work as well as the unique resources that exist within communities that can support business development and innovation for greater economic development. The plan works to influence four key place-based success factors critical in creating competitive places and employment centers. They include: Density, Connectivity, Amenities, and Productivity.

For more information:
regionalcitiesofnorthernindiana.org


Focus Group Planning Session at the EEC

Contemporary Transition:
From its inception in 1984, environmental education has been at the center of the EEC's mission and its community agenda. In part due to the recession, school field trips have declined in recent history that combined with an emerging gap in education focused on older youth and adults, had led to a shift in focus from youth to adult education. This has been primarily achieved through events such as the popular EnviroFest and Arbor Day celebrations. In addition, the establishment of the ElkhartWood continues to reinforce the collaborative nature of the EEC.

Today, the Center's key responsibilities beyond the public outreach of the events include Visitor Services, Volunteer Coordination, Adult Education, as well as Site and Facility operation. These efforts constitute a response to the evolving dynamic of environmental education, additional community facilities offering similar services, and community involvement. With an ultimate goal of reaching as many people as possible, these efforts have enabled the EEC to stay relevant as a resource for the City, while adjusting to changes in leadership, economic climate, and community need.

While these focus areas have led to successful public outreach and engagement, this Master Plan seeks to amplify the value of the EEC and improve operational effectiveness and efficiency. Outlining an adaptive strategy aimed at identifying future opportunities, significant public input was sought and evaluated, influenced by social and environmental context, and building on contemporary planning processes.

Public Enthusiasm
While the EEC has always had public support and volunteerism, recent history has shown a decline in public awareness. Based on feedback from the EEC as well as the focus group meetings, lack of awareness of the Center is a primary concern. At the same time, support of the EEC remains high from both internal and external stakeholders. Leveraging the enthusiasm, through incremental and long term initiatives as well as legacy efforts, will contribute to the continued viability of the Center. This means connecting the efforts that produced the enthusiasm to the new direction of the Center.

Key Events Leading to the EEC Master Plan

EVENT TYPE	DATE
Elkhart Environmental Center Dedication	1991
ElkhartWood Launched	2014
Regional Cities Kick-off Meeting	2014
MACOG's Active Transportation Summit	2015
Vibrant Communities Kick-off	2016
Elkhart BOPW Approval to start Master Plan	Summer 2016
City of Elkhart EnviroFest - Master Plan Announcement	Summer 2016
Master Plan Kickoff	Summer 2016

Elkhart Environmental Center Study Area

EEC Details

- Cabin Construction / Dedication: 1991
- Address: 1717 E Lusher Ave, Elkhart, IN
- Size: 66 Acres - Adjacent to the 120 Acre River Greenway System
- Type: Remedial Landscape
- Site: Previously City Dump

MAP LEGEND: Key Center Site Elements

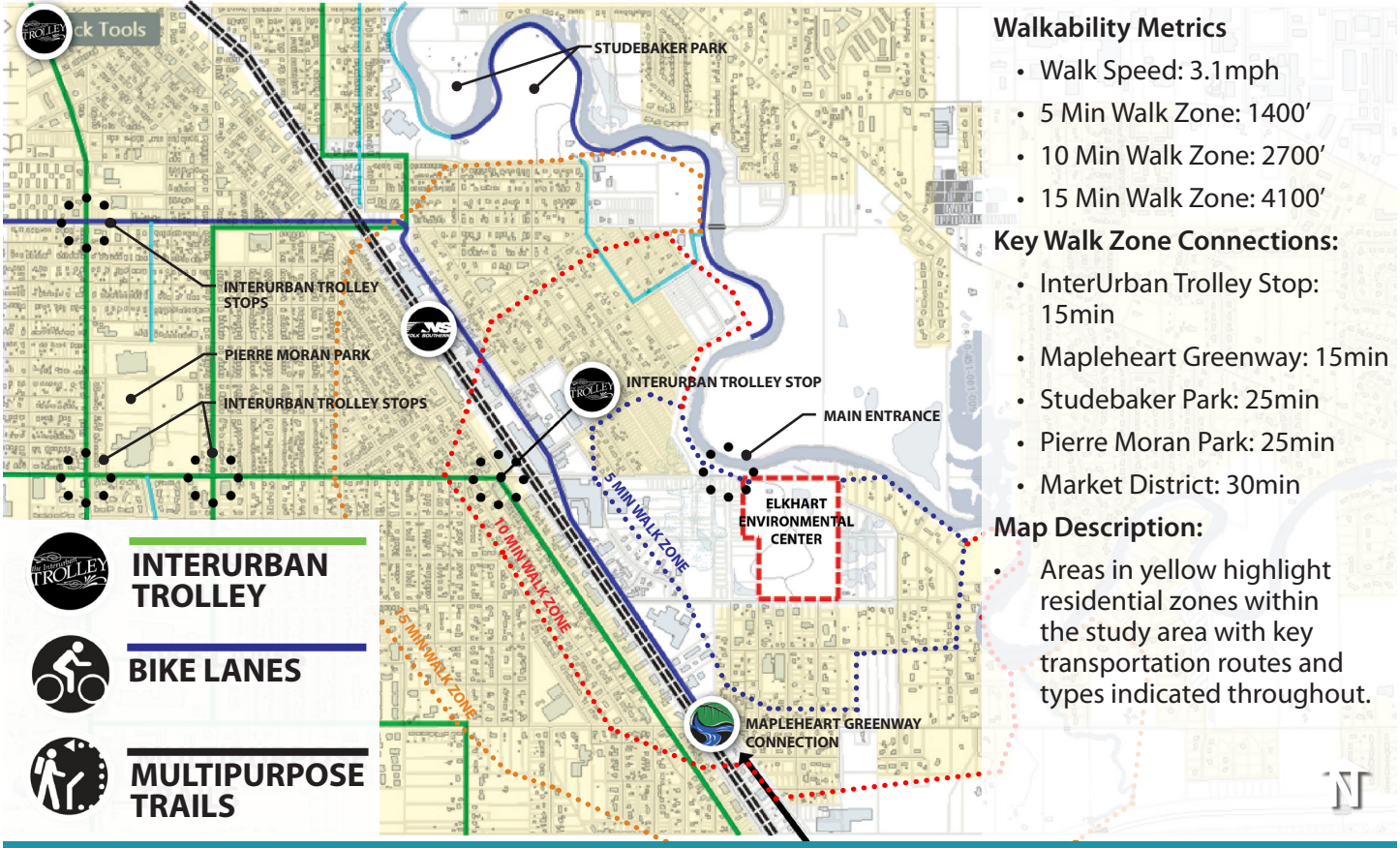
A **Environmental Center Main Cabin**
B **Compost Wind Rows**
C **ElkhartWood Log Yard**
D **Constructed Wetlands**
E **Recycling Drop-off Location**
F **Reflection Grove**
G **Ampitheater**
H Boat Launch
I Learning Garden

Site Inventory and Analysis Process

Situated along the Elkhart River, the 66 acre EEC site features several different types of ecosystems including emergent and wet meadow, wooded, open prairie/wildflower, and forested wetland. The facility serves dual purpose as a passive recreation park and functional land resource, with a learning center, nature trails, recycling drop-off, and a compost area. Responsibilities of the Center include Visitor Services, Volunteer Coordination, Adult Education, Events, as well as the ability of the existing amenities of the site and facility to support operations and education.

With the primary focus of the master plan process on the Center property itself, in order to more effectively address the goals of the process, the surrounding networks, landuse, and amenities were also strategically examined. From a landuse perspective, the site is surrounded by a commercial corridor to the west, residential areas to the south and east, and the river/naturalized areas to the north. Additionally, several critical challenges were also discussed including expectations, facility size, staff limitations, as well as community and organizational obligations.

The following pages further investigate the physical and social context of the Center; each contributing to the final strategy and project recommendations.



Walkability Metrics

- Walk Speed: 3.1mph
- 5 Min Walk Zone: 1400'
- 10 Min Walk Zone: 2700'
- 15 Min Walk Zone: 4100'

Key Walk Zone Connections:

- InterUrban Trolley Stop: 15min
- Mapleheart Greenway: 15min
- Studebaker Park: 25min
- Pierre Moran Park: 25min
- Market District: 30min

Map Description:

- Areas in yellow highlight residential zones within the study area with key transportation routes and types indicated throughout.

Transportation Inventory Map


Looking north along Sterling Ave.

Walkscore Measurement:
With an average Walkscore of 36 out of 100, the City of Elkhart is predominantly car dependant. Based on use, accessibility, nearby amenities, and overall connectivity, the EEC site has a Walkscore of 10. Moving further north and west from the EEC increases the score significantly, but adds hurdles in both actual and perceived accessibility. Because of available infrastructure, a 10-20 minute walkzone only reaches the neighborhoods to the south and west, while just getting to the Lusher/Main Street intersection.

WalkScore is an online resource that measures walkability based on quality and amount of walking routes to destinations and amenities within an area.

www.walkscore.com

Inventory Plans
The various inventory maps shown throughout the Background section of this document were assembled from data provided by the EEC and spatial information gathered from the US Census and Environmental Systems Research Institute (ESRI) collaborations. The Michiana Area Council of Governments (MACOG) Geographic Information Systems (GIS) online sources and Google/Bing aerial photography were also heavily used.

Combined with feedback from the City of Elkhart, participating anchor institutions, and the public, an initial inventory of physical conditions and features, as well as the social context provided a baseline understanding of assets and liabilities. Historic and Contemporary volunteering and partnership in the EEC were also studied.

Pedestrian Environment Analysis
Vehicular Traffic: Contrary to the Center's focus on environmental health, visitors primarily access the site via vehicular means. Contributing factors include an isolated site and being surrounded by major thoroughfares and collector streets, such as Main St. and Lusher Avenue. The Norfolk Southern railroad crossing also is a barrier to accessing the site from the west. Despite having a pedestrian pathway along the river from the north, the feedback from the participating groups shows that it is relatively unused. A significant asset is the Interurban Trolley stop just west of the EEC, at the intersection of Main St. and Lusher Ave. According to feedback from focus group attendees, a Transit Oriented Development is planned for the southwest corner of this intersection.

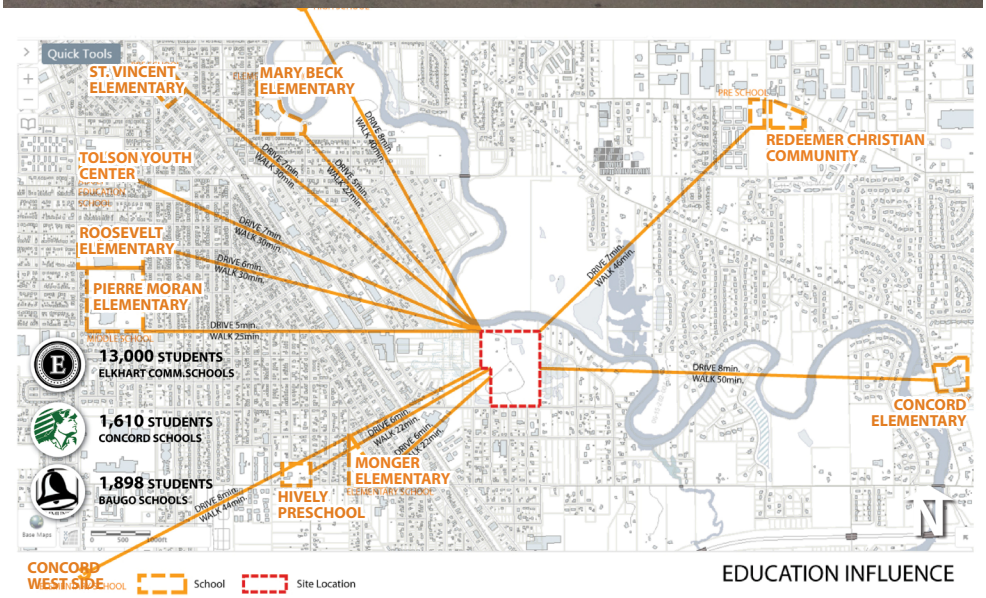
Accessibility and Universal Access: Critical to pedestrian accessibility and greater connectivity, the EEC does not have any Americans with Disabilities Act (ADA) approved trails. Refer to appendix for more information on ADA Assessment. Full topographic and elevation studies are necessary to determine site compliance.

Bicycle Connectivity: The Mapleheart trail stops just short of the EEC property and represents a significant opportunity in connecting bicycle traffic to the Center. A separated bicycle lane continues along Sterling Avenue from the Mapleheart trail with another multi-use pathway approaching the site from the north.

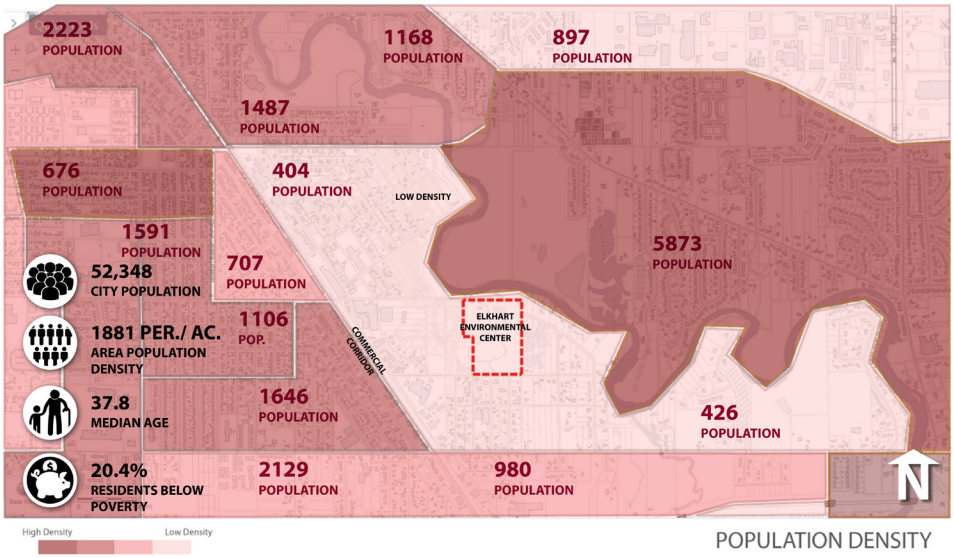

Looking north along Moyer Ave from Lusher Ave Intersection


Looking west along Lusher Ave.


Johnson Products entrance



School Inventory Map



Population Inventory Map

Education Assessment:
Schools are clustered mainly to the west. Better connecting to the region's 16,000 school-aged children provides the Center with an easily reported metric.

Population Assessment:
From the onset, this process has been about better connecting people to the EEC. To do that in an equitable manner, this is about fostering a local, regional and citywide connectivity, not just connecting to major transportation nodes or routes. To start, local, regional, and citywide population densities were compared to find areas to connect. Regional average age was also examined to get a relative understanding of how nearby residents might use the facility. With a median age of 37.8 years, advanced population age according to the US Census data, shows a need for passive recreation facilities more frequently used by that demographic.

From the Population Inventory

Population Assessment (cont.)

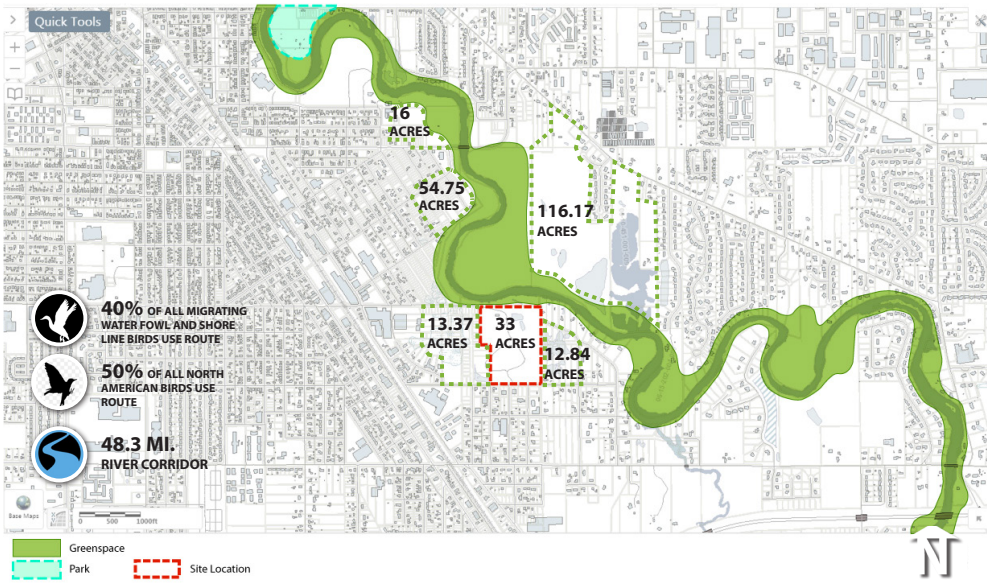
Map, low density areas are found around the Center, consistent with the nearby commercial corridor impacts and the impact of the floodplain around the River. Adjacent to Main Street and on the opposite side of the Elkhart River lie pockets of higher density neighborhoods, especially surrounding schools. Low density becomes more prevalent moving north from the EEC, with higher rates of vacant parcels that have become somewhat naturalized. This is primarily due to the floodplain. Coupled with 20.4% of the population living below the poverty designation, investment in regional public green space helps improves overall environmental justice.

Environment Assessment

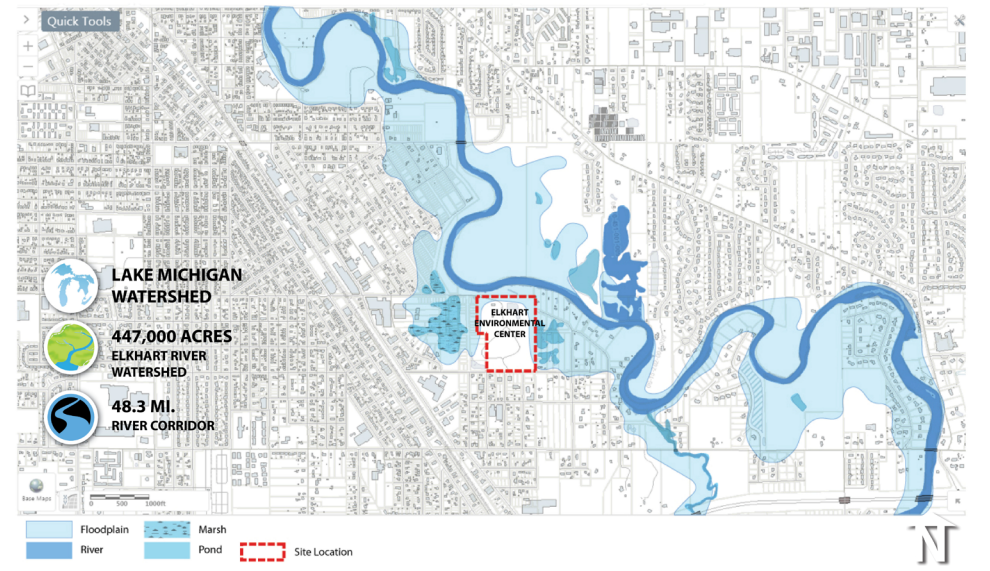
Looking at the Open Space and Ecology Inventory Map and the Hydrology Inventory Map, the significance of the EEC's size and location (as one of the largest open spaces along the river corridor) becomes more evident. Part of over 43 miles of river corridor and a keystone watershed in the Lake Michigan Watershed and Mississippi Flyway, the Environmental Center's site, boasts several types of ecosystems that contribute to the ecological health of the entire system. More regionally, the EEC sits as part of a connected and linear green space corridor that leads into the heart of the City. Many of the neighboring sites to the EEC are greenspace, which contribute, even unintentionally, to the Center's role as ecological habitat.

Drainage/stormwater management: The topography of the EEC predominantly drains toward the Elkhart River, with a small wetland at the southwest portion of the site and several other small low wetland areas also collecting water (5 total constructed wetlands and 2 natural wetlands). Because of the topography and proximity, the EEC has a particularly intimate relationship with the river, buffered only by a small wooded strip.

Mississippi Flyway Map - via North Dakota Game and Fish Dept.



Open Space and Ecology Inventory Map



Hydrology Inventory Map


Looking east along Elkhart River, near EEC


Northside of the constructed wetland

Existing signage near entrance


Existing bridge near wetlands


Existing meadow

Existing signage

Existing entrance sign

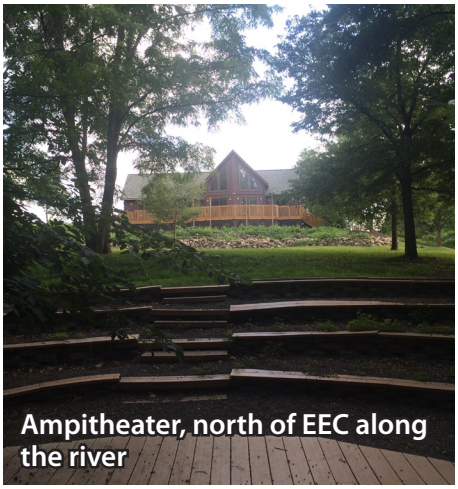
Site Context Photos - *Images above were obtained through Google Street View*

EEC Entrance - *Along Lusher Ave*

EEC Cabin entrance - *From parking lot over rain garden*

EEC Access Ramp

Eco-cabin, southwest corner of the parking lot

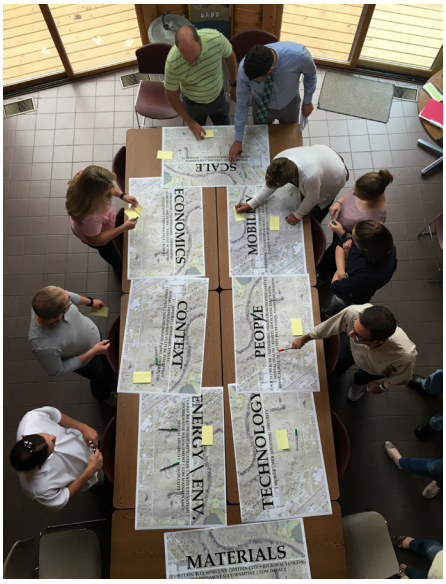


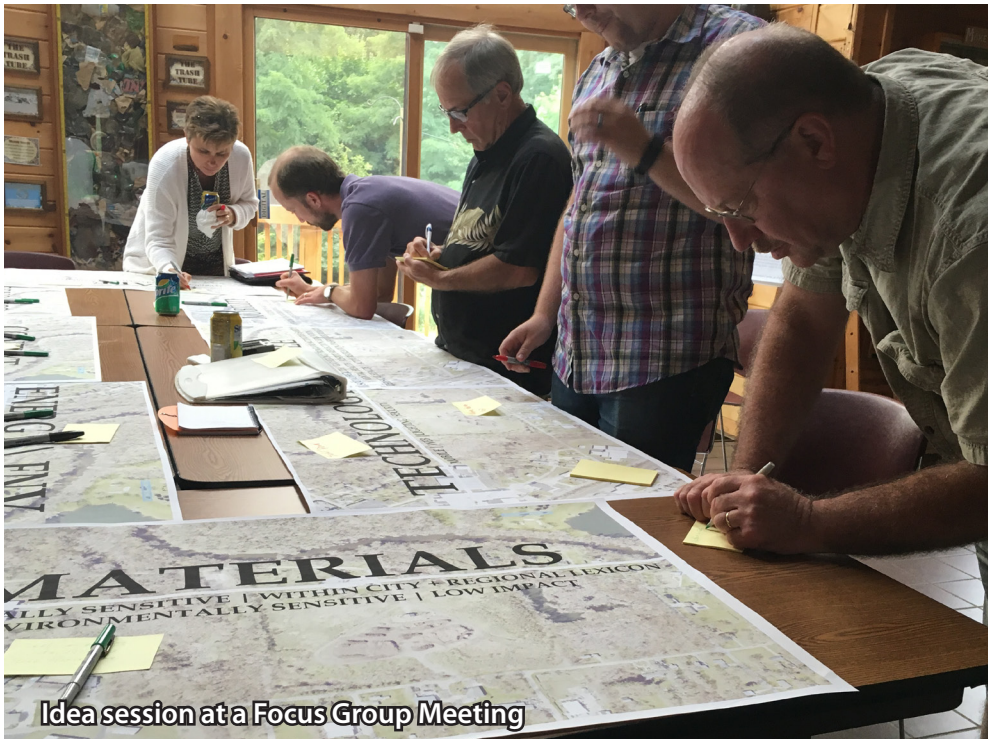
Ampitheater, north of EEC along the river

Public Works Compost Area - *South portion of the EEC Campus*

Site Context Photos - *Images above were obtained through Google Street View*

Public Process





Idea session at a Focus Group Meeting

Process

Celebrating the groundswell of public enthusiasm that the City is generating through concurrent planning efforts, a process that builds on these efforts while also avoiding "planning fatigue" was employed. This strategy also focused on gathering input from a variety of sources, with education, public, and private sectors represented. From the responses gathered from the EEC and the public, strategies and potential projects were compiled and developed and represented to gain more insight, hone ideas, and prioritize development. Throughout, feedback was tracked and shared, allowing the plan to evolve and public priorities to be addressed.

Ultimately, this plan portrays a snapshot in time and responding to continued feedback will be an important responsibility of the EEC moving forward.

Schedule

Gathering feedback from a diverse array of interested people was an important part of this process. Several opportunities and strategies were used for both the stakeholders and the public to ensure an empathetic, transparent, context sensitive, and people driven process. The following outline represents the major meeting dates with continual feedback provided by the Elkhart Environmental Center and the City of Elkhart Public Works Department.

Key Dates in Elkhart Environmental Center Master Plan Process

MEETING TYPE	DATE
1. Kick-off Meeting	July 2016
2. Focus Group One	August 2016
3. Focus Group Two	August 2016
4. Public Planning Session	September 2016
5. Public Presentation	November 2016
6. Draft Plan Complete	November 2016
7. Final Plan	December 2016

With the front end of the plan featuring public meetings, in order to facilitate wider distribution, the Master Plan was released for further public review via the City website.

Outlining priorities at a Focus Group Meeting

Strengths, Weaknesses, Opportunities, and Threats
Compiling the feedback from the meetings, site visits, and background analysis, the following Strengths, Weaknesses, Opportunities, and Threats analysis was developed. Each item represents the areas that came up most frequently during the background and inventory phase.

Strengths

Proximity: Despite being an isolated site within the City, the EEC is close to a number of community assets that can help bring more people to the property. The biggest asset is the Elkhart River, a unique community resource (especially in immersive environmental education). With fostering connections being a top priority, the EEC's proximity to popular bike and pedestrian infrastructure is also a definite strength.

Function of the Site: The EEC serves an important functional and community health role as the steward of a reclaimed property. Additionally, the regional ecosystem benefit, with the site serving as a link between habitats and an ecotone, that further demonstrates the site's overall importance.

Sustained Interest: Events such as the EnviroFest and Arbor Day celebrations connect to thousands of residents each year and remain an important metric for measuring the success of the Center.

History: After 25 years of service to the Elkhart community, the nostalgia of the Center and its reputation for working with kids continues to be strong and is something to build on.

Weaknesses:

Physical Condition: From the crowded entrance and "no dumping" signs to the need for remediation, there are several physical liabilities around the Center that need to be improved.

Public Awareness and Perception: Site conditions and declining educational programming at the Center has led to confusion and misunderstanding whether or not the Center is still operational.

Open Space: Education areas are overgrown and undefined, leading to the site not fully being used by visitors.

"Establish a better connection to [the adjacent] neighborhood."

"Partner with local commercial neighbors for green events."

"What gaps exist within institutions that the EEC could cover?"

"Utilize more of the available space for education."

"Take advantage of connection to the river."

"Encourage as a stop along local bike trails"

"Make a nice sign at entrance"

"Connect with the community"

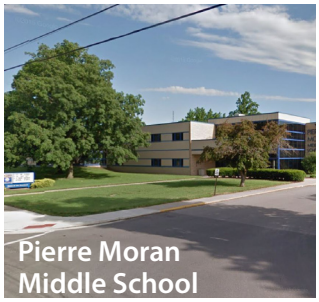
"Make the entrance remarkable"

*"Bring back focus on **youth** education"*

"How can we bring the center to the people in addition to bringing people to the center?"

"Reinforce trails for easier maneuvering"


Mary Beck Elementary


Pierre Moran Middle School


Roosevelt Elementary


Studebaker Park


Wellfield Botanic Gardens


Hawthorn Elementary

Woodlawn Nature Center


Woodlawn Nature Center

Site Context Photos - *Images above were obtained through Google Street View*

Visibility, Accessibility, Connectivity: In each phase of this process, visibility of the site has been mentioned as a liability. The site is isolated from the community and the resources on the site (from the cabin to the trails) are perceived that way as well. Lack of lighting and permanent pedestrian infrastructure contribute to this perception and the actual disconnect from the community.

Opportunities:

Connections: One of the easiest ways to bring people to the Center is to physically link to areas where people are (such as the surrounding neighborhoods, trails, and public transportation stops).

Ecosystem Role: Building on an already important role within the regional ecosystem increases education opportunities, contributes to important metrics (such as energy reduction, stormwater management), and increases community health.

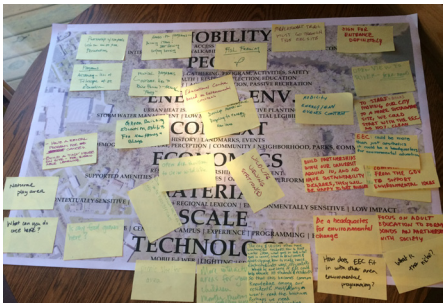
Partnerships: Identifying overlaps in missions between the EEC and a variety of organizations adds value to those organizations without adding programmatic responsibility to the EEC. Establishing new partnerships and strengthening existing ones increase awareness and involvement in the Center which leads to long term sustainability.

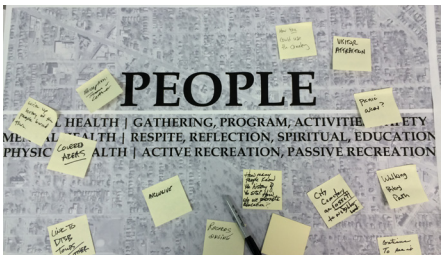
Threats:

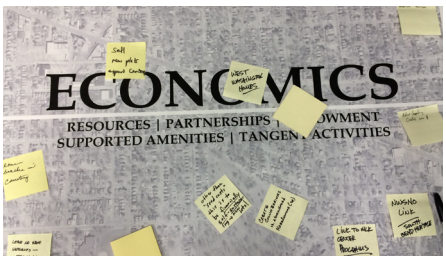
Perception: Overcoming lack of awareness of the center within the community and the public's understanding of both the quantitative and qualitative value presents a challenge to accomplishing any of the strategies or projects outlined within the Master Plan.

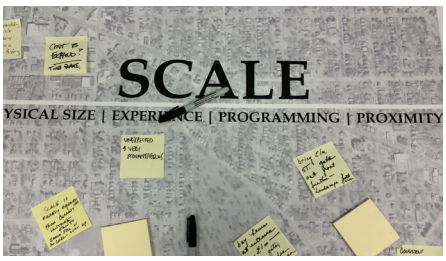
Programming Niche: Re-establishing and maintaining a unique positon within the community is critical to the EEC's long term viability. A diluted program will limit success and reduce the public's understanding of the Center.

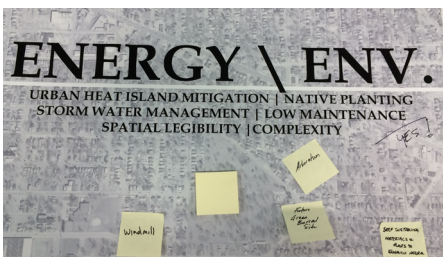

Outlining priorities at a Public Planning Meeting











Key Considerations

As demonstrated in the Inventory and Analysis portion of this document, the EEC, while playing an important role within the regional environmental ecosystem, sits within a low density and overlooked part of Elkhart. Careful thought must be given to balancing the environmental aspects, such as habitat, pollinators, biodiversity and succession planting as well as environmental and social justice components.

In order to break down complex projects into digestible content and facilitate purpose driven feedback, several key lenses were utilized throughout the process. These lenses are individually important and function as a system, which ensures broad coverage of the context of the project and a detail-oriented process that provides a meaningful direction for the Master Plan.

The following lenses were utilized to guide discussions with the focus groups and the public. Each lens was broken down into more specific prompts to get into greater detail to determine potential projects and ultimately project priorities. Participants were shown the different lenses and asked to provide feedback on post-it notes within each category. Their comments were then compiled (see appendix) and analyzed for feasibility and community support.

The **lenses** and prompts were as follows:

- **People**: social, mental, physical
- **Mobility**: access, awareness, way finding, passive and active recreation, Interurban Trolley, walkability, bicycle
- **Energy/Environment**: urban heat island mitigation, native planting, storm water management, low maintenance, spatial legibility, complexity
- **Materials**: contextually sensitive, accurate to time period, environmentally sensitive, low impact
- **Context**: history, landmarks, events, social, demographics, community, neighborhood, parks, commercial
- **Technology**: mobile, web, lighting, security
- **Economics**: resources, partnerships, endowment, tangent activities and supported amenities
- **Scale**: physical size, experience, programming, proximity

Master Plan Priorities and Goals
The Master Plan's key considerations include:

1. *Historic perception of the EEC.*
2. *Environmental and social justice*
3. *Building on contemporary planning efforts.*

These aspects served as the backdrop for identifying goals and developing strategies to achieve them. The framework of the major strategies helped to prompt the dialogue during the stakeholder meetings, and elicit feedback more specific to the contemporary direction of the Center. After compiling feedback and background analysis, which provided a comprehensive understanding of the physical and social context of the EEC, a series of goals that supplemented the original considerations, were developed. Using those goals, we could then identify projects and outline priorities that were important to the City and the community. Throughout the process, the public was given an opportunity to give feedback and to prioritize the recommendations.

Using these goals and priorities as a starting point, the next series of pages goes into more detail regarding the identified projects and how they might be implemented.

*Refer to the the **Strategic Implementation Matrix** for more information on the overall strategies and priorities.*

Master Plan Key Considerations

1. History of the Center
Managing expectations with the EEC's evolution

2. Environmental and Social Justice
Connect to the community and regional ecosystem

3. Build on Contemporary Planning Efforts

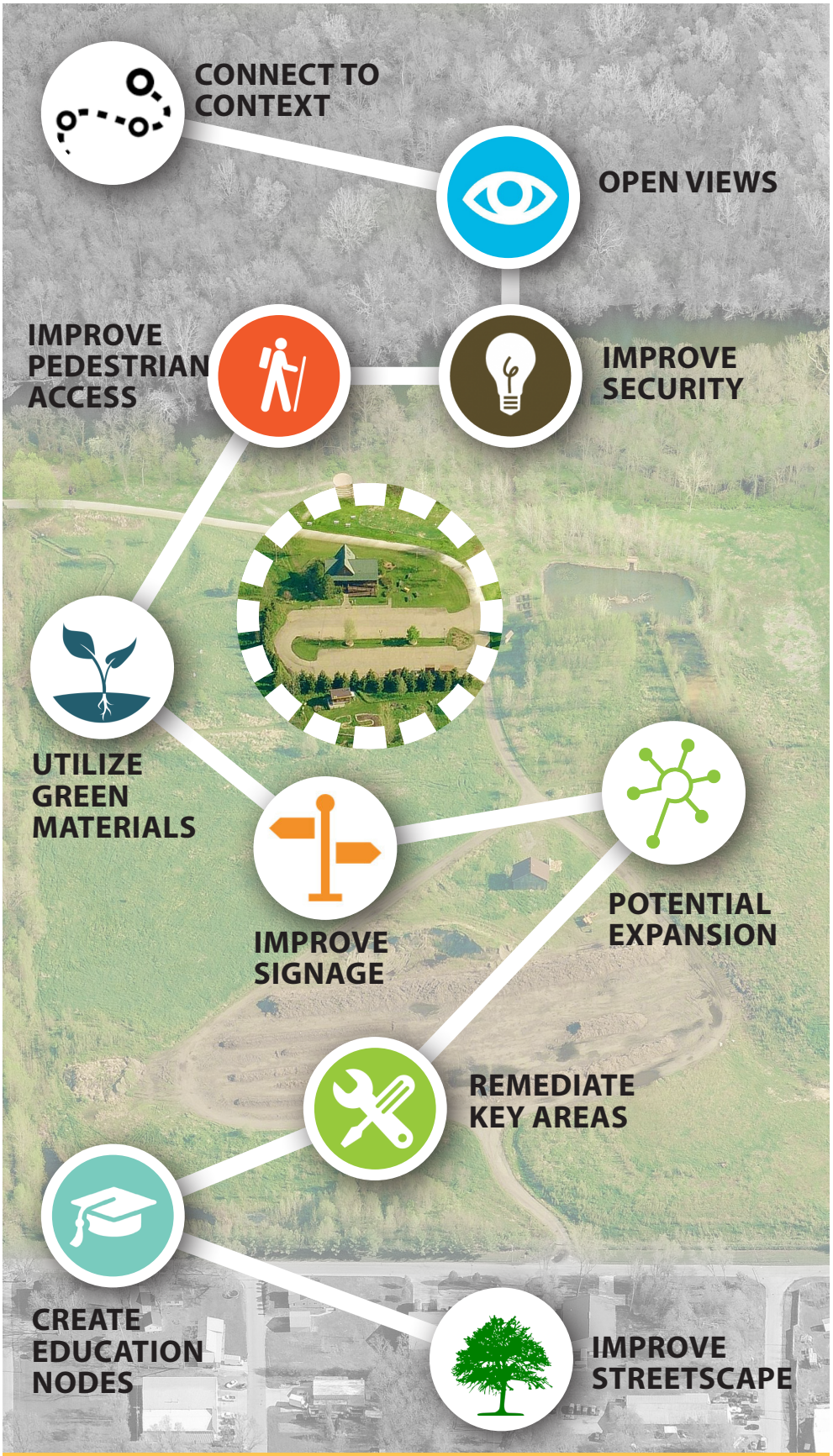
Master Plan Goals

1. Improve Visibility and Connectivity
2. Strengthen Environmental Resources
3. Strengthen EEC Programming and Operations
4. Highlight the Elkhart River
5. Explore Partnership Opportunities
6. Prioritize Opportunities and Develop Project Phases
7. Develop Performance Metrics

Public Priorities

1. Main Entrance Improvements and Creating Community Connections
2. Improve signage and security
3. Developing Education Nodes
4. Open views to Elkhart River
5. Improved Programming and Partnerships
6. Developing a regional Greensward Plan

Recommended Improvements



While this list of projects is not exhaustive, it represents the keystone efforts that are imperative to accomplish to move forward and see a more successful open space for the city. The above projects will be implemented over short, middle, and long term initiatives that should be the focus for the foreseeable future.

The next series of pages will address in greater detail the components of the individual projects and highlight the key recommendations for each.

ELKHART ENVIRONMENTAL CENTER MASTER PLAN

For the first time in its 25 year history, this community environmental resource has a comprehensive master plan. Part of the intent of the project was to showcase the value of the EEC as a resource, both programmatically and ecologically. Additionally, it was to capitalize on the Center's positioning as a immersive education resource and history of volunteerism. From the beginning of this process, the plan for the Center focused on people. This public oriented process sought to capitalize on the momentum and awareness built by the Vibrant Communities, Regional Cities, and Active Transportation plans.

Within this effort, four primary objectives, focused as both internal and external strategies for the Center, evolved to encompass the proposed projects: Improve the access and aesthetics of the Elkhart Environmental Center's adjacent context; enhance the external programming and partnerships of the Center; improve the function, health, and aesthetics of the EEC site; and optimize the internal operations of the EEC. As the action oriented components of the four strategies, each of the projects seek to accomplish the goals, while creating opportunities for both short term implementation and long term direction. This provides the EEC the ability to show immediate progress and a framework for future decision making.

With each project, whether internal or external, architectural or operationa, consistent use of materials, colors, and symbols (lexicon) reinforces the brand identity of the EEC and it's role within the community network.

EXTERNAL STRATEGIES MASTER PLAN: Improve Access, Connectivity and Aesthetics

Context Photos

Objective 1: Improve Access and Aesthetics of EEC's Surrounding Areas

In order to more fully integrate the EEC into the community, making its value more visible, strengthening and showcasing its responsibility as a linchpin habitat location as well as bringing people to the Center need to be addressed. This helps to solve the isolation problem and supports the capacity of the Center while also enhancing existing amenities, such as the InterUrban Trolley and the nearby trails. This first strategy focuses on external opportunities: creating physical connections to the surrounding area and improving accessibility, improving people's experience on the streetscape, improving signage and wayfinding, opening views (both to the river and along access routes to the Center), creating education nodes, and developing a comprehensive Greensward Plan. Each facilitate different aspects of the strategy.

Connect to Context and Improve Pedestrian Access

- **1.1** Create a gateway at main entrance of EEC
- **1.2** Create a sidewalk from Lusher Ave/Main Street intersection to EEC
- **1.3** Create a bikelane from Lusher Ave/Main Street intersection to EEC
- **1.4** Create a trail from neighborhood to the east
- **1.5** Foster connection to existing trail and pedestrian systems (Mapleheart and Rivertrail)

Streetscape Improvements

- **1.6** Streetscape improvements along Lusher from Main Street to Main Entrance of EEC
- **1.7** Streetscape improvements along Perkins

Improve Signage

- **1.8** Improve signage at Lusher Ave and Main Street Intersection

Open Views

- **1.9** Limb up trees and reduce understory plants at key locations

Create Education Nodes

- **1.10** Utilize the resource of the River to create nodes to expose river travelers to the EEC and EEC visitors to the River.

Develop Greensward Plan

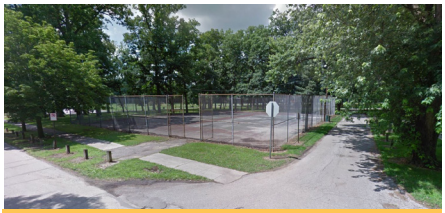
- **1.11** Connect to adjacent greenspace to create a cohesive ecologic corridor to improve flora and fauna while providing additional recreation opportunities for the City.

GREENSWARD

"Both Frederick Law Olmsted and Calvert Vaux, the designers of Central Park advocated government support of culture and the arts, and they viewed a public park as one public institution among many -- schools, museums, libraries -- that could enhance the lives of free citizens. Central Park would be a democratic institution by virtue of the mixing of classes within its boundaries. And their 'Greensward Plan' itself postulated what individuals from all social backgrounds would do there: admire the artistically composed scenery, enjoy the spectacle of the crowd on the promenade, and engage in the wholesome exercise of driving, riding, walking, skating, or -- for those who played cricket -- competitive sports."

For more information refer to: www.centralparkhistory.com

EXTERNAL IMPROVEMENTS: Connecting to Context



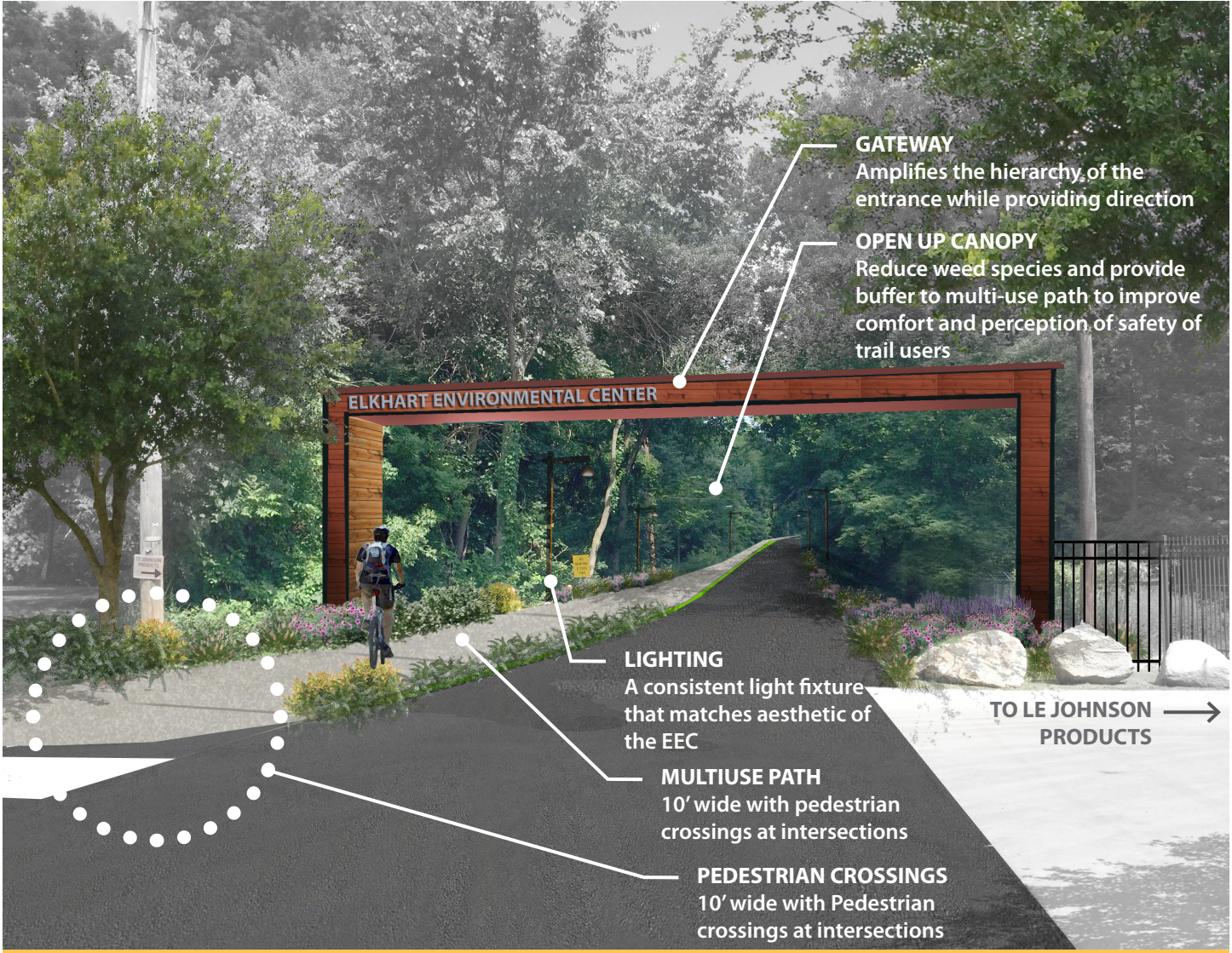
Context Photos

Connect to Context and Improve Pedestrian Access

While each of the outlined projects are linked, the connections made within this first section are particularly impactful and more successful because of those links. By focusing on connectivity - to adjacent neighborhoods, to public transportation, and to existing pedestrian infrastructure - qualitative key performance indicators (KPIs) are dramatically improved. Quantitative KPIs, such as an amount of infrastructure, are often used, but not the most effective way to measure success of the project. Qualitative KPIs include coverage and quality of place and while still measureable, are more directly related to the desired outcome of physical and social connectivity.

The next few pages identify five projects, with key connections including:

- Incorporating the EEC into existing and planned transportation networks, especially the InterUrban Trolley stop.
- Linking to the MapleHeart Trail is an important connection to make, establishing the EEC as a key node within the system.
- Increasing access to the site provides more usable amenities for the neighborhoods, specifically the north, east, and south residential areas.



EXTERNAL IMPROVEMENTS: Proposed Main Entrance Gateway

Existing Main Entrance to the EEC

Other types of gateway signage

1.1 Create A Gateway At Main Entrance Of EEC

Developing a new entrance gateway was one of the top priorities from both focus groups and public meetings. This helps create a sense of arrival, improving wayfinding while also thematically tying to the Center itself.

Reclaimed materials for the gate could be used providing additional opportunities for public education and reducing overall cost. Native planting, with an ornamental focus, would increase the sense of arrival and importance, which combined with wayfinding signage would better indicate to visitors that they are in the correct location.

Lighting the gateway would contribute to perceived security which addition to removing the old gate and prominant "no dumping" signage, creates a more inviting and an atmosphere more like a park.

Organization References

The National Association of City Transportation Officials (NACTO) is a 501(c)(3) non-profit association that represents large cities on transportation issues of local, regional and national significance. NACTO views the transportation departments of major cities as effective and necessary partners in regional and national transportation efforts, promoting their interests in federal decision-making. As a coalition of city transportation departments, NACTO is committed to raising the state of the practice for street design and transportation by building a common vision, sharing data, peer-to-peer exchange in workshops and conferences, and regular communication among member cities.

The Active Transportation Plan, led by the Michiana Area Council of Governments (MACOG) will identify needs, resources, and strategies to improve and increase walking and bicycling in Elkhart, Kosciusko, Marshall and St. Joseph Counties. During the planning process for Michiana on the Move: 2040 Transportation Plan, it was noted that there is a significant need to identify projects meant for those who don't necessarily use a vehicle for transportation. For this reason, the Active Transportation Plan will serve as an important element of the long range plan.

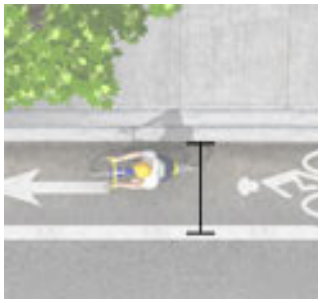

Lusher Ave looking West near Johnson Products


Lusher Ave looking East near Johnson Products


Looking at the Main St. Intersection on Lusher

1.2 Create A Sidewalk From Lusher Ave/Main Street Intersection To EEC

With 5 vehicular intersections between Main St. and the EEC along Lusher as well as a few private drives, separate facilities for motorists and pedestrians will help with safety and visibility of the route. In other words, both motorists and walkers will have a clear understanding of where to expect pedestrians.




From Lusher Avenue near Sterling Intersection

1.3 Create A Bikelane From Lusher Ave./Main Street Intersection To EEC

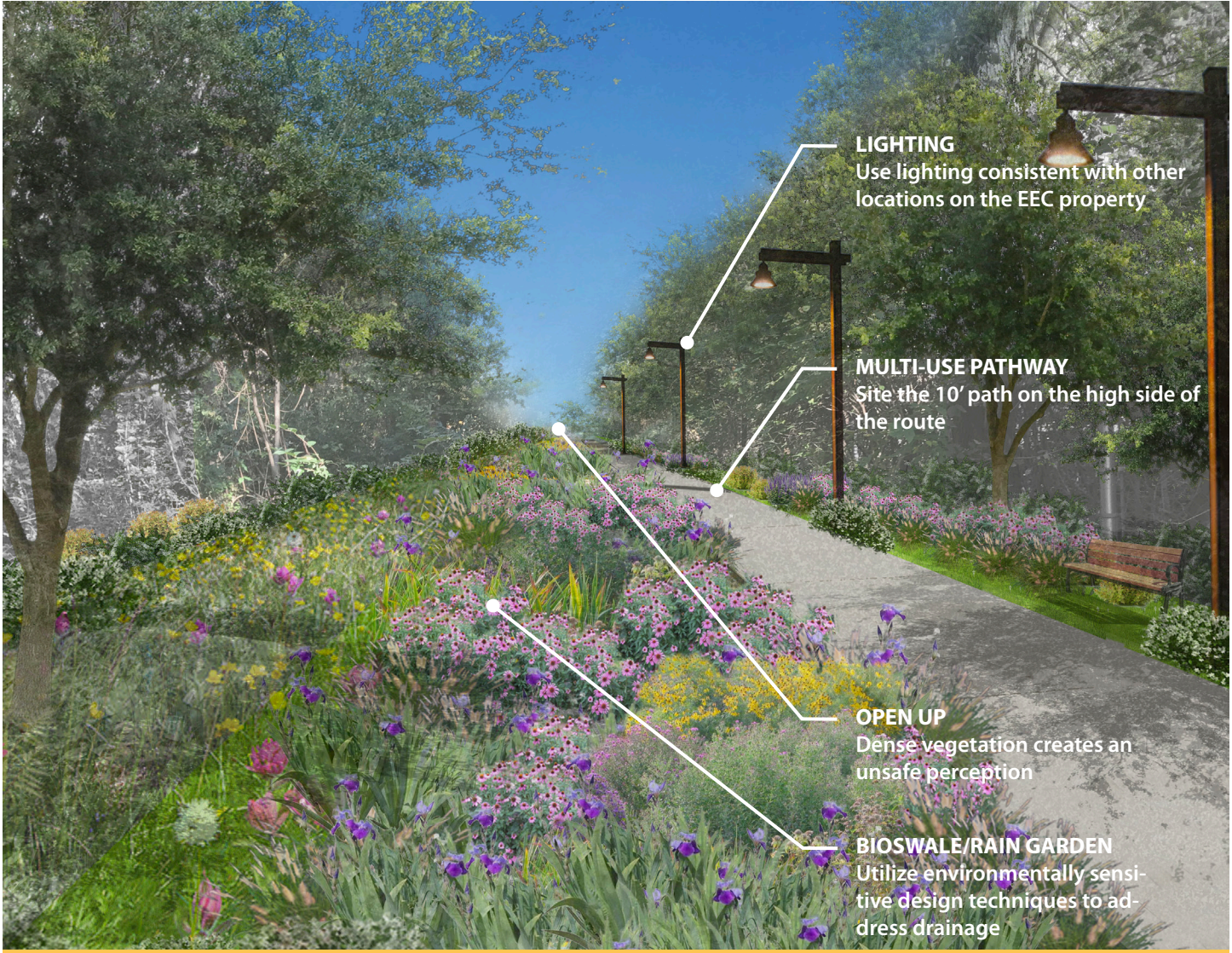
Separated bike and pedestrian facilities are appropriate when right-of-way width allows or when high traffic volume necessitates it. In this case, tying into the existing bike lanes along Sterling Ave. lend to both clear wayfinding and understanding where to anticipate the location of cars, bicyclists, and pedestrians.

It is recommend to refer to NACTO Guideline for width and crossing designs. These guidelines are more geared to pedestrian and bicycle traffic than typical street design standards and lead to greater success of new amenities.

A multiuse pathway could be implemented instead of 1.2 and 1.3, especially if Right-of-Way widths limit the width of the sidewalks or bike lanes.

1.4 Create A Trail From Neighborhood To The East

Not only does this trail make the EEC an entrance to the City from the County, feedback has indicated that it will ease police patrols/access, making the entire area safer.



EDDY CONNECTOR - Proposed path and bioswale

EDDY CONNECTOR - Existing Photo

Typical Bioswale/Rain Garden

1.5 Foster Connection To Existing Trail And Pedestrian Systems (Mapleheart And River Trail)

Several opportunities arose as viable trail and pathway connections. The former Eddy St. corridor, already a defined path, provides important routes to link the River Trail to the Mapleheart while also better connecting to the residential areas to the South. This route also provides an additional access point to the EEC and additional possibilities for educational nodes.

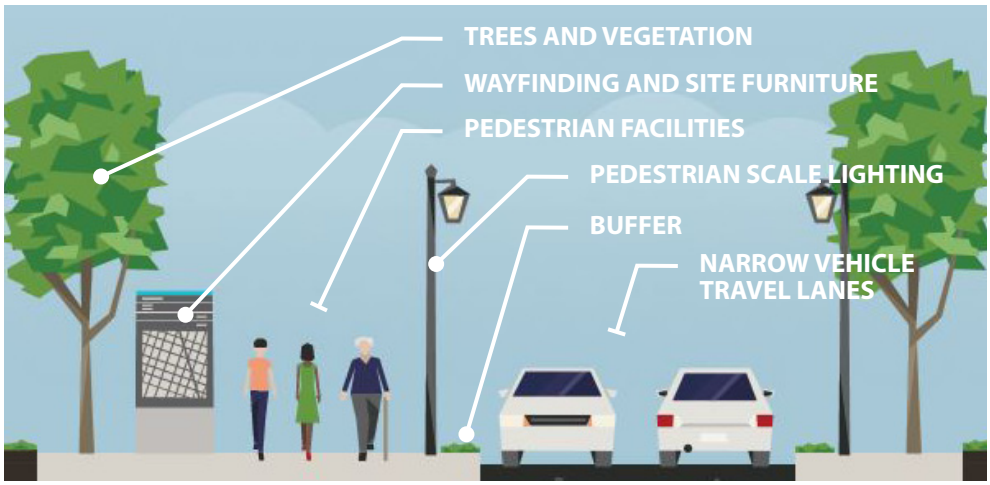
Situating the trail on the high side of the former street corridor allows for a functional drainage solution while also providing an opportunity to create a green stormwater management technique in a long bioswale/rain garden. This natural approach to stormwater management can be used as an additional education opportunity, while also creating an aesthetically pleasing approach to the EEC.

Complete Streets Perspective

Complete Streets are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations.

Even where daily destinations are close to home, incomplete streets too often make them inaccessible by foot, bicycle, or public transportation. They are cut off by cul-de-sacs that increase walking distance, or by high-speed roads lacking bike lanes, sidewalks, comfortable transit stations, or safe crossings. While some streets do provide a safe pedestrian environment, it may not be a pleasant one – the absence of benches, scarce landscaping, and storefronts set back from the sidewalk do little to encourage walking.

https://smartgrowthamerica.org/app/uploads/2016/08/cs-livable.pdf



Streetscape Improvements

Separate from bicycle and pedestrian infrastructure, other streetscape elements such as lighting, trees, signage, and buffer zones contribute to the perception of safety and overall aesthetic of the corridor. While safety is an obvious consideration for public facilities, curb appeal is equally important to the long term viability of public spaces as a key attachment driver (what makes people enjoy or feel attached to places). Combined with the pedestrian and bicycle components, these improvements form "complete streets", which accommodate more users and types of traffic.

1.6 Streetscape Improvements Along Lusher From Main Street To Main Entrance Of EEC

As the "front door" to the EEC, this street corridor gives the first impression of the Center. By amending the streetscape with trees from the City approved list, lighting, and strategic planting areas, the transformation aids in wayfinding to the Center completing the sense of arrival.

1.7 Streetscape Improvements Along Perkins

The vegetated buffer along Perkins St. has been limbed up and outgrown the benefit initially intended as a screen for the compost area. Completing a streetscape along this route gives an indicator of the EEC and important trail connections, while also recreating the buffer of the compost yard.

Improve Signage

Creating a unified network of signage throughout the City's pedestrian system will help distinguish it from the Regional Network and positively contribute to wayfinding for users of the network. Standard street signs can be used to communicate distances, important routes, and directional information. More formal signage should be used to mark gateways or communicate more indepth information, such as maps or historic information.

1.8 Improve Signage At Lusher Ave And Main Street Intersection

Directional signage at this high volume intersection is one of the fastest and easiest wayfinding problems to solve for the project. This key node has an annual average daily traffic between 10,000 and 12,000 vehicles, a high rate that increased by almost 3% last year according to the Indiana Department of Transportation. While pedestrian and bicycle infrastructure will continue to be promoted, leveraging this volume of traffic through strategic signage (on both north and south bound lanes as well as at the InterUrban Trolley stop), will lead to clearer wayfinding and potentially more visitors.

International DARK-SKY Association

The International Dark-Sky Association is the authoritative voice on light pollution. IDA educates lighting designers, manufacturers, technical committees and the public about controlling light pollution. They recognize that the best way to accomplish our goal of protecting and restoring our natural night environment is through the promotion of quality outdoor lighting. To achieve this, they developed the Fixture Seal of Approval program to provide objective, third-party certification for lighting that minimizes glare, reduces light trespass and doesn't pollute the night sky.

What is Light Pollution

Light pollution is a side effect of industrial civilization. Its sources include building exterior and interior lighting, advertising, commercial properties, offices, factories, streetlights, and illuminated sporting venues.

The fact is that much outdoor lighting used at night is inefficient, overly bright, poorly targeted, improperly shielded, and, in many cases, completely unnecessary. This light, and the electricity used to create it, is being wasted by spilling it into the sky, rather than focusing it on to the actual objects and areas that people want illuminated.

Information via: darksky.org

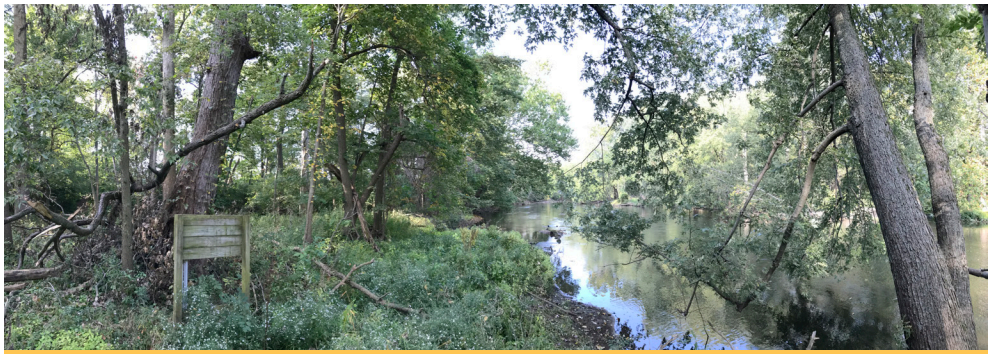
RIVERFRONT - PROPOSED BOARDWALK AND RESTORATION PERSPECTIVE

1.9 Limb Up Trees And Reduce Understory Plants At Key Locations

While the density of trees along Lusher and along the River contributes to the immersive atmosphere of the EEC, they also lend to a claustrophobic and unsafe perception. One that leads visitors to feel lost, even ones that know they are in the right location. Strategically opening the canopy and creating vistas to important resources, like the River, will enhance the atmosphere of the EEC and give awareness to valuable resources around the campus.

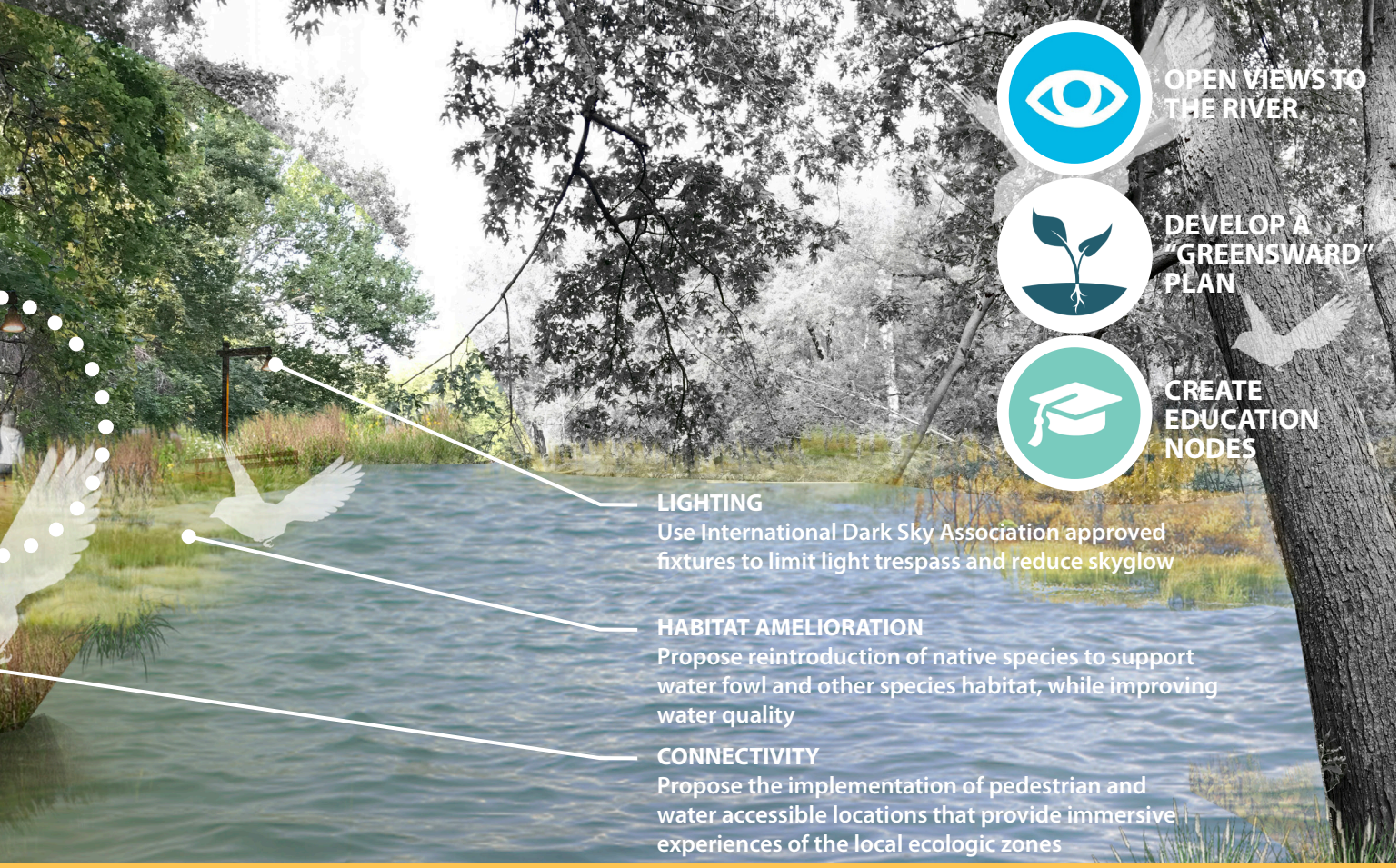
1.10 Utilize The Resource Of The River To Create Nodes To Expose River Travelers To The EEC And EEC Visitors To The River.

Beyond wayfinding signage, educational nodes can be distinct landmarks within the campus. In highlighting strategic information, such as sensitive habitats or keystone species, the nodes can further the educational commitment of the

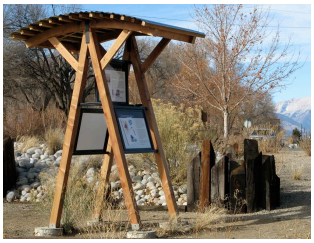


RIVERFRONT - Existing Photo looking west from south bank

RIVERFRONT - Existing Photo looking east from south bank



EEC without adding programmatic responsibility. Additionally, integrating new technology into these nodes, such as wifi access, electricity, or touch-screen components, the nodes become important communication tools and safety (such as call boxes) components.



CREATE EDUCATION NODES

DEVELOP A "GREENSWARD" PLAN

1.11 Connect To Adjacent Greenspace To Create A Cohesive Ecologic Corridor To Improve Flora And Fauna While Providing Additional Recreation Opportunities For The City.

Critical to the overall ecologic health of the City, green corridors allow for the free movement of species and an increase in biodiversity not available in typical urban parks. Purposefully linking the green spaces around the EEC could reinforce the long term environmental health, while benefiting regional energy use, stormwater management, and microclimate.

Objective 2: Enhance Programming and Partnerships

The Elkhart Environmental Center has a rich history of educational programming, volunteer support, and foundational partners. Continued development of these facets demonstrate a key commitment of the EEC to the public and a critical public engagement tactic that ensures the long-term success of the Center. In other words, the more people engaged at the Center, the more successful the EEC will be.

The operations of the EEC can be improved through fostering a stronger network of partners and program enhancements. These improvements encompass each of the current Center responsibilities including visitor services, education, site and facility oversight, volunteer coordination, and events. The projects outlined in Section II's external strategy underline the Center's commitment as an environmental education facility.

Volunteers are at the core the EEC

The public looks on at Reflection Grove Ribbon Cutting

2.1 Re-Establish Friends Of EEC Group
A Friends group can serve as a type of Advisory Board, contributing to the management of certain tasks and allowing for staff to focus on objectives and optimizing performance of the Center. Volunteers have played a significant role in the operation of the Center and creating a more deliberate Friends Group could help leverage contemporary momentum.

2.2 Streamline Volunteer Coordination
Developing a recruitment and retention strategy - a centralized calendar with regular and consistent tasks - allows for faster decision making and higher volunteer engagement. Reducing time spent on volunteer program coordination allows staff to focus on operations and delegate more tasks.

2.3 Develop Active Outreach Initiave
This includes establishing regular tours, engaging anchor institutions, and connecting with outdoor activity groups to better showcase the property.

2.4 Reconnect With Regional School Systems
Creating a stronger network of environmental education programs will help utilize City resources better, disseminate important information (such as City Plans), and connect to the Center's history while maintaining current direction. This could be accomplished by hosting regular school events at the EEC, visiting the regional schools to talk about the Center, and/or maintaining a more consistent communication with those programs and leaders.

2.5 Develop A Partnership With Regional Universities
Fostering a relationship with these institutions connects the Center to a resource pool for interns, potential project development through class exercises, and fosters the Adult Education direction.

2.6 Develop An Internal And External Sustainability Strategy
This initiative would better integrate the EEC into the various City Departments, in a leadership capacity, demonstrating value. Through this effort, the City could also demonstrate a positive direction for the residential and commercial sectors.

2.7 Develop Marketing Strategy And Improve Communications
Showcasing the active social media channels the Center operates, by linking them or showing posts from those platforms, would be one way to streamline the current communications process. The Center could also structure those posts to serve as bullet points for their newsletter and departmental updates. While flyers and handouts have decreased for most organizations, some printed materials such as 11x17 posters remain widely used (primarily for events).

Potential Partners Key Recommendations:

1. Local Anchor Institutions
- Elkhart Community Schools
- Elkhart General Hospital/ Beacon
- Elkhart Public Libraries
- Elkhart Chamber of Commerce
- Elkhart County Health Dept.
- Community Foundation

2. Regional Higher Educational Institutions
- University of Notre Dame/ Sustainability Office
- Goshen College/Merry Lea
- Indiana University South Bend/Center for a Sustainable Future
- Bethel College

3. Municipal Agencies and Departments
- Elkhart Police Dept.
- Elkhart Planning Dept.
- Elkhart Parks and Recreation Dept.
- Elkhart Buildings and Grounds Dept.
- Elkhart Forestry Division
- Elkhart Engineering Dept.
- South Bend Sustainability Office

4. Activity Groups
- Bicycle Michiana

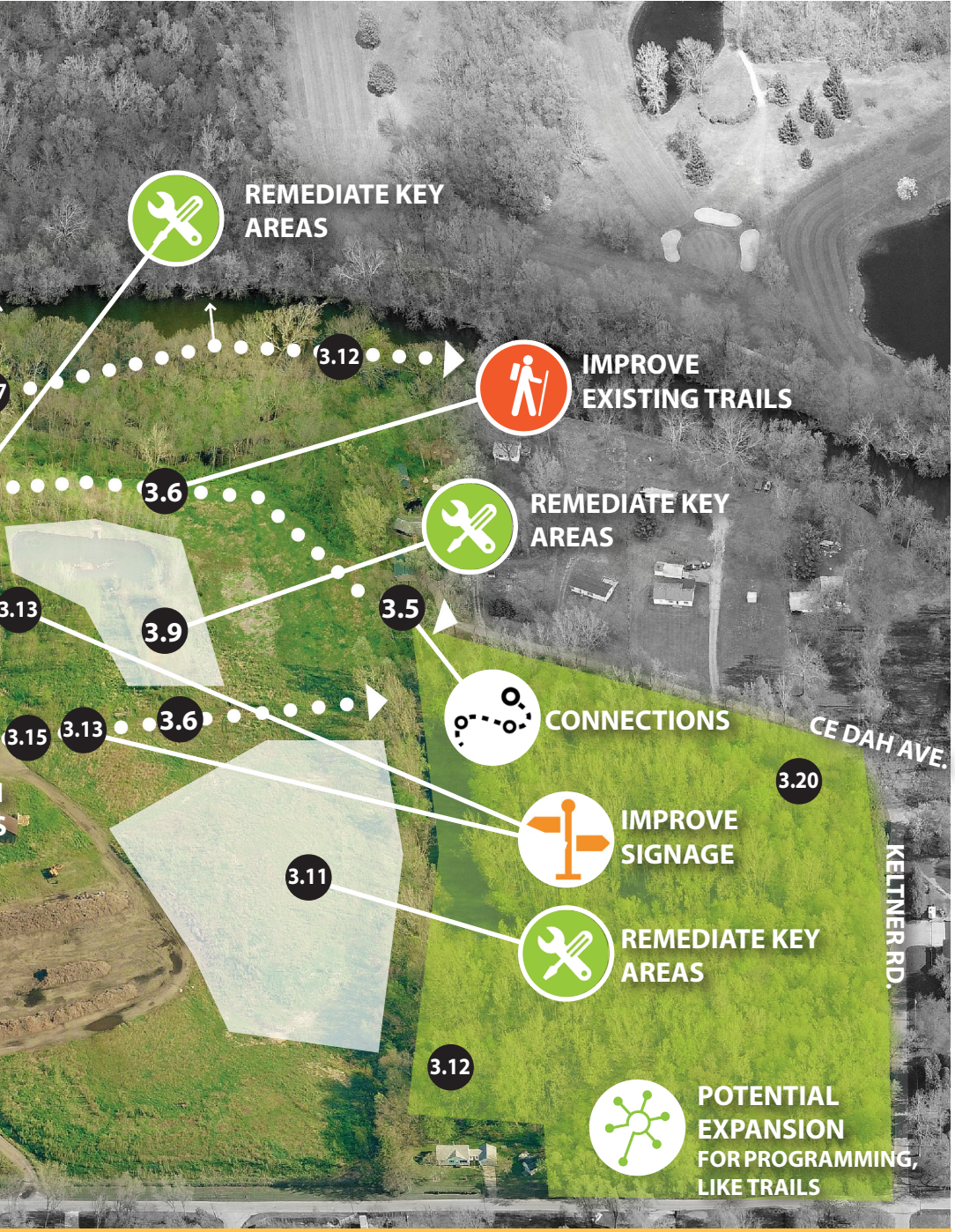
5. Other Agencies
- NIBCO/Martin Foundation
- Wellfield Botanic Gardens
- Woodlawn Nature Center

INTERNAL STRATEGIES MASTER PLAN: Improve Site Function

Objective 3: Improve EEC Site Function, Health, and Aesthetics

The Elkhart Environmental Center serves a dual role as an educational, passive recreation park and a Public Works facility. While some of the functional elements are complementary, such as composting, the two roles are difficult to reconcile. With the overall intent to bring additional visitors to the Center, with increased access to the site, consideration should be made on the security of important Public Works assets. With that in mind, the projects outlined in this strategy fulfill needs of both roles, including continued focus on physcial connections, remediation of key areas, improving signage, opening views, utilizing green materials, and seizing opportunities to expand to strategic areas.

Many of the project recommendations outlined in this section are complementary to the external projects described in Strategy I. While they have two different designations within this Master Plan, those projects may function as one for funding purposes (depending on funding source, amount, and project type).



Looking north along the access road
Toward the EEC from the Public Works Compost Area

Connect to Context and Improve Pedestrian Access

- **3.1** Add pedestrian indicators at key locations (crosswalks, signage, traffic calming)
- **3.2** Continue sidewalk/paths from Main Entrance (along River)
- **3.3** Continue sidewalk/paths from south neighborhood
- **3.4** Form Better Connection to Adjacent River Trail
- **3.5** Create a trail from east neighborhood
- **3.6** Improve condition of existing trails (boardwalk and gravel)

Remediate Key Areas

- **3.7** Conduct a site survey to determine condition of clay cap (as needed)
- **3.8** Address ElkhartWood Log Yard at Main Entrance to reduce confusion
- **3.9** Improve function of Wetlands
- **3.10** Address Any Remediation Needed in In-Situ Cap
- **3.11** Address Remediation Needed for "Sledding Hill"
- **3.12** Better highlight ecosystem zones

Improve Signage and Security

- **3.13** Improve internal signage
- **3.14** Install new lighting and security cameras
- **3.15** Move southern boundary past trail head
- **3.16** Develop information kiosks

Open Views to River

- **3.17** Limb up trees and reduce understory plants at key locations

Utilize Green Materials

- **3.18** Address updates to site pavement through use of green materials, such as permeable paving
- **3.19** Explore Opportunities for Renewable Energy

Identify Potential Expansion Areas

- **3.20** Better Highlight Connected Greenspaces

Connect to Context and Improve Pedestrian Access

Repeatedly, studies show the economic and public health benefit of increasing the quantity and quality of pedestrian infrastructure. This is especially true in urban environments. Just linking to the EEC is not enough. A developed network within the EEC's campus reinforces the value of the site itself and builds on the value of the pedestrian system around the property.

Building on pedestrian infrastructure, such as trails and boardwalks, adds capacity to the EEC and supports current initiatives without adding programmatic components. These features can remain open, even when the cabin facility is closed, providing an additional resource to the current system of trails and a unique jewel within the emerald necklace of the system.

The EEC site is strategically situated between key pedestrian routes, including the MapleHeart Greenway and the Elkhart Riverwalk. Fostering those connections reinforces the Center as a destination along a system, rather than simply a stand alone property.

3.1 Add Pedestrian Indicators At Key Locations (Crosswalks, Signage, Traffic Calming)

Within the EEC's property, the main access drive bisects the campus, cutting off the main environmental resource of the River. With that in mind, using traffic calming techniques, such as narrowing the roadway at crossing or including rumble strips to alert drivers to pedestrian zones, to indicate a different scale and pace within the campus will contribute to increased usage of all of the resources, while making the campus safer. Thematic pedestrian crossings can contribute to the atmosphere, contribute to the public education (such as safe driving habits), and define certain areas as separate from others. Each of these factors better connects the campus and improves overall pedestrian access and at the same time reinforces the environmental mission of the Center.

3.2 Continue Sidewalk/Paths From Main Entrance Along River And Connect To EEC Site Trails

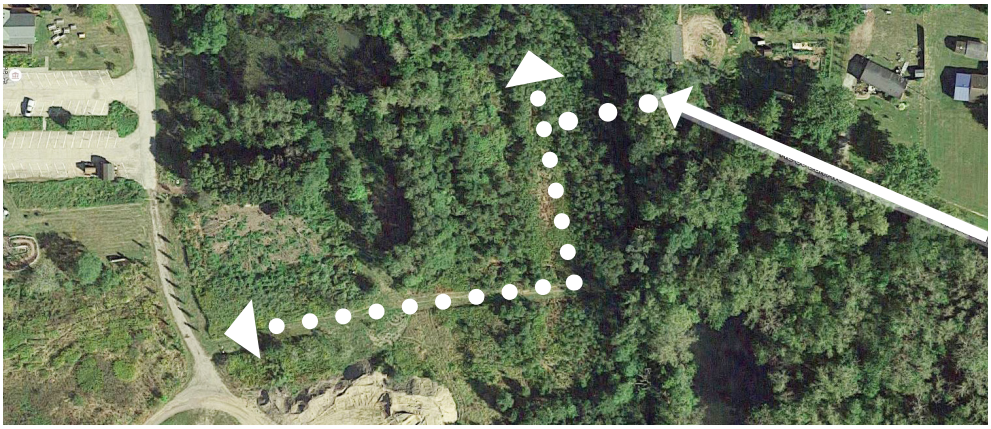
The EEC's existing trails are an under-utilized resource for the Center and ultimately for the City's trail network. Reinforcing the ties to the River places more emphasis on those trails, while also bringing the River to the forefront of the EEC.

3.3 Continue Sidewalk/Paths To Neighborhoods South Of EEC

Connecting to the neighborhood south of the EEC more fully uses the campus, while also tying into key pedestrian routes. This also provides an additional resource for that neighborhood, increasing quality of life and property values.

3.4 Form Better Connection To Adjacent River Trail

The understated trail marker at the EEC is easy to miss, blending into the scenery, and does not look like a trail. Opening up the node, creating a distinct trailhead, and improving access (using elements like removable bollards), more effectively transitions to the EEC. This also adds programmable space to each asset.



3.5 Create A Trail From Neighborhood To The East

Visitors have gotten lost on trails, accidentally navigating to the neighborhood to the east of the EEC. Bringing the trail developed in the External Project Recommendations all the way into the campus, connecting it to the existing network of paths increases coverage of pedestrian amenities. This connection also makes it easier on law enforcement patrolling the campus, which increases security and decreases vandalism.

3.6 Improve Condition Of Existing Trails (Boardwalk And Gravel)

Using more permanent materials for select trails, such as gravel, will encourage use and increase longevity of the system. These types of materials more clearly define the path and can reduce maintenance (mowing less frequently). Enhanced trail material will also better tie the EEC trails to the adjacent pedestrian networks.

"[This is an] Opportunity to be different."

"Keep it natural"

"What gaps exist within institutions that the EEC could cover?"

"Clearly identify trails and EEC access"

"Have more city activities on site"

"Hands-on activities; especially with local critters"

Remediate Key Areas

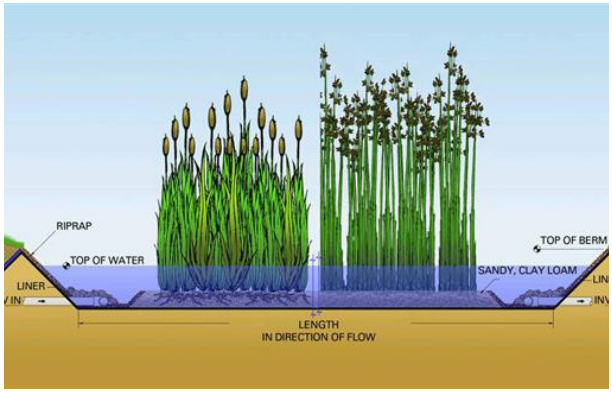
Several areas around the EEC campus require maintenance or purposeful intervention to make the site more functional and safe. Some, like the ElkhartWood Log Yard, have simply changed function and need to be addressed only to reduce confusion in the public. Other aspects, such as the site's clay cap, require more indepth study (site survey) to determine extent of remediation necessary. Recommendations within this Master Plan are based on currently available data and may change with additional information.

3.7 Conduct A Site Survey To Determine Condition Of Clay Cap

A site survey is necessary to determine condition of the in-situ clay cap and location of sink holes around the site. Any remediation determined from the survey would be on an as needed basis.

3.8 Address Elkhartwood Log Yard At Main Entrance To Reduce Confusion

The old compost pick-up area creates confusion at the main entrance to the site and should be addressed through elements such as new signage or a screening element. The Log Yard could also be moved to group Public Works functions and and limit access to the entrance off Perkins St.



3.9 Improve Function Of Wetlands

The constructed wetlands served as a key education feature in the original intent for the site. Improving their function by reintroducing an outflow element, would add an additional education element to the site. This can be done via pumping, which was the orignial design or it could be done with regrading and updated piping. Either way, water quality testing should continue to be done on the water outflow to be sure it meets regulations.

3.10 Address Any Remediation Needed In In-Situ Cap

Where repair of the clay cap is needed, if any, either because of erosion or other reduction of the cap, any rehabilitation performed must be in accordance to any applicable state and Federal laws regulating former landfills. If the cap is fully intact after investigation, a bi-annual monitoring program is recommended by the Environmental Protection Agency's Assesment and Remediation of Contaminated Sediment (ARCS) Program Report to address any maintenance concerns moving forward.

3.11Address Remediation Needed In "Sledding Hill"

The "sledding hill" feature on the site is unusable in its current form, creating more of a liability than a resource and should be ameliorated. Prior to remediation, the extent of the refuse concrete should be determined. Several places in the region specialize in recycling concrete for using in structural fill for building projects.

3.12 Remediate And Better Highlight Ecosystem Zones

Several areas around the site can better highlight the dynamic variety of ecosystems, their necessary maintenance, and systemic qualities, thus contributing to the overall health of the system and to the education components of the site. This can be accomplished through physically constructed elements, such as signage and educational nodes. It can also be addressed with maps, guides, and other education materials.

"Partner with local commercial neighbors for green events"

"[Create] a sign to indicate you have arrived"

"Focus on adult education to form bonds and partnership with society."

"To move our city to a more sustainable city we could start with a 100% clean EEC"

"Construct board walks in areas currently "offsite""

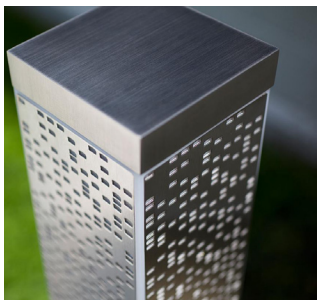
"More direct path from Mapleheart trail!"

Improve Signage and Security

Internal signage drives site navigation and wayfinding, especially during times when staff are not present. It highlights key areas and guides visitor experiences. Site signage, when integrated with education nodes, is easily updated to maintain relevance and stay fresh. Augmented reality, such as Pokemon-Go, can be an additional way to increase educational content.

Lighting should be looked at from a dark sky perspective. As the IDA states, *"A dark-sky policy is not a dark-ground policy. The aim of good dark-sky lighting is to provide light where it is needed – on the ground – while reducing scattered light and glare to the greatest extent possible. One of the simplest ways to do this is to use fully-shielded light fixtures. Such fixtures are equipped with housings that prevent light from being emitted above the horizontal plane, ensuring that all light is direct down where it is needed for nighttime activities."*

New security cameras and site lighting complements other site improvements that bring people to the site. These elements improve both actual and perceived safety; how safe people are and how safe they feel. Additionally, energy efficient or grid free lighting could be used as an education opportunity or pilot program for the rest of the city. To increase response times and engagement, wireless cameras, visible from a mobile device or computer could also be used.



3.14 Install New Lighting And Security Cameras At EEC Cabin

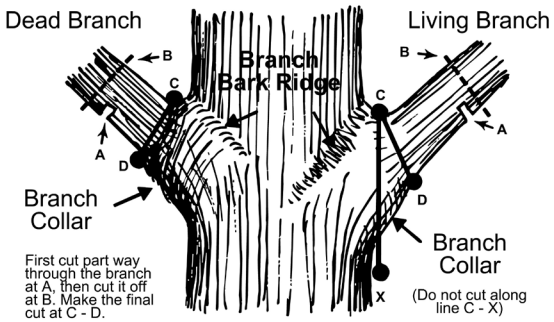
By installing new lighting and security cameras, which could be motion activated or dimmed when not activated. This would both serve as an indicator when visitors are present and also save energy when not in use.

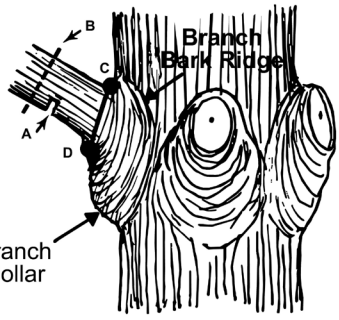
3.15 Move Southern Boundary Beyond Trail Head

The current gate to the compost area, which is off-limits to visitors, unintentionally restricts access to the trail that lies beyond that gate. Moving this boundary would improve use of that trail.

3.16 Develop Internal Signage/Information Kiosks

These implementations support the education commitment of the EEC, without adding operational programming. Signage should reflect the established aesthetic of the campus. There are a handful of existing signs which should be updated with the new format. Other kiosk locations should highlight existing amenities not previously addressed and new amenities developed within this Master Plan.





3.17 Limb Up Trees And Reduce Understory Plants At Key Locations

The river is not currently visible from the Cabin despite its close proximity. While pruning the entire river understory along the EEC's campus is not necessary, creating strategic "windows" will help manage weed species and develop greater ties to the river resource. Proper pruning technique, such as recommended by the Arbor Day Foundation seen above, should be used to maintain a healthy canopy.

3.20 Better Highlight Connected Greenspaces

Two EEC owned greenspaces are currently adjacent to the EEC's primary campus, but are not programmed in obvious ways to the public. Utilizing these parcels to expand the trail system of the EEC, highlight ecosystem zones, and create additional intential habitat areas would supplement the existing green infrastructure at the EEC. These areas also provide more buffer to the EEC's main campus, continuing to give it the immersive atmosphere that creates such a lasting impact.

Utilize Green Materials

The EEC should be an example for the rest of the City to follow. Piloting green materials for use elsewhere. Several opportunities exist, such as grants and partnerships with agencies and universities, to make that more of an economic reality for the EEC.

3.18 Address updates to site pavement through use of green materials.

Materials such as porous paving, contribute to the educational role of the EEC and can serve as pilot programs for the City.

3.19 Explore Opportunities for Renewable Energy

From small-scale wind and solar power to grid free lighting, renewable energy could serve both as a demonstration project for the EEC as well as a measure to reduce costs.

People are at the core of the EEC's role within the City

Objective 4: Optimize Operations

The operations of the EEC can be improved through facility and staff optimizations. From spatial and technology improvements to the cabin, to staff engagement and isolation, operations improvements will reinforce the EEC's role within the City and further demonstrate its value. As much as possible, updates that do not involve additional programmatic responsibilities should be prioritized. These efforts leverage staff involvement without requiring additional staff.

These improvements encompass each of the current Center efforts, including visitor services, education, site and facility function, volunteer coordination, and events.

4.1 Update Office Space: Separate Office Space From Public Areas
The current adjacency of office space and public areas is inefficient. Potential solutions involve creating greater separation of the office space by creating a new wall or relocating the office space.

4.2 Expand Education Areas Of Cabin
Current arrangement of space does not lend itself to large group use of the facility, in part, due to spatial and auditory constraints. Updating the facility to better accommodate groups would allow greater use and improved function for staff and visitors.

4.3 Update Self Directed Exhibits
Utilizing new technology, such as large monitors or touchscreen components like IPADs, would allow for rapid update of education areas to reflect seasonal changes or new components of the EEC.

4.4 Improve Aesthetics And Function Of Area Adjacent To Cabin
ADA Accessibility is a concern both for the cabin and key recreation amenities, such as the picnic tables and should be updated to comply with contemporary standards. Drainage in key areas, such as next to the incoming drive, should be amended to prevent overflow into user areas. Formal aesthetic elements, such as ornamental planting, could improve visitor perception.

4.5 Develop Stronger Partnership With Parks Dept.
Given similar programming, especially for events and recreation, working with the Parks Department would help in developing operational efficiency and coordinating use of the EEC campus amenities.

4.6 Identify Optimum Hours Of Operation Based On Visitor Attendance
A regular presence at the cabin will facilitate better care of the buildings and grounds while also enabling a consistent program. To better address visitor use of the Center, staffing hours should be adjusted, coinciding with peak usage of site and facility.

4.7 Keep Site Open 24 Hours A Day
The grounds can be more easily monitored if the site remained open 24 hours a day, which makes the site function more similar to a passive recreation park than a public works facility. This does not apply to the cabin, which would only be staffed during optimal hours.

4.8 Streamline Operational Bottlenecks
These bottlenecks include the isolation of the staff, the diversity of programming, as well as technology issues (such as slow computer networks). Improvements, such as broadband connectivity, should ease some of the isolation experienced at the EEC. Regular staff hours within Public Works offices could also help improve the bottlenecks created by an "out-of-site, out-of-mind" mindset.

4.9 Partner To Host "Train-the-Trainer" Workshops
A train-the-trainer model enables experienced personnel to show a less-experienced instructor how to deliver courses, workshops and seminars. Usually, a new instructor first observes a training event led by the course designer or subject-matter expert. A train-the-trainer workshop can build a pool of competent instructors who can then teach the material to other people. Instead of having just one instructor who teaches a course for a long time, you have multiple instructors teaching the same course at the same time. This ensures that employees get timely training to complete tasks according to company policies and procedures.

"I would like to see the EEC become more of a hands-on learning center."

"Staff are isolated."

"Retain the natural park like setting and environmental awareness education"

"How can you do both adult education while maintaining youth education roots?"

"Biggest buy-in when you can say you reach 2000 kids in a year (legacy)"

Additional Sources

Case Studies

- **Wolf Lake Boardwalk:**
  - http://www.permatrak.com/news-events/bid/99128/Event-Wolf-Lake-Boardwalk-Construction-in-Hammond-IN
- **American Chemical Services Site:**
  - https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0501373
- **Gas Works Park:**
  - www.seattle.gov/parks/find/parks/gas-works-park
  - tclf.org/landscapes/gas-works-park

US Census: www.census.gov

Elkhart Area Schools:

- elkhart.k12.in.us/
- www.concord.k12.in.us/
- www.baugo.org/

Conclusion

1. Master Plan Summary

Overall, four strategies for improving the existing Elkhart Environmental Center facility and campus as well as its surrounding context were identified in the Master Plan process. They include both internal and external tactics, focused on improving contextual access and aesthetics; enhancing programming and partnerships; improving site function, health, and aesthetics; as well as optimizing operations. Each of these utilized the key considerations of environmental justice, connecting to the community, and building on the current initiatives as a starting point. After introducing the contextual analysis and gathering ideas about potential projects, the public then identified priority improvements. These priorities included internal and external improvements that were then used to develop the overall project recommendations.

In total, forty-seven recommendations were made that carefully considered feasibility, project leaders, potential partners, and a general timeline. The Strategic Implementation Matrix (on the next page) features the summary of those considerations.

2. Strategic Implementation Matrix

Each of the major strategies identified on the overall Master Plan were broken down further into key implementation projects. Within the Strategic Implementation Matrix, those projects were analyzed and given priority and a potential time line, as well as lead roles identified for moving forward. Given the overall longevity of this Master Plan, the information provided in the matrix provides a snapshot and general framework to improve the Elkhart Environmental Center.

3. Closing Thoughts

The projects identified within this report, while not exhaustive, provide a roadmap for revitalization of the EEC. In implementing each of the components to the plan, the City of Elkhart gains not only a stronger, more resilient open space, but an adaptive plan for the community surrounding the facility that contributes to overall public health, safety, and wellness.

Strategic Implementation Matrix

					Community Priority Level			Potential Implementation Timeline (in years)
		Lead Role(s)	EEC Responsibilty	Potential Partners	Low	Medium	High	
EXTERNAL STRATEGY	**Objective 1: Improve Access and Aesthetics of EEC's Ajacent Context**							
Connect to Context and Improve Pedestrian Access	1.1 Create a gateway at Main Entrance of EEC	Public Works / Engineering	Site and Facility	Planning Dept., Friends of EEC				(2-5 years)
	1.2 Create a sidewalk from Lusher Ave/Main Street intersection to EEC	Public Works / Engineering	Site and Facility	Planning Dept., Bicycle Michiana				(2-5 years)
	1.3 Create a bikelane from Lusher Ave/Main Street intersection to EEC	Public Works / Engineering	Site and Facility	Planning Dept., Bicycle Michiana				(1+ years)
	1.4 Create a trail from neighborhood to the east	Public Works / Parks	Site and Facility	Planning Dept., Bicycle Michana				(5+ years)
	1.5 Foster connection to existing trail and pedestrian systems	Public Works / Parks	Site and Facility	Planning Dept., Bicycle Michana				(2-5 years)
Streetscape Improvements	1.6 Streetscape improvements along Lusher from Main Street to Main Entrance of EEC	Public Works / Engineering	Site and Facility	Planning Dept.				(2-5 years)
	1.7 Streetscape improvements along Perkins	Public Works / Engineering	Site and Facility	Planning Dept.				(5+ years)
Improve Signage	1.8 Improve signage at Lusher Ave. and Main Street Intersection	Public Works / Street Dept.	Site and Facility	Planning Dept.				(1+ years)
Open Views	1.9 Limb up trees and reduce understory plants at key locations	City Forester / Bldgs	Site and Facility					(1+ years)
Create Education Nodes	1.10 Utilize the resource of the River to create nodes (public access)	Public Works / Parks	Site and Facility	Planning Dept., Universities				(2-5 years)
Develop Greensward Plan	1.11 Connect to adjacent green spaces to create a cohesive ecologic corridor	Public Works / Parks	Site and Facility	Planning Dept.				(5+ years)
EXTERNAL STRATEGY	**Objective 2: Enhance Programming and Partnerships**							
	2.1 Re-Establish Friends of EEC Group	EEC	Events, VC	University, Sustainability Groups				(1+ years)
	2.2 Streamline Volunteer Coordination	EEC / Parks	Events, VC.	Friends of EEC				(2-5 years)
	2.3 Develop Active Outreach Initiative	EEC	Visitor Services	Friends of EEC				(2-5 years)
	2.4 Reconnect with regional school systems	EEC	Events, VC	Elkhart, Concord, Goshen, Baugo Schools				(2-5 years)
	2.5 Develop a partnership with regional universities	EEC	Adult Education	Notre Dame, IUSB, Goshen, St. Mary's				(2-5 years)
	2.6 Develop an internal and external sustainability strategy	EEC / Public Works	AE, VC	City Departments, Friends of EEC				(2-5 years)
	2.7 Develop Marketing Strategy and Improve Communications	EEC / IT Dept	VS, VC, AE, Events	Parks Dept.				(1+ years)
INTERNAL STRATEGY	**Objective 3: Improve EEC Site Function, Health, and Aesthetics**							
Connect to Context and Improve Pedestrian Access	3.1 Add pedestrian Indicators at key locations (crosswalks, signage, traffic calming)	Public Works / Engineering	Site and Facility	Planning Dept.				(1+ years)
	3.2 Continue sidewalk/paths from Main Entrance (along River) and Connect to EEC Site Trails	Public Works / Engineering	Site and Facility	Planning Dept.				(2-5 years)
	3.3 Continue sidewalk/paths to neighborhood south	Public Works / Engineering	Site and Facility	Planning Dept.				(5+ years)
	3.4 Form Better Connect to Adjacent River Trail	Public Works / Engineering	Site and Facility	Planning Dept.				(2-5 years)
	3.5 Create a trail from neighborhood to the east	Public Works / Engineering	Site and Facility	Planning Dept.				(5+ years)
	3.6 Improve condition of existing trails (boardwalk and gravel)	Public Works / Engineering	Site and Facility	Planning Dept.				(2-5 years)
Remediate Key Areas	3.7 Conduct a site survey to determine condition of clay cap	Public Works / Engineering	Site and Facility					(1+ years)
	3.8 Address ElkhartWood Area at Main Entrance to reduce confusion	Public Works / EEC	Site and Facility					(2-5 years)
	3.9 Improve function of Wetlands	Public Works / Engineering	Site and Facility					(2-5 years)
	3.10 Address Any Remediation Needed in In-Situ Cap	Public Works / Engineering	Site and Facility					(2-5 years)
	3.11 Address Remediate Needed in “Sledding Hill”	Public Works / Engineering	Site and Facility					(5+ years)
	3.12 Better highlight ecosystem zones	EEC / Parks	Site and Facility	Universities				(2-5 years)
Improve Signage and Security	3.13 Improve internal signage	Public Works / Street Dept.	Site and Facility					(1+ years)
	3.14 Install new lighting and security cameras	Public Works / Bldgs	Site and Facility					(2-5 years)
	3.15 Move southern boundary beyond trail head	Public Works/Engineering	Site and Facility					(1+ years)
	3.16 Develop internal information kiosks	EEC / Public Works	Site and Facility	Universities, Friends of EEC				(2-5 years)
Open Views to River	3.17 Limb up trees and reduce understory plants at key locations	City Forester / Bldgs	Site and Facility					(1+ years)
Utilize Green Materials	3.18 Address updates to site pavement through use of green materials	Public Works/Engineering	Site and Facility	Friends of EEC				(5+ years)
	3.19 Explore Opportunities for Renewable Energy	EEC / Public Works	Site and Facility	Friends of EEC				(5+ years)
Identify Potential Expansion Areas	3.20 Better Highlight Connected Greenspaces	Public Works / Parks	Site and Facility	Planning Dept., Friends of EEC, Universities				(5+ years)
INTERNAL STRATEGY	**Objective 4: Optimize Operations**							
	4.1 Update Office Space: Separate office space from public areas	EEC / Public Works						(2-5 years)
	4.2 Expand education areas of cabin	EEC		Friends of EEC, Universities				(2-5 years)
	4.3 Update self directed exhibits	EEC		Friends of EEC, Universities				(1+ years)
	4.4 Improve aesthetics and function of area adjacent to cabin	EEC / Public Works		Friends of EEC, Buildings and Grounds Dept.				(2-5 years)
	4.5 Develop stronger partnership with Parks Dept.	EEC / Parks	Events, VC., AE					(1+ years)
	4.6 Identify optimum hours of operation based on visitor attendance	EEC / Public Works	Events, VC., AE					(1+ years)
	4.7 Keep site open 24 hours a day	EEC / Police Dept.						(2-5 years)
	4.8 Streamline operational bottlenecks	EEC / Public Works	Events, VS, VC, AE					(1+ years)
	4.9 Partner to Host “Train-the-Trainer” Workshops	EEC		Universities and Sustainability Groups				(1+ years)
								(2-5 years)

Key Abbreviations:
EEC - Elkhart Environmental Center **Bldgs -** Buildings and Grounds Division
AE - Adult Education **VC -** Volunteer Coordination **VS -** Visitor Services,

Resources
City of Elkhart Departments: www.elkhartindiana.org
Bicycle Michiana: www.mbabike.com
IUSB Center for a Sustainable Future: www.iusb.edu/csfuture
Notre Dame Sustainability Office: green.nd.edu/
Mary Lea Center for Sustainability: www.goshen.edu/merrylea

Project Resources

Timeline

Event	Invite	Date	Time
EnviroFest	Public	7.15	
Focus Group 1	Internal Stakeholders	8.05	1:30 PM
Focus Group 2	External Stakeholders	8.05	3:30 PM
Draft Due	EEC Team	8.22	
Comments Due	EEC Team	9.02	
Review Meeting	EEC Team	9.02	
Public Meeting	Public	9.15	5:30 PM
Final Draft Due	Internal Stakeholders	10.07	
Comments Due	Internal Stakeholders	10.21	
Review Meeting	EEC Team	10.28	
Final Public Presentation	Public	11.03	6:00 PM

Key Responsibilities				
5.1 Visitor Services 5.2 Volunteer Coordination 5.3 Adult Education 5.4 Events 5.5 Site and Facility				

Critical Challenges: Inconsistent expectations

What center was and what it currently is

Communications issue

Critical Challenges: Size and staff limitations

Exhibits

Tours

Set-up per group an issue

Critical Challenges: Obligations

Events: Arbor Day, EnviroFest, River clean-up, Yoga

Organic recycling

Division heads

Budget

Opportunities

Workshops for adults: programming

Master gardeners

Public works Public Education: Stormwater Ed: Human Action

Build own connections

Internal Stakeholder Focus Group						
Department/Division	**Name**	**Email**	**Invitation**	**RSVP**	**Attended**	**Notes**
Community Development	Crystal Welsh	crystal.welsh@coei.org	sent 7/25/2016	No	0	
	Adam Fann	adam.fann@coei.org		Yes	1	
Planning	Eric Trotter	eric.trotter@coei.org	send 7/25; reminder sent on 7/28	yes, rec'd 7/28	1	
Building and Code Enforcement	Robin Miller	robin.miller@coei.org	sent 7/25; reminder sent on 7/28	yes, rec'd 7/28	0	Had to cancel
Parks and Rec	Clyde Riley	clyde.riley@coei.org	sent 7/26; Sent	Yes, rec'd 7/29	1	
Buildings and Grounds	Mike Lightner	mike.lightner@coei.org	sent 7/26; Sent reminder on 7/28	yes, rec'd 7/28	1	
Buildings and Grounds/Forestry/ElkhartWood	Chip Tallman	chip.tallman@coei.org	sent 7/26	yes, rec'd 7/27	0	Had to cancel
Public Works/Engineering	Laura Kolo	Laura.Kolo@coei.org	N/A	Yes	1	
	Mike Machlan	Mike.Machlan@coei.org	sent 7/26; Sent reminder on 7/28	No	1	
	Leslie Biek	Leslie.Biek@coei.org	sent 7/26; Sent reminder on 7/28	yes, rec'd 7/28	1	
	Joe Foy	Joe.Foy@coei.org	sent 7/26; Sent reminder on 7/28	yes, rec'd 7/28	1	
	Tim Reecer	tim.reecer@coei.org	sent 7/26; Sent reminder on 7/28	no	1	
	Daragh Deegan	daragh.deegan@coei.org	sent 7/26; Sent reminder on 7/28	maybe	0	rec'd approval from Lynn Brabec on 7/26
	Sarah Mitchell	sarah.mitchell@coei.org	sent 7/26	yes, rec'd 7/26	1	
Mayor's Office	Mayor Neese	tim.neese@coei.org	sent 7/26; Sent reminder on 7/28	no, rec'd 7/28	0	
	Courtney Bearsch	Courtney.Bearsch@coei.org	sent 7/26; Sent reminder on 7/28	yes, rec'd 7/28	1	
Elkhart Police Dept.	Trevor Holmes	Trevor.Holmes@elkhartpolice.o	emailed Chief Windbigler on 7/26,	yes, rec'd 7/29	1	Received approval from Chief Windbigler on 7/29
				Actual attendance	12	

External Stakeholder Focus Group						
Organization	**Name**	**Email**	**Invitation**	**RSVP**	**Attendanc**	**Notes**
MACOG	James Turnwald	jturnwald@macog.com	sent 7/25/16; reminder 7/28		0	
	Zach Dripps (principal Planner)	zdripps@macog.com	sent 7/25/16; reminder 7/28	Yes, rec'd 7/28	1	
	Jeremy Reiman (Environmental Planner)	jreiman@macog.com	sent 7/25/16; reminder 7/28	Yes, rec'd 7/28	0	
Elkhart General Hospital (Community Outreach/Community Health)	Patty Gremaux	pgremaux@beaconhealthsystem.org	emailed 7/27; followed up on 8/3		0	had to find email address first; no response rec'd
Elkhart County Health Dept.	Daniel Nafziger; Jordan Reyes; Michael Hoover; Karla Kreczmer	envhealth@elkhartcounty.com	sent 7/25, replied to email on 7/26, no further response rec'd		0	emailed on 7/25; rec'd response from Manager of Env. Health on 7/26; responded 7/26 but no further replies rec'd
Elkhart Community Schools	Darcey Mitschelen, Program Manager – Adult/Community Education (EACC)	dmitschelen@elkhart.k12.in.us	sent 7/25/16; reminder 7/28	No, rec'd 7/28	0	
	Robert Woods, Director of Business Operations	rwoods@elkhart.k12.in.us	sent 7/25/2017	Yes, response rec'd on 7/26	0	
Elkhart Chamber of Commerce	Kyle Hannon	khannon@elkhart.org	sent 7/25; sent reminder on 7/28		0	
	Kay House-Clark	kay@elkhart.org	sent 7/25/2017	Yes, rec'd 7/26	0	Had to cancel
Elkhart Public Libraries		administration@myepl.org	sent 7/25/16; reminder 7/28		0	no response
Center for A Sustainable Future	Krista Bailey	kob@iusb.edu	sent 7/25/2017	No, rec'd by email on 7/25	0	can't attend meeting, supports project
Notre Dame Sustainability Office	Linda Kurtos	linda.kurtos.1@nd.edu	sent 7/25/16; reminder 7/28	Yes, may be a little late, coming from another meeting	1	
NIBCO/Martin Foundation	Alice & Rex Martin	http://www.rexandaliceamartin.org/contact/	submitted via online form on 7/25		0	no response
South Bend Sustainability Office	Therese Dorau	tdorau@southbendin.gov	sent 7/25/16; reminder 7/28	No	0	can't attend meeting, supports project
Community Foundation Elkhart	Shannon Oaks	shannon@inspiringgood.org	sent 7/25/16; reminder 7/28		0	
Kroc Center	David Hurley	comhurls@AOL.com	sent 7/25/16; reminder 7/28		0	
Merry Lea/Goshen College Sustainability	Jonathon Schramm	jschramm@goshen.edu	sent 7/25/2017	Yes, response rec'd on 7/25	1	
Jason Schenk			7/28	No, Rec'd 7/29	0	
City Council	Dwight Fish	Dwight.Fish@coei.org	7/29	Yes, rec'd 7/29	1	
	Brian Thomas, preside	Brian.Thomas@coei.org	7/29	Yes, 7/29	1	
				Actual attendance	5	

Focus Group 1

Context

Smaller scale regular events to attract public
Or used as venue for 3rd party events
Besides public works, what other resources (human, economic, technology, etc) does the EEC have available
Better job in reaching out to activity based groups (Bike groups, SB adventure club, paddlers, bird watchers, Indiana wildflower conserv.)
Establish better connection to neighborhood
Embrace culture of neighboring pptys
Partner with local commercial neighbors for green events
Expand event offering on the property
25 year celebration use as attraction to get new people here
Start/stop point for canoe/kayaking floating river
Bring back river clean-ups; especially in summer
Connection to parks better known - creating a space for more events
Beautification. Not just the cabin.
A better connection with the surrounding neighborhood
Focus on multiculture (language for communication spanish-english)
Schedule annual social event. advertise
Low income community around the EEC

Energy/Environment

Low maintenance materials
Natural settings
Energy efficient heating and cooling
Natural lighting
Permeable pavement parking lot
Compost
Better identify trails and make them ADA compliant
More stormwater BMP demo areas
Safe and upgraded garden and terrace that is low maintenance
Demonstration of/for storm H2O management, urban heat mt, etc.
Installation of native planting and ecosystems
Zero waste
Green energy
Improve air quality
Develop old gravel pit for urban fishing
Permaculture

Economics

Strong summer staff to support increased community use during this time
Tie with existing groups (Scouts, Boys and Girls Club, Tolson, etc.) to get community buy-in
In house maintenance dept.
Personalized bricks in garden as fund raiser
Need more staff (full time, year round)
Actively fundraising/not just for events
Partner with local "green" businesses for sponsorships and the like
Funding for maintenance and resources
Corporate Support for capital projects
Partner with schools who have students interested in education
(continued) this be an opportunity for them to get experience and assist in programming
Support or showcase local green companies
Grants - state and federal
City Funding and Support
Support from service clubs, grants, foundations, neighborhoods and associations
Research available funding sources

Scale

What gap exist within institutions that the EEC could covered?
Is it actually school field trips? Aren't other institutions already covering this need?
Center is nucleus, but programming should be community wide
Interactions with the river (tying the land/water ecosystems together
Encourage as a bike stop along local biking trail
Connect with downtown, service clubs, churches, universities
Very small office space; small gathering space for groups/education; building is very small
Connections with local schools and youth centers (Tolson, Career Center, High Schools, boy scouts, B&G clubs)
Outdoor covered pavilion for events and groups
Make use of vacated alley to south and west of EEC
Expand across river to the north
Campus is under-utilized on outskirts of town (near a dying portion of city)
Outdoor facility with restrooms to accomodate large school groups
Keep it Natural
Employee staff [area] is too small; need more than just 2 full time people
Utilize more of the available space for education; take advantage of connection to the river
Hands-on activities; especially with local critters

Mobility

Encourage as stop along local bike trail
Make it pet friendly; ADA compliance; signage directing people to the center
We need to be a Pokemon-Go Stop; enhanced Geocaching
Signs at entrance or leading to entrance - from bypass; better signage for those who have never visited
Signage once at the site - trails
Establish entrance
Bike paths through the property
Connect to nearby bike paths; access with current gate configuration; site is open but gate is closed (misleading)
Connect with other community; optional times; transportation; collaboration
Connect to Trolley Route
Have a trolly stop at EEC; make trails and Center ADA accessible
Clearly identify trails; clearly identify EEC access
Make a nicer sign; do not make it look like Parks Dept.
Site info/background on signs along entry road
"Sledding Hill" very unsafe for visitors and it's not labeled
Bike/Ped connections to greater Elk. County
Due to recent criminal activity, leave gates open (summer/weekends) all day/night so PD can access for area checks of property
Clear bike paths for easier walking/biking
ADA compliant; pet friendly
ADA - a nature path for those w/disabilities
Mt. Bike trails on a city own prop. (arch and bar area etc.)
No parking when gate is closed for people to access trails by foot
Seating areas for relaxing/reading nature watching
Programs to tie river to upland areas
Bike/boat rentals

People

Wild Life
Map with trail distances for runners/walkers
Sensory garden
Nature and animal therapy
Visitors Bureau Museum Guide
Outdoor pavilion would be a bid draw

More site events - star gazing - owl walk - meteor watching
Partner with local health providers - Beacon - Adec - IU Health - Oaklawn
Improve Ampitheater; Improve Reflection Grove; more access to waterways
More school programs
Maps listing distance; illustrations - signs; low impact recreation; children/adult signs in reverse order
Youth programming
Outdoor yoga; summer concert series; use surrounding property as active transport. magnet (mountain bike trails, canoe/kayak launch)
Field trips or demonstrations from other city depts. (eg. aquatics, forestry, stormwater, etc. promote the city + public education)
Folky acoustic music
Offer as meeting place for 3rd parties (as available) to bring in new people
Eco Cabin is not even being used! (for people/education) (seconded)
Offer volunteer work to Homeless (Tent City) and Youth Programs. Provide Transpo
Open an area for small sporting events. Scout log/camping area
Open more hours; better volunteer team (more)
Bring back focus on youth education; how can we bring the center to the people in addition to bringing people to the center
Youth education
People not knowing about discontinued programming
Forest bathing (term means to go out in nature) not bathing :)
Volunteers from school groups/clubs
Trail loops - active recreation

Materials

Future improvements should utilize renewable resources as well as environmentally friendly products
Accessibility
Need welcoming signs at entrance
Signs on bypass for 33 exit
Signs in area surrounding EED (neighborhoods)
Signs; theme; maps
Pet friendly
Open Trails Wider for vehicle use (security purposes)
Reinforce trails for easier vehicle maneuvering
Neighborhood connection; educational opportunity
Not clear it's part of city (looks like an abandoned property to outsiders)
Lack of signage and signage in places that don't make sense
Focus on sustainability
Identify site as city site (make it more clear)
Maybe a natural looking city logo sign
Pervious pathways in highly traveled pathways - seconded

Technology

Better, more advertisement about the center
Have a constant "offer" that invites, takes the attention of people online, paper, FB, etc.
Updated website - (Please)
GPS Trails for maps
Solar lighting in open areas
Updated security for main building + shed
Modern Lighting LED
Park Rangers, Latest Technology, Internet Tech, Surveillance Tech
Focus on Sustainability - How can we meet these needs - Environmentally and Economically
Green technology - highlight
Solar lighting
Green technology - solar - wind - etc.
Pokestops
Databases and faster internet
Need a better way "more efficient way" to water the garden/terrace
Mobile apps; web cam; trail cam
Internet service is horrible! Offer wifi?
Update the sculptures - they are starting to break and become unsafe
Virtual trail map (second)
Lighting trails ?
Lighting on Lusher and South Road
Security Cams on buildings (reference recent burglaries)
Green Technology; use what is here - water - solar - wind
Securities: Cameras, Lighting, Keep Gate Open for police
EEC should be equiped with wifi
Mobile app for trails/events
Lights should have motion sensors to reduce energy costs

Focus Group 2

Context

No one knows we are here
Environmental Action Culture
Disconnected from the community/neighborhood
Community/Neighborhood events/activities
Connect via other city offices/departments or via community interactions (signs/info in youth centers, @ schools...)
College kids/classes (groups to contact) studies, recreation
Families > Parks - Therapy
Picnics, rest areas off trails
Center for Public Ed. for all City aspects (esp. forestry issues, stormwater, etc.)
Event: Meteor Shower - This is a great "dark" place - advertise an evening under the stars
Increase awareness of Center thru outside speaking engagements
Keep some sort of running info column in newspapers about center, programs, etc.
Keep people updated on what you do / no longer offer

Energy/Environment

Environmental Education: Social, Economical, Natural, Politics
Sustainability, Climate Change, Environmental Justice
Dichotomy of EEC mission and yet we sit on a dump
Heat sink
Solar collector
Rain garden demonstration plots
Native garden demonstration plots
Research site opportunities
urban meets nature
Establish wind turbine educational section
Solar power opportunity?

Economics

What does it really cost to promote?
Value added activities

Public Planning Meeting Feedback (post-its)

What is the niche?
Focus on adult education to form bonds and partnership with society
Be a headquarters for environmental change
How does EEC fit in with other area environmental programming?
The city and utilities often have brochures for residents: How to keep water clean, what goes in sink,
What goes in sewer, what to do with leaves and grass clippings, how to make house electricity and water usage effi
Would be awesome if EEC could help educate HS students and residents
EEC: could be more than just aesthetics - it could be a headquarters for environmental education
We need a commitment from the govenment to support environmental ideas
Other city depts. to develop events/programs for EEC
To start moving our city to a more sustainable site, we could start with the EEC as 100% clean
Open view to river - year round
Sign for entrance definitely
Mobility - Energy/Env. events context
So that this becomes common knowledge among our residents.
Most/many won't read the brochures; perhaps we need entertaining/educating video clips
Build partnerships with our universities around IU and ND; [both] have sustainability degrees, they will be happy to g
Wildlife viewing stations
Mapleheart Trail must go through the EEC site
Fish Farming
More interactive areas for young children - monthly meeting like girl/boy scouts
Expand/reconfigure EEC Bldg so it can be fully/efficiently used
Open air pavillion to view wildlife
Education center based on environmental concerns
Develop unconventional material; recycling to energy; new ideas
Natural play area
What can you do once you're here
Is any food grown here?
Picnic shelter area
Green building education, exhibits for new homes and bldgs
Have a rental program for canoes
Build a tiny house on site - for sustainable learning
Musical programs - outdoor. Use to raise funds? Annual "party"
Astronomy - use of telescope and education at EC
Partnership with nonprofits who can use EC for presentations
Hands-on programs - Building items: Bat Housing - Cat/Dog Housing

Other Feedback

Clean energy
To move our city to a more sustainable city we could start with a 100% clean EEC
Attract more exhibitors, art, ecology, education
All of these [proposed pedestrian improvements] are important for bringing people here
public access site?
Better ways to deal with environmental problems - not those that aren't working
Construct board walks in areas currently "offsite"
Picnic shelter
Bike path and better access
Access Main St. and Train tracks - Please and thank you!
Sign to indicate you have arrived
Bridge [across river]
More direct path from Mapleheart trail!
^^ Yes - Now!!

Elkhart Environmental Center

Site Priority Level: Medium

1717 E Lusher Ave

Self-Evaluation Forms

Exterior

Item	Feature	Location	Compliance		Approx. Cost
1-1	Parking	Main Parking	Required additional ADA parking spaces	$	-
4-1	Walk	Brick to EcoCabin	Clear walk width	$	-
			Slope	$	1,500.00
			Cross slope	$	-
			Overhead clearance	$	-
			Continuous without steps	$	-
			Changes in direction slope	$	-
			Surface level change	$	-
4-2	Walk	Parking Lot to Stairs	Cross slope	$	800.00
4-3	Walk	Deck	Not on accessible route	$	-
			Surface level change	$	-
5-1	Exterior Ramp	EcoCabin Entry	Bottom landing level surface	$	-
			Landing cross slope	$	-
			Handrail diameter	$	-
			Handrail extends beyond ramp end	$	-
5-2	Exterior Ramp	Main Entrance	Slope	$	-
			Cross slope	$	-
			Landing cross slope	$	-
			Intermediate landing clear space	$	-
			Handrail continuous on both sides	$	-
			Handrail extends beyond ramp end	$	-
5-3	Exterior Ramp	Footbridge to EcoCabin	Slope	$	-
			Surface level change	$	-
			Edge protection	$	-
			Landing cross slope	$	-
			Handrails required?	$	-
6-1	Exterior Stairway	EcoCabin from Brick Wall	Riser height	$	-
			Stair nosing exceeds tolerance	$	-
			Tread surface slope	$	-
			Bottom landing level surface	$	-
			Handrails required?	$	-
6-2	Exterior Stairway	EcoCabin Ground to Deck	Riser height	$	-
			Landing cross slope	$	-
6-3	Exterior Stairway	EEC Deck East Side	Tread surface slope	$	-
			Landing cross slope	$	-
			Handrail diameter	$	-
			Handrail extends beyond ramp end	$	-
6-4	Exterior Stairway	EEC Deck West Side	Tread surface slope	$	-
			Landing cross slope	$	-
			Handrail diameter	$	-
			Handrail extends beyond ramp end	$	-
6-5	Exterior Stairway	EEC Main Entry	Riser height	$	-
			Tread surface slope	$	-
			Landing slope	$	-
			Handrail height	$	-
6-6	Exterior Stairway	Amphitheater	Stair nosing projects tolerance	$	-