

**Livingston County Green Infrastructure Visioning Session**  
**June 5, 2013 – 12:00 Noon**  
**Genoa Township Administrative Offices**  
**2911 Dorr Road**  
**Brighton, MI 48116**

SEMCOG is partnering with its local government members to develop a regional green infrastructure vision for Southeast Michigan. Green Infrastructure is both a network of green space and natural areas in our communities, along with built techniques such as rain gardens and bioswales that preserve the function of the natural ecosystem to benefit residents of the region.

The purpose of this visioning session was to gather input from stakeholders on important natural areas in Livingston County and discuss what and where additional green infrastructure could be located. What follows is a summary of the visioning session.

**Livingston County Green Infrastructure Visioning Session**  
**June 5, 2013 – 12:00 Noon**  
**Genoa Township Administrative Offices**

**Attendance**

Mike Archinal, Genoa Township  
Bill Bamber, Oceola Township  
Scott Barb, Livingston County Planning  
Grant Brooks, SEMCOG  
Matt Bolang, Livingston County Department of Public Health  
Bill Call, Handy Township  
Mike Cunningham, Tyrone Township  
Ryan Dividock, Oakland County Planning  
Sally Elmiger, Carlisle Wortman Associates  
Mark Fosdick, Cohoctah Township  
Chuck Fellows, Green Oak Township  
Martha Hagluel, Livingston County Intern  
Kim Hiller, Livingston County Road Commission  
Cindy Hodge, Marion Township Supervisor  
Brian Jonckheere, Livingston County Drain Commissioner  
Kelly Karl, SEMCOG  
Jim Keglovitz, Oakland County Planning  
Kathleen Kline-Hudson, Livingston County Planning  
Erica Korfanta, OLHSA  
John Langs, HRWC  
Ric Lawson, HRWC  
Jean Ledford, Genoa Township  
Amy Mangus, SEMCOG  
Steve Manor, City of Howell  
Kelly Matthews, Brighton Township  
Sue Nyquist, Huron-Clinton Metroparks  
Kris Olsson, HRWC  
Bill Parkus, SEMCOG  
Mike Rife, Conway Township  
Mike Sedlak, Green Oak Township  
Hank Vaupel, Handy Township  
Luciele Weaire, Brighton Township  
Kristan Wiltfang, Oakland County Planning  
Donna Zalewski, ITC

## Interactive Group Exercise

The purpose of this exercise was 1) to identify significant areas of green infrastructure within Livingston County that are important to protect, and 2) to identify areas where we want to increase green infrastructure as well as the practices. The county was divided into four quadrants. Two maps were developed for each quadrant:

- 1) A map of existing green infrastructure: Participants placed round stickers on existing sites of green infrastructure (e.g. parks, riparian corridors, trails, wetlands, sites of rare native communities, large sites of woodlands or openspace, prime farmland).
- 2) A map of future green infrastructure elements: Participants placed round stickers/text on sites, at which, they would like to increase green infrastructure (e.g. acquisition of land around parks or as a conservation connection between two sites of preservation areas, establishment of riparian buffer along river/stream corridors, addition of bioswales, rain gardens and trees along streets in urban areas). Green tape was used to identify the need for a connection between two or more sites of green infrastructure – or between a site of green infrastructure and the urban area such as a downtown.

### Livingston County Southwest Quadrant

**Communities included:** Iosco Township, Marion Township, City of Howell, Unadilla Township, Putnam Township, Village of Pinckney

#### Existing Green Infrastructure to Protect

- Areas of high ecological value around the Pinckney Recreation Area
- the Portage Creek Riparian Corridor
- Riparian corridor of Duck Lake, Barber Lake and Putnam Lake
- Portage River riparian corridor
- Unadilla Stockbridge Drain riparian corridor
- Livermore riparian corridor as connection between Pinckney State Recreation Area and Gregory State Game Area
- South branch of Shiawasse riparian corridor
- Red Cedar River Riparian Corridor
- Red Cedar River Middle Branch Riparian Corridor

<b>Proposed Future Green Infrastructure</b>	
<b>Action</b>	<b>Practice</b>
<b>Pinckney State Recreation Area</b>	
Acquire land as connection between existing conservation parcels	Recreation
<b>Brighton State Recreation Area</b>	
Land acquisition to extend conservation area from swarthout Road south to M-36 – west of Chambers and east of Farley roads	Recreation
<b>Transportation Corridors</b>	

Add green infrastructure BMPs along M-36 through the Village of Pinckney	Stormwater Management
Add green infrastructure BMPs along Grand River through the City of Howell	Stormwater Management
Mitigate land cover (urban bare) areas along Pinckney Road in Putnam Township, and along Lucy Road south of Howell.	Recreation and habitat restoration
<b>Shiawasse River</b>	
<i>South Branch of Shiawasse</i>	
Establish riparian buffer as connection between MNFI polygon areas west of Howell	Stormwater management, blueway recreation, habitat protection
Purchase of MNFI high value polygon area north of Coon Lake Road and west of Pinckney Road	Open space preservation
<b>Red Cedar River</b>	
<i>Red Cedar River</i>	
Establish riparian buffer	Habitat protection, stormwater management, blueway recreation
Acquire high value MNFI polygon areas Southwest of Howell	Conservation
Purchase public access points from Hile Road north	Blueway recreation
<i>Middle Branch of Red Cedar River</i>	
Establish riparian buffer	Habitat protection and connection along corridor, stormwater management, blueway recreation
Acquire high value MNFI polygon parcels	Conservation
Purchase public access points from Hile Road north	Blueway recreation
<b>Riparian Corridor Protection</b>	
Add riparian buffer along Portage River between Pinckney State Recreation Area and Little Portage Lake	Habitat protection, recreation
Add riparian buffer along Portage Creek as connection between Williamsville Lake (Unadilla State Wildlife Area) and Patterson Lake (Pinckney State Recreation Area)	Habitat protection, recreation
Add riparian buffer along Unadilla Stockbridge Drain from Dexter Road to Williamsville Lake	Habitat protection, recreation
Add riparian buffer along corridor between Duck Lake, Putnam Lake and Barber Lake	Habitat protection, recreation
Add riparian buffer along Livermore Creek between Patterson Lake and Sheets Lake as	Habitat protection, recreation

connection between Pinckney State Recreation Area and Gregory State Game Area.	
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**Livingston County  
Southeast Quadrant**

**Communities included:** Genoa Township, Brighton Township, City of Brighton, Hamburg Township, Green Oak Township

**Existing green infrastructure to protect**

- Huron River Corridor in Kensington Metropark and Island Lake State Recreation Area
- Wild Wing Lake portion of Kent Lake
- Green Oak Township Park along Silver Lake Road
- Green Oak Township Park along Marshall Road
- Wooded open space area south of Silver Lake Road, north of Frog Lake, east of U.S. 23.
- Huron Meadows Metropark
- Huron River woodland area – west of intersection of Winans Lake Road and Hamburg Rd.
- Huron River woodland area west of Merrill Field
- Huron River woodland area south of Cordley Lake Road on north bank of Gallagher Lake
- Huron River between Whitewood Lake and Baseline Lake
- Baseline Lake Land Preserve
- Brighton State Recreation Area
- Brighton Lake
- South Ore Creek within City of Brighton
- Mount Brighton Ski Area
- Woodland Lake
- Genoa Township Hall lands
- Woodland/open space area, west side of Lake Chemung.

<b>Proposed Future Green Infrastructure</b>	
<b>Action</b>	<b>Practice</b>
<b>Transportation Corridor</b>	
Trail with green infrastructure along Grand River Road from Island Lake State Recreation Area to City of Brighton	Recreation, stormwater management, native vegetation
Use of green infrastructure along Grand River between Euler and Lawson Drive	Stormwater management, native vegetation
<b>Huron River Watershed</b>	
Riparian buffer along Woodruff Creek from Lyons Lake south to Grand River	Habitat protection, stormwater management
Acquisition of woodland area along river, west	Recreation, habitat protection

of intersection of Hamburg and Winans Lake Road.	
Boat access at head of Strawberry Lake	Recreation
Acquisition of woodland/open space MNFI high value polygon parcel north of Cordley Lake and Bass Lake	Habitat protection, recreation
<b>Hay Creek Subwatershed</b>	
Riparian buffer from Brighton State Conservation area parcel just north of Swarthout Road south to MNFI high value polygon parcel just south of Rush Lake Road	Habitat protection and connection along corridor, stormwater management
Acquisition of MNFI high value polygon parcel just south of Rush Lake Road	Habitat protection and connection along corridor
Riparian buffer from MNFI high value polygon parcel at Rush Lake Road southeast to Cordley Lake	Habitat protection and connection along corridor
<b>Chilson Creek Subwatershed</b>	
Riparian buffer along corridor from Zukey Lake northeast to Brighton State Recreation Area	Habitat protection and connection along corridor, blueway recreation, stormwater management
Acquisition of headwaters MNFI high value parcel at Coon Lake and Chilson Roads east of Westphal Road	Habitat protection, water quality
Greenway connection trending southwest between Chilson Creek headwaters and Brighton State Recreation Area	Habitat preservation and connection along a greenway corridor
<b>South Ore Creek Subwatershed</b>	
Riparian Buffer along South Ore Creek from Brighton State Recreation Area southeast to Ore Lake	Habitat protection and connection along riparian corridor
Acquisition of forested openspace immediately at intersection of Hamburg and Cowell Roads	Expansion of Brighton State Recreation Area, habitat preservation
<b>Davis Creek Subwatershed</b>	
Add riparian buffer along corridor from just east of Dixboro Road southeast along the corridor to Doane Road	Habitat protection/restoration and connection along riparian corridor
<b>Acquisition of High Value MNFI Polygon Parcels</b>	
Acquire MNFI polygon area at Merrill and Strawberry Lake Road	Habitat protection/restoration
Acquire MNFI polygon area at Eight Mile and Marshall Roads	Habitat protection/restoration
Acquire MNFI polygon area along Pleasant Valley between Commerce and Lone Tree.	Habitat protection/restoration
<b>Park Development</b>	
Mitigate land cover and develop park along Kensington Road between Buno and Jacoby	Recreation, restoration of habitat

Develop park within Brighton City limits north of Williamson in wooded/openspace area.	Recreation, protection and restoration of habitat
Park developed at Hunter and Hyne north of Livingston Gun Club	Recreation, protection and restoration of habitat
Restoration of sand pit land cover and development of park/preserve at corner of Chilson Road and Cunningham Lake Road	Recreation, restoration of habitat
<b>Greenway trails</b>	
Bike trail developed adjacent to U.S. 23 Lee Road and Eight Mile Road	Recreation, stormwater management
Walking Trail develop on Hyne Road – from Hacker Road to Hunter Road	Recreation stormwater management
Greenway trail along power easement corridor with Green infrastructure elements	Recreation, stormwater management, habitat restoration and protection

**Livingston County  
Northeast Quadrant**

**Communities included:** Tyrone Township, Deerfield Township, Oceola Township, Hartland Township, City of Howell

**Protection of Existing Green Infrastructure**

- Wetlands associated with Tipsico Lake along Tipsico Lake Road between Center and Holtforth Roads.
- Lake Shannon at appropriate places
- Unnamed tributary from Shannon Lake to Tyrone Lake
- North Ore Creek Creek from Shannon Lake to Bullard Lake
- Handy, Maxfield, Round and Long Lakes
- Woodland and openspace resource area between Kellogg and Latson Roads and Golf Club and Brophy Roads.
- Salt runoff mitigation of land cover along Latson Road from Grand River north to Golf Club
- Bogue Creek From Lake Thompson in City of Howell to Curdy Road
- High quality farmland from Curdy to Allen Roads and Latson to Fisher Roads
- High quality woodland and open space between Allen Road and Burns Road and Latson Road and Wiggins Road.

<b>Proposed Future Green Infrastructure</b>	
<b>Action</b>	<b>Practice</b>
<b>Tyrone Township</b>	
Acquisition or environmental easement on wetlands associated with Lake Tipsico along Lake Tipsico Road between Holtforth and Center Roads	Habitat restoration and protection
Installation of buffer around riparian	Habitat protection restoration using native

shoreland of Lake Shannon	vegetation,
Restoration/protection of wetlands at mouth of Old Ore Creek tributary to Lake Tyrone	Habitat protection and restoration
<b>Hartland Township</b>	
Install native buffer along North Ore Creek from Shannon Lake Southeast to Bullard Lake	Habitat protection and restoration, stormwater management, recreation
Native vegetative buffer around Handy Lake, Maxfield Lake, Round Lake and Long Lake	Recreation and habitat protection and restoration
<b>Oceola Township/City of Howell</b>	
Install native vegetative buffer around Thompson Lake in City of Howell	Habitat protection and restoration, recreation
Install native vegetated riparian buffer along Bogue Creek from Lake Thompson and Curdy Road	Habitat protection and restoration
Acquire high value resource corridor along Bogue Creek running from Latson Road SE to Kellogg Road	Recreation, habitat protection and restoration
Mitigation of salt runoff along Latson Road to avoid deposition to Lakes Earl and Chemung	Water quality protection and restoration
Development of greenway trail along MDOT – parallel to Latson Road between Grand River and Bigelow Roads	Recreation, greenway
High value farmland between Curdy and Allen Roads and Latson and Fisher Roads	Use of PA 116 or local Township ordinance to preserve high quality farmland
<b>Deerfield Township</b>	
Acquisition of high quality, high connectivity woodland/openspace south of Oakgrove State Game Area to Allen Road between Latson and Wiggins Roads	Blueway and greenway, hunting recreation,

**Livingston County  
Northwest Quadrant**

**Communities included:** Conway Township, Cohoctah Township, Handy Township, Village of Fowlerville, Howell Township, City of Howell

**Protection of Existing Green Infrastructure**

- Oakgrove State Game Area
- Lake Thompson Park and Beach
- Cohoctah and Cook Lakes
- Wooded/openspace area from M-59 north to Henderson Road and east of Byron Road
- Fowlerville Community Park



- Fowlerville Wastewater Treatment lagoons
- FT Techno Industrial Test Track at Smith and Sargent Roads
- High quality farmland north and northwest

<b>Proposed Future Green Infrastructure</b>	
<b>Action</b>	<b>Practice</b>
<b>Cohoctah Township</b>	
<i>Oakgrove State Game Area</i> Potentially purchase land within the MNFI high value polygon parcels from Cohoctah Road South to Faucett Road to expand conservation area	Recreation – mountain biking, hiking. Hunting and paddling within riparian corridor
More public access at Cohoctah and Cook Lakes	Blueway recreation
<b>Howell Township</b>	
Future opportunity to convert Great Lakes Central railroad north of Howell to greenway trail	Recreation, hiking, biking, native vegetation, green infrastructure for stormwater management
Tanger Outlet Mall: Use of rain garden, bioswale and retention basin BMPs	Stormwater management
<b>City of Howell</b>	
Green infrastructure use in City of Howell: <ul style="list-style-type: none"> <li>• rain gardens, green roofs, green walls</li> </ul>	Stormwater management
Develop and extend M-59 greenway trail from Howell east to Brighton and west to Fowlerville	Recreation – biking, hiking native vegetation, stormwater management
Develop greenway trail – Howell to Brighton, along Grand River	Recreation – biking (bike rentals), hiking, native vegetation, stormwater management
<b>Handy Township</b>	
<i>Red Cedar River</i> <ul style="list-style-type: none"> <li>• Potentially purchase land along Red Cedar River corridor</li> <li>• Install native vegetation buffer along riparian corridor</li> </ul>	Protection and restoration of habitat, recreation such as fishing hiking and biking, stormwater management
Reduce salting of Grand River to avoid polluting area lakes and rivers	Water quality improvement
Preservation of farmland north of Fowlerville	Preservation of green infrastructure
Potentially purchase MNFI high value polygon parcels at Fowlerville and Sober Roads and trending SE to Owosso Road	Recreation – greenway, hunting, hiking
Expand test track of FT Techno of America	

### Key Pad Voting on Potential Green Infrastructure Policies

The participants were asked questions concerning their perspectives and level of support for green infrastructure and its practices across the region and in their areas. This input will assist in developing policies that will assist local governments in implementing the regional Green Infrastructure vision within their jurisdictions.

1. What benefits of green infrastructure are most important to you?

Multiple choice options	Voting results by option	
a. Improving our water quality	11	44.0%
b. Improving our air quality	2	8.0%
c. Providing increased recreational opportunities	3	12.0%
d. Adding to the quality of life with improved aesthetics	2	8.0%
e. Economic benefits (improved property values, neighborhood stabilization, green jobs)	4	16.0%
f. Improving the use of vacant property	0	0.0%
g. Increasing habitat areas	1	4.0%
h. Energy Savings	0	0.0%
i. Climate change mitigation	2	8.0%

2. What is the most important green infrastructure element you would like to see more of in your area?

Multiple choice options	Voting results by option	
a. Trees along roads, downtowns	3	12.5%
b. Bikehike trails	11	45.8%
c. Kayakcanoeingboat access	0	0.0%
d. Parks	3	12.5%
e. Community gardens	2	8.3%
f. Natural areas (wetlands, woodlands)	5	20.8%

3. Where is the most important place you'd like to see more green infrastructure in Southeast Michigan?

Multiple choice options	Voting results by option	
a. Within ½ mile of my home	1	4.2%
b. Along rivers and lakes	6	25.0%
c. Along major roadways	7	29.2%
d. Near existing parks and rare areas	4	16.7%
e. Inside parks	0	0.0%
f. On vacant property	0	0.0%
g. On local government property	0	0.0%
h. Within commercial and industrial corridors	6	25.0%

4. In your area, how important is it to use green infrastructure to reduce pollution to our rivers, lakes and streams?

1. Not important through 9. Very Important

1	2	3	4	5	6	7	8	9	Total
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0	1	0	0	2	2	2	3	15	7.88 (score)

5. In your area, how important of a role does green infrastructure play in retaining and attracting knowledge based workers?

1. Not important through 9. Very Important

1	2	3	4	5	6	7	8	9	Total
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1	3	0	2	5	2	5	4	2	5.71 (Score)

6. In your area, how important of a role could green infrastructure play in creating semi-skilled green jobs for lower-income workers?

1. Not important through 9. Very Important

1	2	3	4	5	6	7	8	9	Total
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4	3	0	3	4	2	6	1	2	4.88 (Score)

7. What green infrastructure provides the highest economic value in your area?

Multiple choice options	Voting results by option	
a. Publicly-owned parks	10	40.0%
b. Privately-owned parks common areas	1	4.0%
c. Beaches Access to Water	11	44.0%
d. Natural areas	2	8.0%
e. Land Trails	1	4.0%

8. In your area, how important is it to have public green infrastructure within 12 mile of residential population?

1. Not important through 9. Very Important

1	2	3	4	5	6	7	8	9	Total
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2	0	0	0	2	1	3	5	12	7.48 (score)

9. In your area, how important is it to have public access for boats (canoe, kayak, fishing) to local waterways?

1. Not important through 9. Very Important

1	2	3	4	5	6	7	8	9	Total
4	0	0	0	3	2	4	2	10	6.60 (score)

10. In your area, how important is it to increase green infrastructure around industrial areas to reduce dust, improve air quality and enhance the area?

1. Not important through 9. Very Important

1	2	3	4	5	6	7	8	9	Total
2	0	1	0	3	0	6	4	8	6.92 (score)

11. In your area, how important is it to increase green infrastructure through stream buffers around local waterways?

1. Not important through 9. Very Important

1	2	3	4	5	6	7	8	9	Total
0	1	1	0	2	1	3	1	16	7.76 (score)

12. In your area, how important is it to utilize green infrastructure as a mechanism to enhance vacant lots?

1. Not important through 9. Very Important

1	2	3	4	5	6	7	8	9	Total
5	0	1	1	2	3	5	1	6	5.71(score)

13. In your area, how important is it to increase green infrastructure along roadways to reduce stormwater pollution, enhance commercial and residential areas, and integrate into trails planning?

1. Not important through 9. Very Important

1	2	3	4	5	6	7	8	9	Total
1	0	1	0	2	1	2	1	15	7.70 (score)

14. In your opinion, how important is it to increase green infrastructure to increase energy efficiency and or reduce the impacts of climate change?

1. Not important through 9. Very Important

1	2	3	4	5	6	7	8	9	Total
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5	2	2	1	2	0	0	3	8	5.43 (score)

15. Looking at the Southeast Michigan region as a whole, is it important to you to increase and protect green infrastructure throughout the whole region as a mechanism to have a successful region?

1. Yes. I understand the benefits and importance of increasing green infrastructure across the whole Southeast Michigan region.	21	91.3%
2. No. I am interested in green infrastructure only in my area.	2	8.7%

16. In your opinion, does there need to be more education of green infrastructure benefits and marketing of our green infrastructure?

1. Yes	24	96.0%
2. No	1	4.0%

17. How likely are you to install green infrastructure (rain gardens, trees, rain barrels) on your own property?

1. Not likely through 9. very likely

1	2	3	4	5	6	7	8	9	Total
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1	0	1	1	0	2	1	2	17	7.84 (score)

## **Livingston County Green Infrastructure Visioning Session Meeting Evaluation**

Approximately 30 people attended the (Brown Bag Lunch Series) green infrastructure visioning session at Genoa Township Administrative Offices on June 5<sup>th</sup>. Twelve evaluation forms (40%) were received at the end of the meeting. The evaluators rated the meeting the following:

### **Quality of Lunch program content**

Rating 6 (Excellent): Seven evaluators (60%)

Rating 5 (excellent): Four evaluators (30%)

Rating 4 (Satisfactory): One evaluator (8%)

### **What I liked most about today's event**

- Freedom to exchange and discuss ideas
- Networking
- Planning and providing input
- Amount of participants
- The topic and the map
- Mapping exercise
- Opportunity to provide input
- Interaction
- Electronic Survey
- Small group work and electronic survey
- Survey
- Electronic group vetting/Survey

### **Did you enjoy the working session format of this brown bag lunch?**

“Yes” from all 12 evaluators.

### **Suggestions for improvements**

- Limited time affects ability to be thorough in identifying areas for Green Infrastructure.
- Send background documents (plan) out ahead of the meeting via e-mail.
- Send out what to think about before the meeting.