Introduction

The goal of the Sustainable Keuka Watershed Master Plan is to examine how stakeholders in the Keuka Lake vicinity can take steps to ensure a healthier, more vibrant region. The research for this Master Plan was made possible with funding from the New York State Department of State Local Waterfront Revitalization Program (LWRP), which provides reimbursement and technical assistance to state municipalities "to prepare and implement strategies for community and waterfront revitalization."[1] Under the guidance of George Frantz (Cornell University Visiting Lecturer, AICP, ASLA), Stephen Butchko (Wayne Town Supervisor), the Southern Tier Central Regional Planning and Development Board, and regional public officials and community members, students from Cornell University's Land Use Planning Workshop produced the Watershed Master Plan to align with LWRP goals.

Students from the Land Use Workshop took the following steps to create the Watershed Master Plan:

1. Assessed eight Keuka-area comprehensive plans as they coincided with the following:
    a. Goals and action items from the Land Use Leadership Alliance (LULA) 2009 Keuka Lake Watershed Land Use Planning Guide
    b. Keuka Lake Watershed Farmland & Agricultural Protection Plan (Cornell University, 2014)
    c. Keuka Lake Waterfront Revitalization and Scenic Viewshed Protection Plan (Cornell University, 2014)
    d. Yates County Looking Ahead: A Planning and Design Guide (1990) by Roger Trancik, FASLA
    e. Additional environmental, economic, and equity goals that relate to regional well-being
2. Toured the Keuka Lake Watershed to take inventory of environmental, economic, and cultural resources
3. Spoke with regional public officials and community members about regional planning initiatives

The Watershed Master Plan highlights shared values among Keuka municipalities, as well as resources to preserve and enhance what locals value most about their communities. The following pages outline regional assets, an inventory and analysis of Keuka-area comprehensive plans, and recommendations to help municipalities more effectively address environmental, economic, and cultural goals on a regional scale.

[1] New York State Department of State (2015)

Watershed Inventory and Analysis

Keuka Lake Watershed is rich in both natural and historical resources. By identifying these regional assets, we can not only help to conserve the unique natural and cultural characteristics of the region, but we can help open up opportunities for economic development as well.

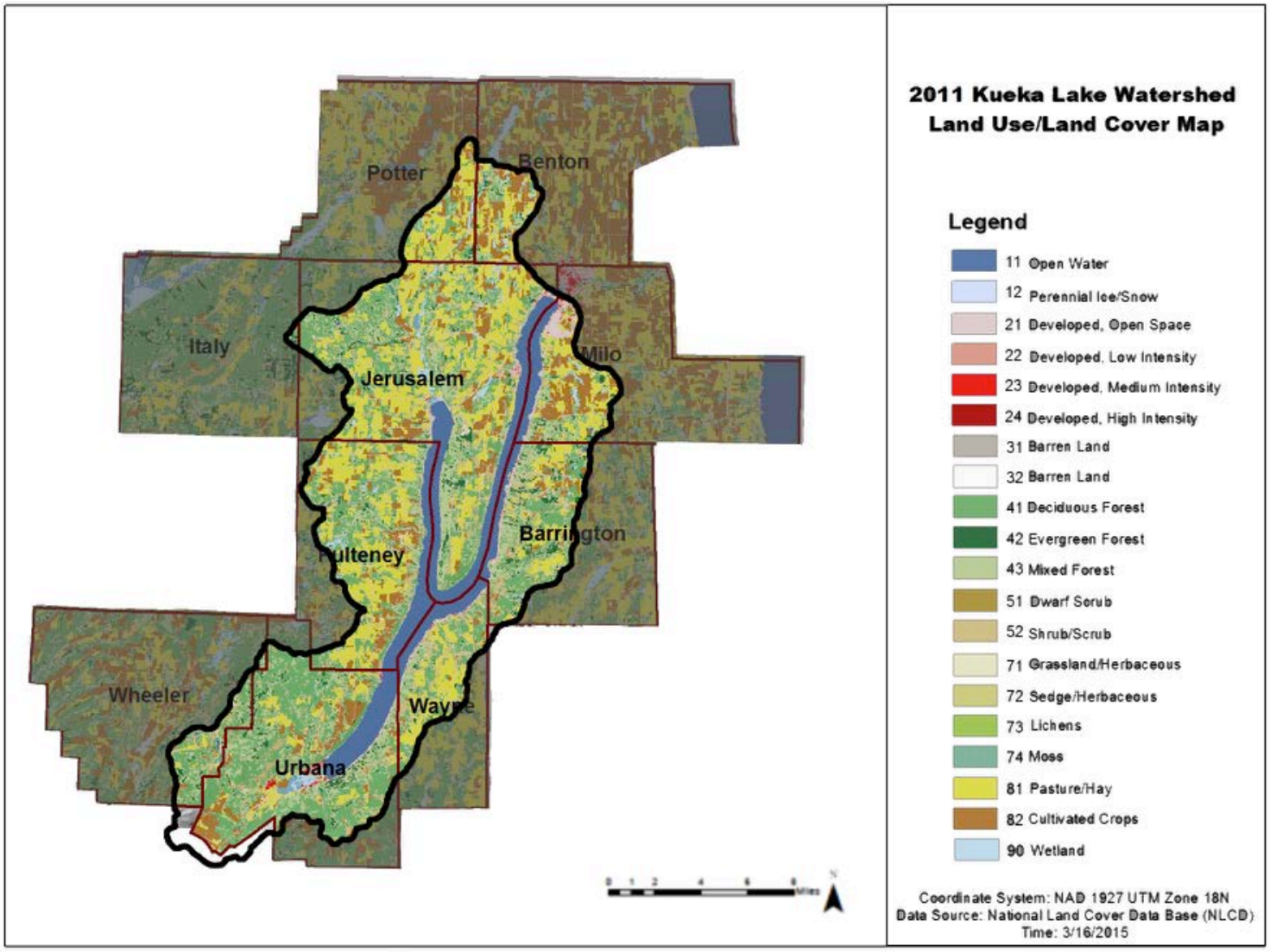
First, regional assets are important in shaping the Keuka Lake Watershed's character. A concern for natural and historical resources is not a new phenomenon in the region; however, population growth and other development concerns create new challenges for natural and historical preservation. Identifying existing assets will help strengthen preservation efforts and align new development with an aesthetic that community members hope to preserve.

Moreover, regional assets are important resources for economic development. According to the National Forest Service, backcountry use and outdoor recreation have increased tenfold since 1985, making it one of the largest growth industries in the United States. The Keuka Lake Watershed is uniquely positioned to take advantage of this opportunity with its natural landscape and tourism resources. By locating these resources on the map, we can integrate them into a regional strategy and enhance the supporting system for future tourism development.

Watershed Land Use/Land Cover

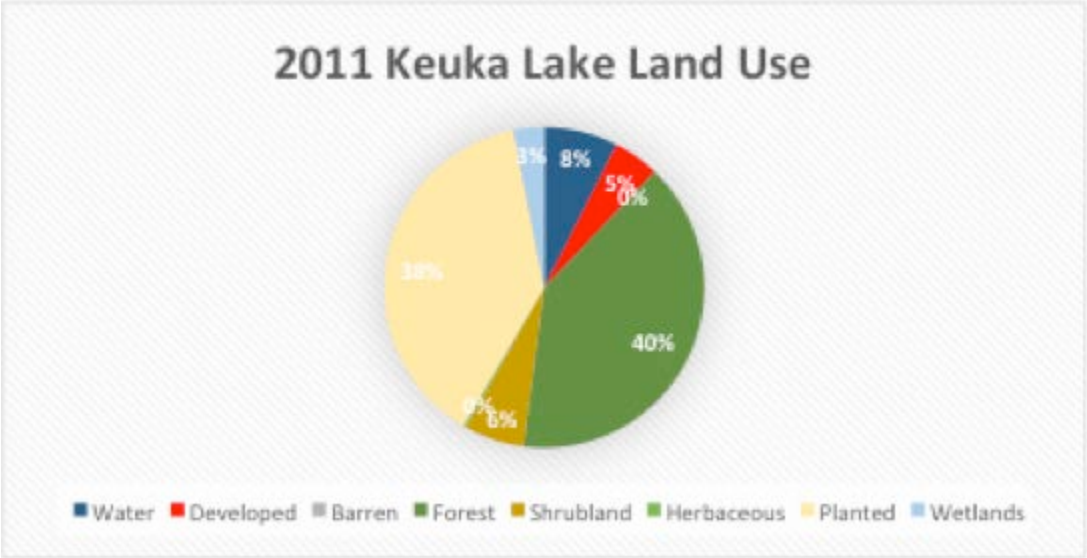
Figure 1 provides a snapshot of ecological conditions using the 2011 Keuka Lake Watershed Land Use/Land Cover map calibrated from the National Land Cover Database 2011 (NLCD 2011). This database was created by the Multi-Resolution Land Characteristics (MRLC) Consortium, a partnership of Federal agencies led by the U.S. Geological Survey. All NLCD data products are available for download at no charge to the public from the MRLC website (http://www.mrlc.gov). The map keeps the same 16-class land cover classification scheme that has been applied consistently across the United States at a spatial resolution of 30 meters. NLCD 2011 is based primarily on a decision-tree classification of circa 2011 Landsat satellite data.

Figure 1: 2011 Keuka Lake Watershed Land Use/Land Cover



The pie chart in Figure 2 shows the descriptive summary data for 2011 Steuben and Yates County land use/land cover. It contains the percent share of land use/land cover for both counties.

Figure 2: 2011 Keuka Lake Land Use/Land Cover (Percent Share of Total)

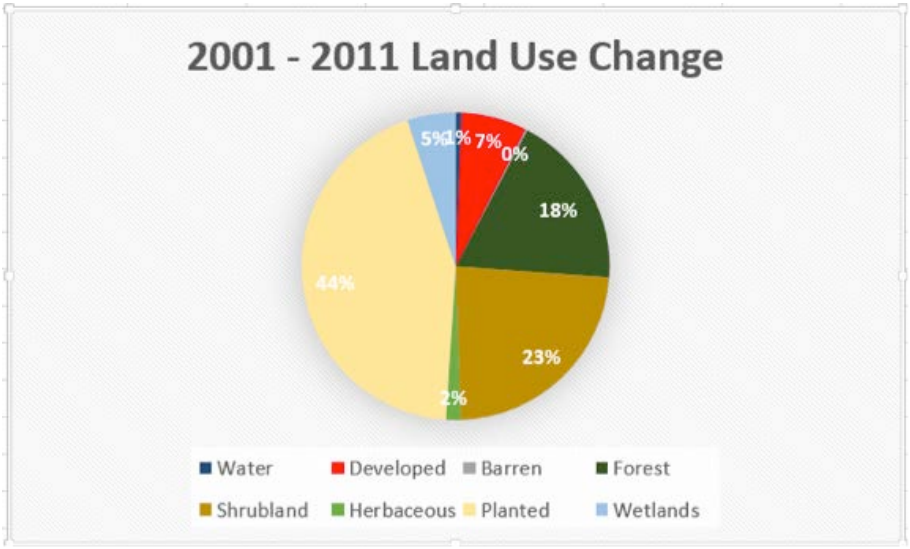


As Figure 2 shows, forestry and agricultural land are the largest component of land use/land cover, followed by water body and shrub land. Developed land or urban area comprises 5% of the total landscape.

Watershed Land Use/Land Cover Change

Figure 3 displays land use change within the Keuka Lake Watershed from 2001 to 2011. According to the National Land Cover Database, the expansion of agricultural land increased by 44% during that timeframe, followed by shrub land with 23% increase and forestry with 18% increase.

Figure 3: 2001 – 2011 Steuben and Yates County Land Use Change (Percent Share of Total)



Watershed Historic Resources

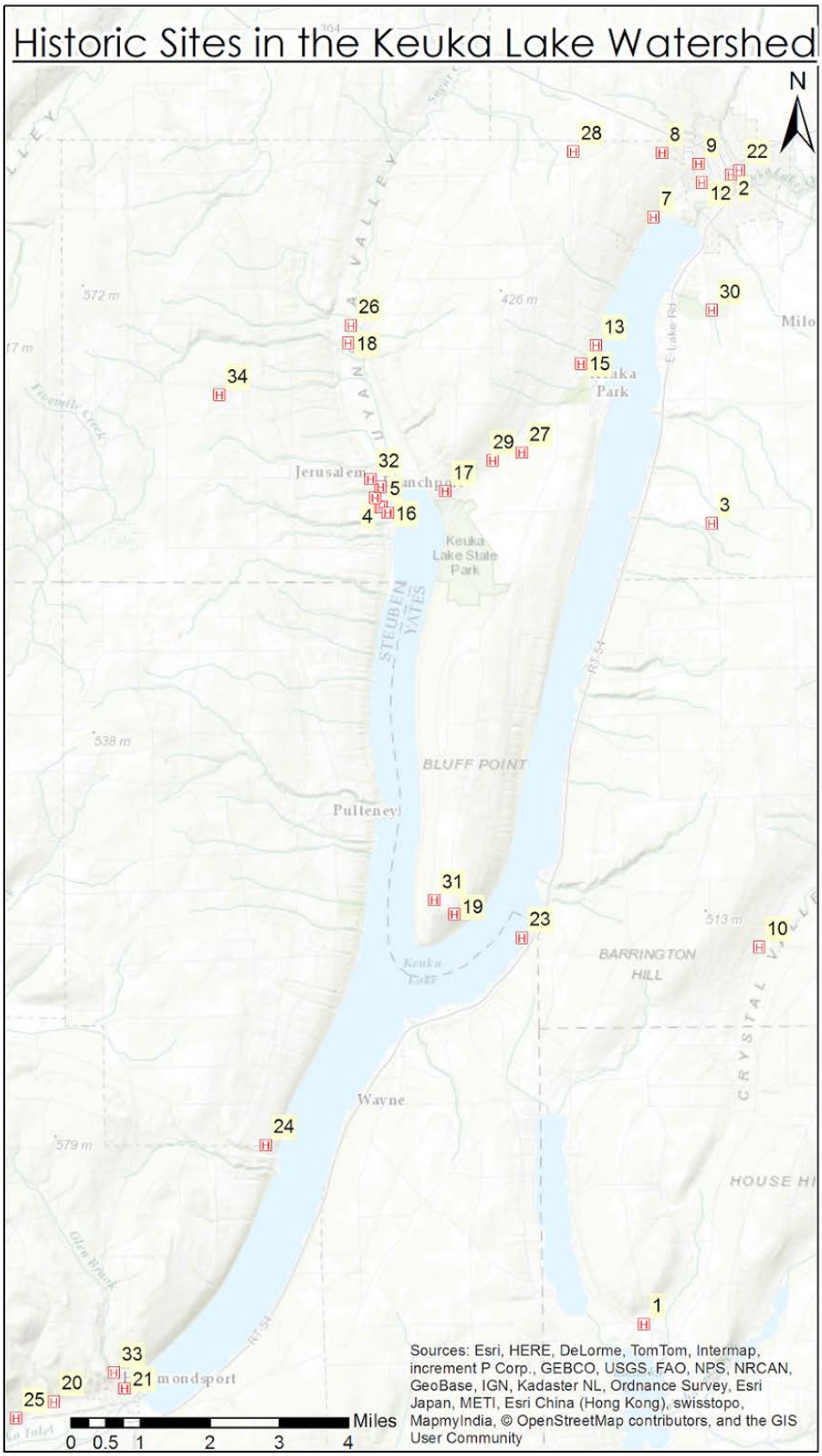
The Keuka Lake watershed is a trove of historic resources ranging from stand-alone structures like the Wagner mansion to historic districts like the Pulteney Square in Hammondsport. Figure 5 provides a map shows the historic resources currently listed under the National Register of Historic Places. The data is currently available on the National Park Service database.[2]

Another important resource for data on historic sites is the Cultural Resource Information System (CRIS) developed by the New York State Office of Parks, Recreation and Historic Preservation's Division for Historic Preservation (DHP). CRIS is an advanced Geographic Information System program that provides access to New York State's historic and cultural resource databases and now digitized paper records. CRIS provides users with access to more than 1.5 million pages of digital images including, National Register documents, building and archaeological inventory forms and survey reports and a wide variety of additional legacy data.

CRIS also serves as an interactive portal for agencies, municipalities and others who use historic preservation programs, such as the State and Federal Income Tax Credits for Historic Properties, the State and National Registers of Historic Places Programs, the Sections 14.09 (NYSPRHPL) and 106 (NHPA) review processes, the Certified Local Government Program and building and archaeological survey programs.[3]

[2] National Register of Historic Places (2015)
[3] New York State Office of Parks, Recreation and Historic Preservation's Division for Historic Preservation (2015)

Figure 5: Historic Sites in the Keuka Lake Watershed



Number	Historic Site
1	Weston Schoolhouse
2	US Post Office--Penn Yan
3	Bailey, Jonathan, House
4	Bitley, Peter, House
5	Bitley, Thomas, House
6	Briggs, John, House
7	Hanford, Uriah, House
8	Hays, George, House
9	Morrison, Roderick M., House
10	Spicer--Millard House
11	St. Luke's Episcopal Church
12	Wagener, Charles, House
13	Wagener, H. Allen, House
14	Weaver, Myron, House
15	Williams, Sherman, House and Fruit Barn
16	Wrightman, Dr. James, House
17	Esperanza
18	Larzelere Tavern
19	Garrett Memorial Chapel
20	Younglove, Timothy M., Octagon House
21	Hammondsport Union Free School
22	Sampson Theatre
23	Cottages at Central Point
24	Gold Seal Winery
25	Pleasant Valley Wine Company
26	Botsford, Samuel, House
27	Hampstead
28	Perry, Ezikial, House
29	Sill Tenant House
30	Swarthout, William, Farm
31	Wagener, Abraham, House
32	Weaver, Solomon, House
33	Mallory Mill
34	Evens, William, House

Legend

Historic Sites

Team K
NAD 1983 StatePlane NY Central
03/10/2015

The Keuka Lake Watershed's tourism industry is well underway; however, there is still an opportunity to enhance tourism resources such as food items, lodgings, and wineries. As an important regional driver for economic growth, it is helpful to identify tourism resources and be mindful of their distribution throughout the watershed.

The data in Figures 6-8 was collected through an April 2015 keyword search in Google Maps and Yelp. The study area is confined to areas closest to Keuka Lake. Figure 6 displays how tourism attractions are disbursed around the lake, while Figures 7 and 8 break down the count of tourist attractions by municipality and type. While an online search was the most efficient way of gauging tourist attractions in the watershed, it is important to note that not all businesses register their information with Google.

Figure 6: Tourism Attractions near Keuka Lake

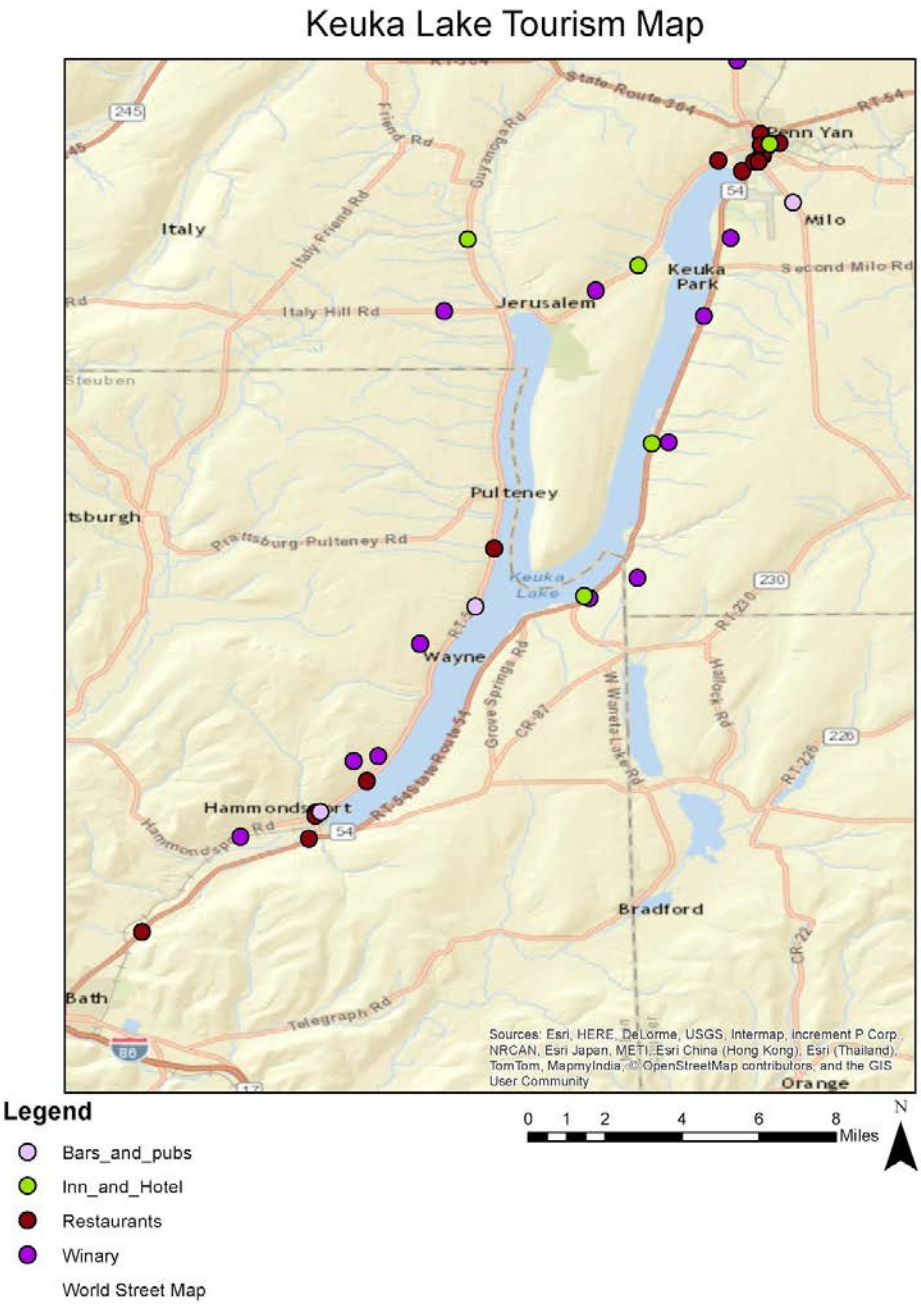


Figure 7: Tourism Resources by Municipality

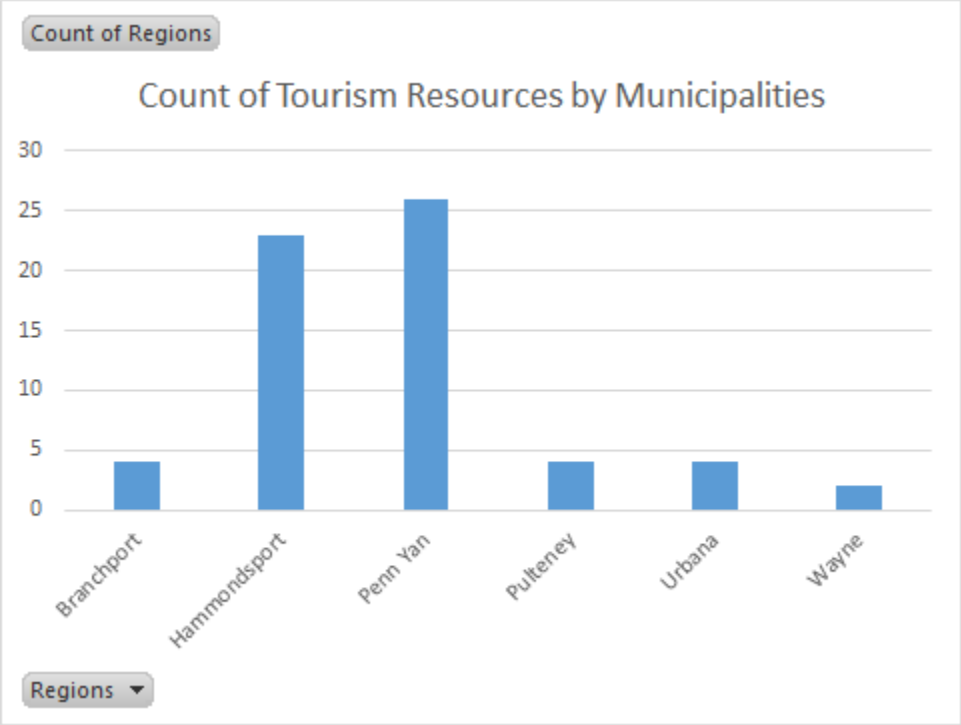
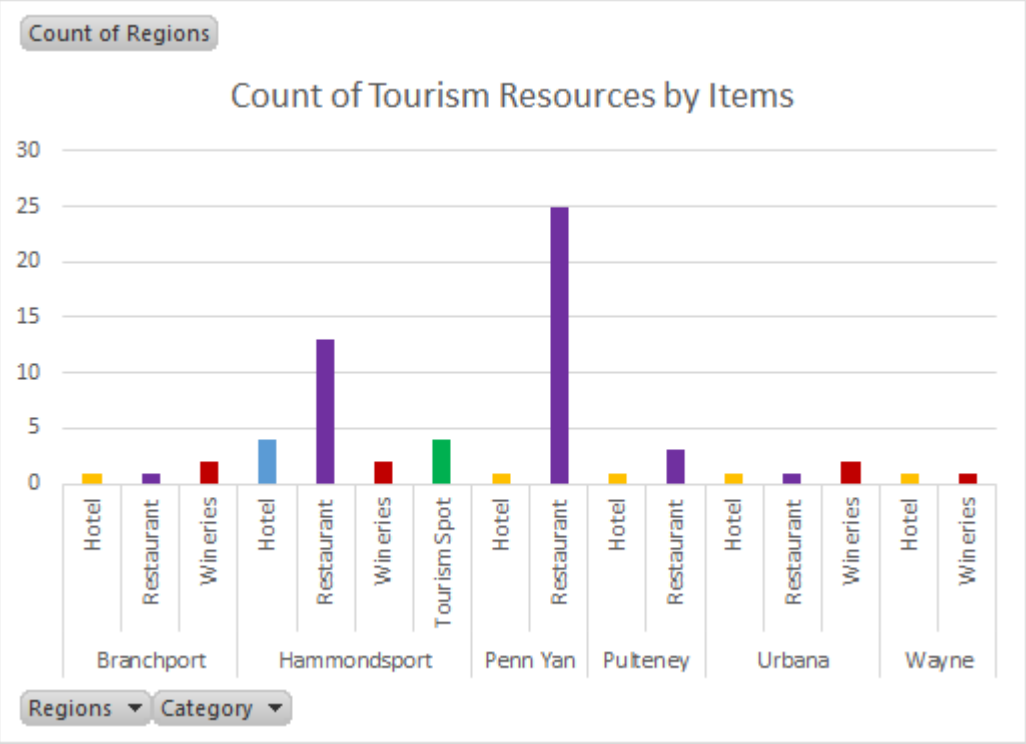


Figure 8: Tourism Resources by Item



While there are notable tourism resources in municipalities surrounding Keuka Lake, Hammondsport and Penn Yan contain two thirds of the total resources. The remaining four municipalities contain less than five tourist attractions each. These numbers are particularly true for restaurants, which are concentrated in the two abovementioned municipalities. To expand tourism development to benefit the entire Keuka Lake Watershed, regional stakeholders might consider how to build upon existing attractions outside of Hammondsport and Penn Yan.

Inventory and Analysis

This Inventory and Analysis section helps to establish baseline conditions and opportunities to incorporate sustainability into the Keuka Lake Watershed. By reviewing existing regional goals, as well as the goals of individual comprehensive plans, the Workshop gained a better idea of sustainability efforts that are already underway. Since the goal is to produce a regional master plan, the Workshop created a matrix to first gauge how Keuka municipalities address sustainability goals, and then used those findings to assess sustainability goals watershed-wide scale.

The Goals and Action Items Matrix (see Appendix) categorizes a wide range of sustainability action items into overarching goals. The first six goals come directly from LULA's 2009 Keuka Lake Watershed Land Use Planning Guide, and they include: Steep Slopes; Working Agriculture Protection and Enhancement; Regional Resources; Keuka Lake Water Quality; Sustainable Development; and Focusing on New Growth in Village/Hamlet Areas. The Workshop scored comprehensive plans strictly on the action items that one might find in a plan (**bold font** on the matrix) rather than in existing legislation (shaded gray on the matrix). This is to avoid duplicating other regional parties' ongoing efforts to analyze zoning and other regulations. Since many municipalities published their comprehensive plans before the 2009 Guide, we also did not analyze action items that focused on efforts created in or after 2009.

The remaining goals are based on the commonly accepted "sustainability pillars"--Environment, Economy, and Equity. The Workshop included these goals to be consistent with larger Sustainable Keuka Watershed initiatives and to supplement the 2009 Land Use Planning Guide. Each goal contains action items that emerged from past Workshop projects, discussions with regional stakeholders (government and community members), and additional insight from this year's Workshop. Together, these goals consolidate research from past projects and ongoing regional efforts (i.e. Keuka Lake Association, Southern Tier Central Regional Planning & Development Board) to help streamline the planning process within the Keuka Lake Watershed.

Each action item on the matrix received a score of either a 1, 2, or 3. 1 means that the comprehensive plan minimally addresses or does not address the action item; 2 means that the comprehensive plan satisfactorily addresses the action item; and 3 means that the comprehensive plan goes above and beyond to address the action item in great detail. We summed each municipality's score on a given action item to gauge how well the watershed (as a whole) addresses that action item. Since there are eight comprehensive plans in the watershed, and the highest action item score is 3, the highest possible watershed-wide score on an action item is 24.

To target sustainability action items with the most opportunity for improvement, we provided recommendations for action items with watershed-wide scores of 15 or less. This assumes that the majority of comprehensive plans scored either a 1 or 2 on a given action item. Figure 9 identifies the action items with the lowest scores.

Figure 9: Opportunities for Watershed-Wide Sustainability Improvements

Action Item	Watershed-Wide Score (out of 24)
Action 4.4.B: Support the environmental stewardship objectives of the Great Lakes Basin Compact	8
Action 4.4.I: Publicize the availability of the revised Keuka Lake Book, which includes Best Management Practices (BMP) for homeowners in the watershed.	8
Action 4.2.D: Encourage farmers to participate in New York State's Agricultural Environmental Management (AEM) program.	10
Address food systems planning	10
Action 4.2.E: Encourage farmers to participate in New York State's Conservation Reserve Enhancement Program (CREP).	11
Action 4.2.F: Publicize information about farm and viticulture operations to non-farm residents	11
Action 4.6.B: Include hamlet zoning districts within municipal Zoning laws	11
Action 4.1.B: Consider adopting a municipal steep slope development law.	12
Action 4.4.D: Support efforts that minimize invasive and exotic animal and fish species/non-native plants	12
Action 4.4.E: Protect watercourses by requiring setbacks from streams and gullies that feed into the lake.	12
Action 4.4.F: Reduce the use of pesticides and fertilizers on private yards, farm fields, and vineyards	12
Action 4.2.H: Research and support Purchase of Development Rights (PDR) programs for local farmers.	13
Action 4.6.G: Encourage local planning and development practices that address biodiversity conservation.	13
Action 4.2.G: Publicize information about agricultural conservation easements to local landowners	14
Action 4.5.D: Consider the location of existing and proposed roadways and roadway access (driveways) when reviewing and permitting new development.	14
Nominate eligible historic sites towards the national register for tourism, better funding etc.	14

Address Amish and Mennonite population	14
Action 4.4.A: All municipalities should continue to support the Keuka Lake Association (KLA), the Keuka Watershed Improvement Cooperative (KWIC), and the Keuka Lake Outlet Compact (KLOC).	15
Action 4.5.C: Promote sustainable agriculture and viticulture	15
Action 4.5.H: Include environmental considerations as a component of Site Plan approvals	15
Action 4.5.I: Require an assessment of water supply and treatment capabilities as a component of municipal review of proposed development projects.	15

The actions items in Figure 9 represent opportunities for the Keuka region to think more extensively about sustainability-related initiatives, and they serve as the basis for our recommendations in the next section. These areas demonstrate the wide range of topics that go into sustainable watershed planning.

Recommendations

We scored each sustainability action item in the gap analysis on a scale ranging from 1 to 3. A score of 1 indicates that the plan minimally or fails to address the action item; a score of 2 indicates that the plan sufficiently addresses the action item; and a score of 3 indicates that the plan goes above and beyond to provide details relating to the action item. The highest watershed-wide score that each action item can receive is a 24, since there are eight municipal plans that address land use and development within the Keuka Lake watershed (a score of 3 x 8 plans=24). If all plans scored a 2 on an action item, the watershed-wide score would equal 16. To assist municipalities address issues that appear to be challenging throughout the watershed, we have limited our recommendations in this plan to action items which had watershed-wide scores that totaled 15 or less (assumes that at least one plan scored a 1 on that action item). We did not factor in action items that called for plans to reference specific regional efforts that were implemented after the Keuka Lake Watershed Land Use Planning Guide was drafted in 2009, as this would skew scores. The following recommendations, based on action items that scored a 15 or less, are intended to help guide watershed stakeholders as they think about investments that make the most sense for their communities and the Keuka region as a whole.

Action 4.1.B: Consider adopting a municipal steep slope development law.

Score: 12/24

1. **Action item description:** Municipalities can adopt zoning codes and/or building codes that limit or prohibit construction on steep slopes.

2. **Why address this action item on a watershed scale:** Disturbing steep slopes can lead to increased erosion, siltation, excessive removal of vegetation and soil, flooding, soil slippage, water runoff, and destruction of unique landforms and scenic vistas. A regional effort to protect against development or overdevelopment on steep slopes will contribute to the protection of water quality and the preservation of the Keuka Lake viewshed.

3. **Why the action item scored low:** The majority of municipalities minimally address steep slope development concerns, and few plans address regulating construction and site planning with consideration of steep slopes, prime agricultural soils, woodland management and scenic view protection. The Town of Jerusalem significantly deals with concerns and potential consequences of overdevelopment on steep slopes and can provide guidance for regional municipalities.

4. **Regulatory recommendations:**
   a. Municipal governments should use their comprehensive plan to state preferences for preserving hillsides, viewsheds, and other natural resources with a goal to limiting development on steep slopes. Further, the comprehensive plans can help direct where growth will occur by specifying future capital improvements for the municipality, such as where infrastructure will be expanded. Land use plans sensitive to unique environmental conditions such as steep slopes can support regional efforts to promote long-term environmental resilience.

      Municipalities can incorporate zoning regulations and adopt subdivision and land development ordinances to prevent the disturbance and development of steep slopes.

5. **Non-regulatory recommendations:**

   a. Limiting infrastructure expansion on steep slopes with targeted land use strategies can discourage development in these areas.

   b. Establishing subdivision regulations that require sufficient flat land for building construction and restricting the construction of streets or utility lines on steep slopes can redirect development to topographically preferable regions.

   c. Educating your municipal planning board, zoning boards of appeals, and elected officials on the negative consequences of developing steep slopes will provide the background needed to make educated decisions that benefit the residents of the municipality and save the municipality money.

Action 4.2.D: Encourage farmers to participate in New York State's Agricultural Environmental Management (AEM) program.

Score: 10/24

1. **Action item description:** The New York State Agricultural Environmental Management (AEM) program is a voluntary, incentive-based program aimed at protecting the State's natural agricultural resources while maintaining the economic viability of its farms. The program is established by the New York State Soil and Water Conservation Committee and the New York State Department of Agriculture & Markets. Farmers can participate in AEM through their respective Soil and Water Conservation Districts (SWCDs)—the State is divided into 58 such districts. The entire Keuka Lake watershed falls under two such districts: the Steuben County SWCD, and the Yates County SWCD.

   The major avenue through which AEM funding is made available to farms is the AEM Base Funding which provides non-competitive funds to all participating SWCDs. In addition, an annual, state-wide AEM award is granted to a winning farm for its environmental stewardship efforts. AEM also has a few other programs under its umbrella. Farmers willing to participate in the program are assisted by local AEM resource professionals through its five tiers or steps.

2. **Why address this action item on a watershed scale:** The AEM approach is carried out within the context of a holistic watershed planning effort whenever possible. This makes sense because the conservation efforts of individual farms in the watershed are interlinked with the conservation of Keuka Lake's overall ecosystem. A challenge that municipalities would face while coming up with a watershed-level AEM plan is that the watershed falls under two different SWCDs (and AEM funding is administered through these districts). The municipalities could look at the way other watersheds have worked out such inter-district collaboration.

3. **Why this action item scored low:** Except for one, all other towns in the Keuka Lake watershed have not mentioned the AEM program in their respective comprehensive plans. This could be because, unlike some of the State's SWCDs that have published their AEM strategies on the web, both the Steuben and Yates county SWCDs have no such readily accessible information on the internet.

4. **Regulatory recommendations:** None**.**

5. **Non-regulatory recommendations:**

   a. All the municipalities in the watershed would benefit from mentioning basic information about the AEM program in their respective comprehensive plans to make the public aware of this funding option.
   b. Publicizing information about the program through municipal websites and through brochures made available at community meetings and other public events can increase public awareness. Such information could be accompanied by the link to the NYS Soil and Water Committee website, which explains the program in good detail. A list of past recipients of the state-wide annual AEM grant in the watershed and the two Soil Water Conservation Districts could be included as well. Interested farmers could learn from these recipients' firsthand experience.
   c. Towns in the Keuka Lake watershed could publicize contact information for certified AEM planners from the State's Certified Planner Directory to help interested farmers get further information and application guidance.

Action 4.2.E: Encourage farmers to participate in New York State's Conservation Reserve Enhancement Program (CREP).

Score: 11/24

1. **Action item description:** The New York State Conservation Reserve Enhancement Program (NYS CREP) is a $62 million streamside conservation program established by the State in partnership with the US Department of Agriculture (USDA) in December 2003. The program provides financial incentives to farmers, through 10- to 15-year contracts, to create vegetative buffers along streams in 12 major watersheds of the State (which includes the Keuka Lake watershed). The program aims to reduce pollution in streams caused by soil erosion and pesticide and nutrient runoff by helping farmers to voluntarily plant trees, shrubs, and grasses on stream banks instead of cropland (which does not prevent pollution as well as the aforementioned options).

   Under the NYS CREP participating farmers receive various financial incentives to compensate for their loss of productive agricultural land. Farmers can be eligible for annual rental payments, annual maintenance payments, cost-share assistance, practice incentive payments, and signing incentive payments.

2. **Why address this action item on a watershed scale:** The water quality of any stream and wetland in the Keuka Lake watershed affects the water quality in other streams, wetlands, and the lake. Therefore, it is important for towns to address the NYS CREP at the watershed-wide level as a funding source to conserve the region's water resources.

3. **Why this action item scored low:** Like the AEM program, most towns in the Keuka Lake watershed have not mentioned CREP in their respective comprehensive plans. Perhaps a reason for not mentioning the program in the watershed's municipal comprehensive plans is that the watershed has already achieved significant water quality improvement under its KWIC initiative.

4. **Regulatory recommendations:** None.

5. **Non-regulatory recommendations:**
   - **a.** Incorporating the NYS CREP program in municipal comprehensive plans as a beneficial and recommended resource can reinforce the commitment of watershed municipalities to conserve the health of the watershed's water resources.
   - **b.** Towns in the Watershed could publicize information about the program through their websites, and through brochures to be distributed at community meetings and other public events.

Action 4.2.G: Publicize information about agricultural conservation easements to local landowners

Score: 14/24

1. **Action item description:** A conservation easement is a written legal agreement between a landowner and a government entity or land trust (a private, non-profit conservation organization) that permanently restricts a property's uses to protect its conservation values.

2. **Why address this action item on a watershed scale:** Municipalities can support the protection of unique natural resources by making available information regarding conservation easements and other state and federal funding programs to private landowners interested in promoting the long-term protection of their property.

3. **Why the action item scored low:** The region-wide score for this goal is 14; two municipalities scored 3, two scored 2, and four scored 1. Both Hammondsport/Urbana and Barrington have developed a comprehensive framework for publicizing agricultural conservation easements.

4. **Regulatory recommendations:** None.

5. **Non-regulatory recommendations:**
   a. The agriculture conservation easement concept should be addressed explicitly in comprehensive plans as part of a broader strategy that encourages the preservation of the watershed health and rural character.
   b. Towns can utilize press releases, media events, brochures, and web-based information dissemination to inform land owners on how to aquire conservation easements and to explain their benefits to the community. This may generate more landowners interested in conserving their properties.

Action 4.2.H: Research and support Purchase of Development Rights (PDR) programs for farmers

Score: 13/24

1. **Action item description:** Purchase of Development Rights (PDR) involve purchasing a conservation easement from a landowner to ensure that the land remains as farmland or open space for perpetuity. Landowners receive the funds upfront which can provide valuable financial resources to protect the land.

2. **Why address this action item on a watershed scale:** PDR is an important consideration for the Keuka Lake Watershed if it is looking to preserve the region's characteristic agricultural lands and scenic viewsheds. PDR programs not only help preserve the landscape, but they also provide upfront financing to farmers who can then use the sale cost of the conservation easement for their operations.

3. **Why the action item scored low:** Some watershed municipalities address PDR programs in their comprehensive plans, though most of them do not, hence the low score in this category. Because the watershed's priorities include preserving its unique landscape and fostering its agricultural roots, PDR programs can provide landowners with the guidance and funding to support regional priorities. The New York Farm Bureau provides a helpful summary of PDR programs.

4. **Regulatory Recommendations:**
    a. Consider the viability of tax incentives that promote the implementation of PDR programs.

5. **Non-regulatory Recommendations:**
    a. Educate municipalities and regional stakeholders about PDR programs as an option to achieve watershed agriculture and viewshed goals.
    b. Encourage municipalities to apply for state and federal PDR program funding.

Action 4.4.A: All municipalities should continue to support the Keuka Lake Association (KLA), the Keuka Watershed Improvement Cooperative (KWIC), and the Keuka Lake Outlet Compact (KLOC).

Score: 15/24

1. **Action item description:** The Keuka lake Association (KLA), the Keuka Watershed Improvement Cooperative (KWIC), and the Keuka Lake Outlet Compact (KLOC) are regional organizations dedicated to preserving and protecting Keuka Lake and its natural beauty for future generations; protecting and improving the purity of waters in the Keuka Lake Watershed by planning for uniform regulation of wastewater management; pursuing appropriate actions to address emerging potential threats to Keuka Lake; and managing water levels and maintaining the outlet gates. These regional groups help bring community members and elected officials from across the watershed together to advance common goals.

2. **Why address this action item on a watershed scale:** By participating in these organizations, regional municipalities can benefit from sharing their knowledge and experiences in addressing common challenges. Participating in regional organizations allows communities to leverage local resources, increase opportunities to successfully implement initiatives, and share best practices developed in response to local conditions. Collaboration across the watershed will help promote the efficient sharing of community knowledge and increase opportunities to implement region-wide practices.

3. **Why the action item scored low:** While the comprehensive plans for Hammondsport/Urbana and Wayne mention cooperation between municipalities and reference the Keuka Lake organizations dedicated to protecting and preserving the watershed, other municipalities have not yet incorporated these resources into their plans.

4. **Regulatory recommendations:**
    a. As necessary, continue efforts with the Keuka Watershed Improvement Cooperative (KWIC) to implement high quality septic system construction and maintenance to ensure pollutants do not enter the lake.

5. **Non-regulatory recommendations:**
    a. Municipalities should leverage KLA, KWIC, and KLOC organizational resources and expertise to address regional environmental and development concerns to include pesticide and fertilizer use; environmentally sound construction and development practices; land use policies; environmental education (invasive species impacts, boating policies, etc.); and all other issues that affect more than one municipality.
    b. The list of recommendations in this plan are all strong candidate topics that these regional organizations can help promote and/or implement across communities.

Action 4.4.B: Support the environmental stewardship objectives of the Great Lakes Basin Compact

Score: 8/24

1. **Action item description**: The Great Lakes-St. Lawrence River Basin Water Resources Compact (Great Lakes Basin Compact) is a legally binding interstate compact among eight states and the federal government designed to protect the Great Lakes ecosystems. All surface water, groundwater, and tributaries within the basin are included as protected waters. Ensuring high water quality is an important element of the Compact. Because the Keuka Lake waters eventually flow into Lake Ontario, watershed municipalities are all subject to this Compact. New York State has adopted water use policies pursuant to the Great Lakes Basin Compact.

2. **Why address this action item on a watershed scale:** The Compact establishes guidelines for water withdrawal and diversion which can potentially impact local large scale agricultural water users. The Compact also establishes a process for water to be returned to the basin in better condition than when it was withdrawn. Keuka Lake residents can take advantage of the Great Lakes Basin Compact network to help advance strategies that maintain the AA water quality valued by local residents.

3. **Why the action item scored low:** The Compact was signed in 2008. Many of the comprehensive plans for Keuka Lake Watershed communities were drafted prior to 2008 and therefore have not yet had an opportunity to include verbiage about the agreement. We encourage all communities to discuss how local water management decisions affect Keuka Lake's water quality individually and within the context of the Great Lakes Basin.

4. **Regulatory Recommendations**:
    a. As part of the Compact, New York State has established that no single user may withdraw more than 100,000 gallons of water per day. No regulations specific to the Compact are recommended for local plans, but additional regulatory suggestions are available from the NYSDEC.

5. **Non-regulatory Recommendations**:
    a. The National Wildlife Federation (NWF) plays a significant role in managing and advocating for the Compact. Municipalities or local organizations may be able to partner with the NWF to secure grant funding for lake protection.
    b. Keuka Lake municipalities can potentially take advantage of other Compact resources to access watershed protection funding.

Action 4.4.D: Support efforts that minimize invasive and exotic animal and fish species/non-native plants

Score: 12/24

1. **Action item description:** The term "invasive species" broadly refers to non-native organisms, ranging from rooted aquatic plants and algae to animals, bacteria, viruses, and insects, which can harm the environment and people. Some invasive species can dramatically alter the native landscape by damaging, displacing, or killing valued plants and animals.

2. **Why address this action item on a watershed scale:** The Keuka Lake Watershed is valued for its agricultural heritage and natural landscape, as well as for its healthy lake. Comprehensive plans can help guide local strategies to monitor and control for invasive species. Some invasive species have a devastating economic impact on communities. For example, the zebra mussel has caused millions of dollars of damage to municipal water systems and hydropower plants because they have grown inside intake and outlet pipes, blocking the flow of water.

3. **Why this action item scored low:** As of 2015, only a limited number of municipalities have addressed the threat of invasive species in the watershed. Increased awareness and local action to address invasives can help the watershed advance strong management practices that help protect the area's valuable land and water resources.

4. **Regulatory Recommendations:** Unwanted and invasive water species can be controlled with a variety of regulations.
    a. Boats and watercraft are often responsible for transporting organisms between lakes. Boating impacts can be reduced by requiring boat owners to clean their hulls prior to entering Keuka Lake from another lake, and their hulls should be washed away from waterways that enter the lake.
    b. Bait buckets used by anglers also have transported organisms between lakes. All bait buckets should be cleaned between fishing trips, and they should be washed on land so that organisms do not flow into Keuka Lake.
    c. Aquarium plants and unwanted fish are often deposited into local waters when owners no longer want to keep an aquarium. Releasing aquarium organisms into local waters can harm local ecosystems. Regulations that prohibit the release of aquarium water and organisms into local waters can help protect Keuka Lake from invasive species.

5. **Non-regulatory recommendations:**
    a. New York State has a number of programs to assist communities in identifying and managing for invasive species. The Partnerships for Regional Invasive Species Management (PRISM) program is designed to help with education, early detection, and rapid response and management of invasive species.
    b. Unwanted plants in the water (lake weeds) can be controlled through a variety of techniques. Common plant management strategies use physical, mechanical, chemical, and biological control techniques to target specific unwanted species. Each technique has associated costs and best practices, so communities should consult with local extension agents or other experts to design appropriate techniques.
    c. Unwanted animals and organisms are more difficult to manage than plants. Again, communities can partner with or consult with extension agents to design appropriate strategies to manage for invasive animals.

Action 4.4.E: Protect watercourses by requiring setbacks from streams and gullies that feed into the lake.

Score: 10/24

1. **Action item description:** Watercourse protection is a man-made activity for the purpose of protecting continuous water flows and drainage facilities, preventing damage due to flooding, and restricting discharge of pollution.

2. **Why address this action item on a watershed scale:** Wetland setbacks are important in two ways: buffer zones can help protect waterways from pollution and degradation; and setbacks can protect homes and other structures from flooding that can result from being built in vulnerable areas along waterways. Implementing protective measures can protect both waterways and structures from mutually damaging impacts. Waterway setbacks will help the region increase resilience to climate change impacts and projected extreme weather events.

3. **Why this action item scored low:** The Barrington Urbana/Hammondsport comprehensive plans have incorporated setbacks as a wetlands and waterway protection tool. However, other municipalities only minimally indicate setbacks and do not broadly discuss the importance of protecting wetlands and waterways.

4. **Regulatory recommendations:**
    a. Create an administrative mechanism to certify that projects comply with approved zoning policies regarding encroachments. A common standard is a 100 foot setback. A mandatory inspection by a building official or code enforcement officer should be mandated as part of the site approval process.
    b. Create an electronic inventory of all properties granted variances for construction within the 100-foot setback that specifies the approval and conditions of that approval.

5. **Non-regulatory recommendations:**
    a. In addition to immediate waterway protection, municipalities can reference flood maps to establish long-term land use policies.

Illustration credit to Kemberli

Action 4.4.F: Reduce the use of pesticides and fertilizers on private yards, farm fields, and vineyards

Score: 12/24

1. **Action item description:** Pesticide and fertilizer use on farmland and private yards can have a negative impact on watershed health when applied without following best management practices.

2. **Why address this action item on a watershed scale:** Fertilizers are an important component of agricultural production. However, when excessive fertilizer is used or if it is applied in a way that leads to fertilizer runoff into local waters, the increase in aquatic nutrients can lead to eutrophication and upset the balance of aquatic ecosystems. High nutrient levels are responsible for lake "slime" caused by the over-abundance of algal growth. Unfortunately, fertilizer runoff can cause aquatic plants to grow rapidly. This growth consumes valuable aquatic oxygen and can lead to the death of fish and other organisms. Both agricultural users and homeowners apply fertilizers to enhance plant growth, and it is important that fertilizer users practice good management techniques to prevent fertilizer runoff. Pesticides are widely used in agricultural production and by homeowners to keep away or kill unwanted pests. Due to their chemical nature, pesticides rarely leave the environment. Their long-term presence and lethal impact makes it imperative to control how and when pesticides are applied. Pesticide residue is often detected in shallow groundwater beneath both agricultural and urban lands. Pesticides have also been found in fish, although pesticide residue specifically in Keuka Lake is unknown. Even small quantities of pesticides can affect the reproduction and growth of amphibians and aquatic organisms that enter the water.

3. **Why this action item scored low:** Although the KLA has been very successful in addressing nutrient runoff originating from septic tanks, the long-term protection of Keuka Lake will require the use of best management practices for both fertilizer and pesticide applications. As of 2015, fertilizer and pesticide management was not well addressed in many of the watershed's comprehensive plans.

4. **Regulatory Recommendations:**
    a. The agricultural industry has been identified as a source of high nutrient runoff, and many best management practices now exist to assist farmers in handling and disposing of fertilizers. Regulations can ensure that fertilizer are stored properly to avoid spills and that storage facilities are located over 100 feet from a well to protect the wellhead.
    b. Agricultural pesticides are currently fairly well regulated and farmers have access to well-prepared educational materials. Homeowner use of pesticides is not well managed, and regulation may be difficult. However, regulatory considerations can include minimizing the application of pesticides to lawns and ensuring the proper disposal of residual waste by prohibiting the dumping of pesticide waste down the drain.

5. **Non-regulatory Recommendations:**
    a. Non-regulatory mechanisms to decrease fertilizer use by farmers can include providing access to educational materials; encouraging crop rotation when possible; and managing stormwater runoff that can carry fertilizers into the lake by creating vegetated buffers that can capture runoff. Homeowners can also reduce fertilizer use by selecting native plants and grasses that do not require much fertilization. They can also plant vegetated buffers that capture runoff.
    b. To help address homeowner use of pesticides, municipalities can provide educational materials about the impact of pesticides on local organisms and encourage the use of integrated pest management strategies. To assist homeowners with disposal, waste management companies can establish hazardous-waste collection days if they do not yet exist.

Action 4.4.I: Publicize the availability of the revised Keuka Lake Book, which includes Best Management Practices (BMP) for homeowners in the watershed.

Score: 8/24

1. **Action item description:** The Keuka Lake Book contains best management practices (BMP's) targeting homeowners. BMP strategies can help residents contribute to protecting and improving watershed health. These BMP's cover advice for water treatment, septic systems, shoreline development, drainage and development, lawn and garden management, and more.

2. **Why address this action item on a watershed scale:** Region-wide cooperation is necessary to ensure the long-term health of Keuka Lake and the watershed.

3. **Why this action item scored low:** Although most plans mentioned the Keuka Lake Association, few discussed the Keuka Lake Book and specific BMP's.

4. **Regulatory recommendations:** None.

5. **Non-regulatory recommendations:**
   a. Improve distribution and access. It is difficult to find the link to the Book on the KLA website. A direct and intuitive link will enable better access to the Book.
   b. Increase awareness of the book. Send a postal/email "postcard" to current homeowners informing them of the publication and how to access it.
   c. Educate residents (homeowners/general public) on how they will benefit by incorporating recommended BMP's.
   d. Collaborate with real estate agents to provide a copy of the book to new homeowners.
   e. The revised edition should be distributed by local development boards to homeowners.
   f. Revise and update the Keuka Lake Book as needed to provide clear and concise information that is complemented by creative, informative, graphics. Visuals and graphics are especially important in educating the public.

Action 4.5.C: Promote sustainable agriculture and viticulture

Score: 15/20

1. **Action item description:** Comprehensive plans in the Keuka Watershed should specifically consider the importance of sustainable agriculture and viticulture in the region.

2. **Why address this action item on a watershed scale:** This goal is important for two main reasons. First, sustainable agriculture and viticulture help preserve the rural agricultural character of the region. This goal is also important because wineries, in particular, are an important element of the regional economy that can attract tourists to the region.

3. **Why this action item scored low:** Although many comprehensive plans mentioned viticulture as an important element of the local economy, few plans identified how land use policies could be leveraged to further promote viticulture and sustainable agriculture activities.

4. **Regulatory recommendations:**
   a. Localities can amend zoning codes to further facilitate the creation and operation of small-scale commercial operations on wineries.

5. **Non-regulatory recommendations:**
   a. Local comprehensive plans should specifically outline how the needs of viticulture operations and local sustainable agriculture will be considered when big decisions are made by localities that could impact the viability of these sectors.
   b. Local planning should promote viticulture through marketing and public/nonprofit tourism organizations.

Action 4.5.D: Consider the location of existing and proposed roadways and roadway access (driveways) when reviewing and permitting new development.

Score: 14/24

1. **Action item description:** This action ensures the full consideration of existing proposed roadways and roadway access connectivity to other points of the region when a new development is under review. The roadways that should be considered include: NYS roadways, county roads, town roads, village roads, unpaved/dirt roads, bikeways along roadway shoulders, designated trails, bridges, and parking facilities.

2. **Why address this action item on a watershed scale:** Roadway planning is a process that requires inter-municipal cooperation across differing levels of government and group responsibility shared among the cities, towns, and hamlets within the region. Road construction and maintenance is an expensive endeavor that requires leveraging resources from the regional, state, and federal governments.

3. **Why this action item scored low:** As of 2015, although transportation related actions are considered a central part of municipal planning processes, only a limited number of municipalities have addressed roadway and traffic planning in their comprehensive plans.

4. **Regulatory recommendations:**
    a. Regulations to preserve the appearance, character, and scenic features of roadways should be required.
    b. New construction should ensure roadway maintenance considerations.

5. **Non-regulatory recommendations:**
    a. Roadway considerations should assist in improving traffic flow.
    b. The municipalities should improve coordination with NYSDOT in order to evaluate traffic impacts when reviewing and permitting new developments.

Action 4.5.H: Include environmental considerations as a component of Site Plan approvals

Score: 15/24

1. **Action item description:** Site plan approval considerations refer to specific environmental impacts when site plans are approved. Complex relationships exist between a proposed construction development and its environment. Some examples are:
    ii. Relationships/conflicts with adjacent and nearby land uses
    iii. Relationships/conflicts with existing and proposed traffic patterns
    iiii. Relationships/conflicts with existing and proposed water supply, sewage disposal, and other utility services
    ivi. The community's ability to provide educational resources and fire protection, etc.
    vi. The visual compatibility with other buildings
    vii. Effect on air and water quality standards, especially for industry-related buildings
    viii. Effect on energy consumption and conservation

2. **Why address this action item on a watershed scale:** Keuka Lake is valued for its high water quality, rural character, and beautiful viewsheds. Inattentive site plan approvals can lead to adverse environmental and viewshed impacts; buildings constructed without consideration for slopes or waterway setbacks can negatively impact water quality by contributing to unnecessary runoff. Buildings constructed in large open lots or built larger than the "standard" local scale can disrupt the scenic rural nature of the Keuka Lake viewshed. Comprehensive plans can discuss the important role site planning plays in shaping the overall character of the region.

3. **Why this action item scored low:** Most comprehensive plans in the watershed area briefly discuss the importance of site plans for new developments and historic preservation. However, a holistic approach that incorporates environmental considerations and regional character should be explicitly stated as goals for moving into the future.

4. **Regulatory recommendations:**
    a. Requirement to prepare a Draft Environmental Impact Statement (DEIS) and an EIS as per the State Environmental Quality Review Act (SEQRA)
    b. A stricter framework through the help of committees at the watershed level when the environmental effects of a project could impact other municipalities.

5. **Non-regulatory recommendations:**
    a. Be updated on the NEPA process specific to the types of construction in the Keuka Lake watershed.

Figure xxx – Comparing the impact of a building's siting on the landscape and viewshed. In the top image, the building is located in the middle of the field. The building is nestled into the treeline in the bottom image. A building's location, size, and color can dramatically change the viewshed.

Illustration credit to Kemberli and George

Action 4.5.I: Require an assessment of water supply and treatment capabilities as a component of municipal review of proposed development projects. (A subset of the previous action)

Score: 15/24

1. **Action item description:** Any proposed development project is subject to municipal review and one of the many ways that the new project can affect the community is its consumption of water both in terms of supply and treatment. If the municipal review itself has a component to assess the effects of the new development on the water infrastructure, municipalities are better prepared in the long run.

2. **Why address this action item on a watershed scale:** Drinking water for Keuka Lake watershed residents comes from the lake or wells. There have been issues of fecal contamination especially during the summer months [Keuka Lake Book]. When new development projects spring up quickly, the water supply and treatment capabilities cannot always match the additional demand. Prior to building permit approval, an assessment of existing capabilities is necessary to determine if facilities are sufficient or whether additional facilities will need to be built.

3. **Why this action item scored low:** Septic tanks seem to be the most common strategy used for dealing with waste water. However, variable soils in the area makes it difficult for everyone to adopt septic tanks as the go-to strategy. The comprehensive plans could indicate a need for a more widespread waste water treatment plant that is beneficial to all in the community and also meets the expanding needs of new development projects.

4. **Regulatory recommendations:**
   a. Requirement to prepare a Draft Environmental Impact Statement (DEIS) and an EIS as per the State Environmental Quality Review Act (SEQRA)

5. **Non-regulatory recommendations:**
   a. Be updated on the NEPA process specific to the types of construction in the Keuka Lake watershed.

Action 4.6.B: Include hamlet zoning districts within municipal zoning laws

Score: 11/24

1. **Action item description:** Including hamlet zoning strategies in regional comprehensive zoning regulations can encourage small and dense hamlet-scale development that is attractive to tourists and promotes economic opportunities. For the region as a whole, the substantial historic value attached to hamlets can be leveraged for additional economic benefits.

2. **Why address this action item on a watershed scale:** Encouraging hamlet-scale zoning across the watershed can create a cohesive "character" for the region. A thematic development approach can contribute to the region's reputation and add charm as a comprehensive and scenic attraction.

3. **Why this action item scored low:** The majority of references to hamlets in the reviewed comprehensive plans address issues of agricultural development. The practice of "hamlet zoning" has a more focused definition related to small, compact, walkable, rural communities; this concept is not addressed well by any of the plans.

4. **Regulatory recommendations**
   a. Incorporate zoning regulations that allow developments in hamlets to take advantage of the historic, environmental, and economic potential of the area.
   b. Align municipal land use plans to the regional land use plan (and vice versa).

5. **Non-regulatory recommendations:**

   a. Enhance the business/cultural/transportation interconnection between municipalities by networking planning efforts across municipalities.

Action 4.6.G: Encourage local planning and development practices that address biodiversity conservation.

Score: 13/24

1. **Action item description:** Comprehensive plans should identify, or establish processes to identify, the distribution natural landscape such as wetland, bushland and forest as well as individual species or resources that are significant to biodiversity. Decision-making processes as well as implementation strategies such as land use zonings and policies at the local level should be developed to aim at the protection of those sites and resources.

2. **Why address this action item on a watershed scale:** The goal is important for two major reasons. First, resources for biodiversity contribute greatly to both environmental sustainability and unique local landscape characteristics. Secondly, while many agencies and individuals in the watershed area have made great efforts to biodiversity conservation, their work are often fragmented and uncoordinated, which calls for a regional biodiversity conservation framework across the whole watershed area.

3. **Why this action item scored low:** The region-wide score for this goal is 13, with one town scored 3, three scored 2 and four scored 1. Only Hammondsport/Urbana has developed a comprehensive strategy for biodiversity conservation. Many towns have mentioned biodiversity conservation or issues related to it in the comprehensive plan. Others did not incorporate biodiversity conservation in their comprehensive plan.

4. **Regulatory recommendations:**
    a. Developing a conservation opportunity framework. The framework can provide a basis for identifying area of high biodiversity significance and risk as well as strategies to conserve those resources at the regional level.
    b. Developing a set of regional maps to guide biodiversity conservation. The maps can assist the framework by accessing the distribution of species, plant communities and ecological systems across Keuka Watershed area, to identify regional opportunities for biodiversity conservation.

5. **Non-regulatory recommendations:**
    a. Developing incentives and market mechanisms to encourage voluntary actions that conserve biodiversity on private lands.
    b. Educating and engaging the public to provide Keuka Lake Watershed residents with information about the value of biodiversity and the steps they can take to help conserve it.

Consider the needs of Amish and Mennonite (Plain Sect) residents in land use policy

Score: 14/24

1. **Action item description:** Comprehensive plans in the Keuka Watershed should specifically consider the needs of Amish and Mennonite residents. Plans should identify how land use policy and zoning codes will impact the livelihoods of Plain Sect residents in the region.

2. **Why address this action item on a watershed scale:** The Plain Sect population continues to grow in the Keuka Lake watershed region, and it is important that area governments consider the contributions and needs of this population. Plain Sect populations help preserve the rural agricultural character of the region and their farming activities have helped return abandoned farmland to working landscapes. Plain Sect residents tend to avoid involvement in local government and they do not tend to advocate for policy changes on their own behalf. As a result, it is important that land use planning in the region give attention to the needs of Plain Sect residents.

3. **Why this action item scored low:** The region-wide score for this goal was low because very few of the comprehensive plans even mentioned Amish or Mennonite populations. The comprehensive plans that did tended to only mention the groups as a demographic statistic and did not explain how these groups are impacted by land use policies.

4. **Regulatory recommendations:**
    a. Municipalities should consider amending residential zoning codes to allow for multi-generational housing units in order to support the social and familial practices of some Plain Sect groups.
    b. Localities can also amend zoning codes to facilitate the creation and operation of small-scale commercial businesses co-located on the farm properties of Plain Sect residents (such as farm stands, etc.)

5. **Non-regulatory recommendations:**
    a. Local comprehensive plans should specifically outline how the needs of Plain Sect residents will be incorporated and/or considered as part of broader land use planning policy discussions.
    b. Transfer of development rights (TDR) and purchase of development rights (PDR) are options to preserve farmland and ensure Plain Sect residents have long term livelihood security.

Address food systems planning

Score: 10/24

1. **Action item description:** The American Planning Association defines a food system as "the chain of activities beginning with the production of food and moving on to include the processing, distributing, wholesaling, retailing, and consumption of food, and eventually to the disposal of food waste."

2. **Why address this action item on a watershed scale:** The Keuka Lake Watershed is abundant with agriculture and viticulture, which drive much of the regional economy. Some community members explained that a more streamlined, cost effective way of bringing food to market would benefit the Keuka region—both from environmental and financial standpoints. By focusing on access to healthy food, the watershed can also use food systems planning as a creative way to improve community health.

3. **Why this action item scored low:** This category scored low because none of the municipal plans explicitly address food systems planning. However, food systems as a formal area of planning has only just become popular in the last decade, which could be why the plans do not officially address it.

4. **Regulatory recommendations:**
   a. Consider the viability of a local Food Policy Council, which can be an efficient way to unite watershed stakeholders around food systems concerns. The Council can exercise influence over a wide array of food topics, including food access for low income households and zoning area to allow farming. For more information, see http://www.statefoodpolicy.org/?pageID=qanda.

5. **Non-regulatory recommendations:**
   a. Encourage the construction of a regional slaughterhouse to help farmers save money on production and transportation costs. A slaughterhouse will ideally create new jobs and business opportunities in the region.
   b. Consolidate farmers markets to key communities and days of the week. Some vendors feel that they are stretched too thin with time and money because so many watershed communities promote their own farmers markets. Larger, consolidated markets would aim to alleviate vendor concerns and make farm-to-table efforts more lucrative.

Nominate eligible historic sites towards the national register for tourism, better funding etc.

Score: 14/24

1. **Action item description:** The National Register of Historic Places recognizes the historical significance of structures and neighborhoods. is a good way to seek more opportunities in tourism, fundraising and community development.

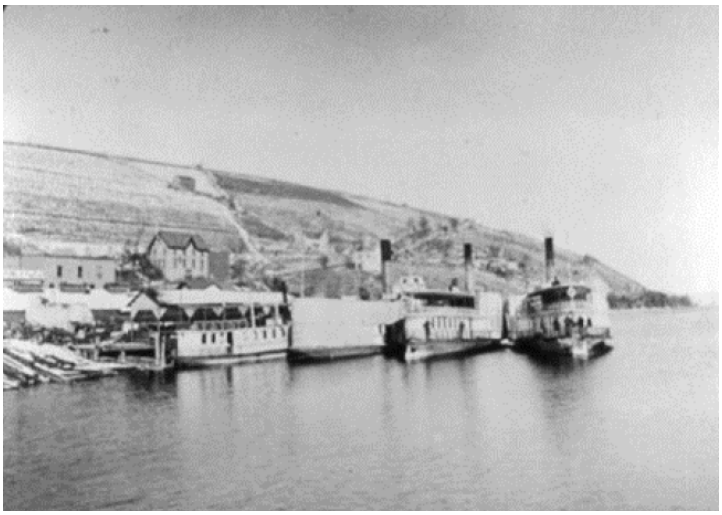
2. **Why address action item on a watershed scale:** Historic sites are distributed across the whole watershed, and being on National Register of Historic Places brands the watershed, bringing attention on preservation and conservation of the watershed.

3. **Why action item scored low:** Historic resources are addressed among municipalities well, however, comprehensive plans lack mentioning the National Register of Historic Places.

4. **Regulatory recommendations:**
   - **a.** Encourage the property owners to preserve their historic properties through state programs. E.g., Tax Credit program provided by New York State, which provides a compensation of up to 20% tax credits in maintaining the historic buildings as long as the buildings are on the National Register of Historic Places.

5. **Non-regulatory recommendations:**
   - a. Provide public education programs to raise the local awareness in the importance of historic sites.
   - b. Initiate recognition program to expand the reputation of historic sites in order to bring them to the national scene.
   - c. Develop local and regional professional staff to preserve and interpret existing historic sites to the public.
   - d. Integrate an index of historic sites in the area.
   - e. Provide public access to historic resources. E.g., build museum that addresses the history of development.

Illustration credit to Kemberli



Summary

Appendix

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Appendix

Goals and Action Item Matrix

Goals and Action Items	Hammondsport/Urbana	Wayne	Pulteney	Branchport	Jerusalem	Penn Yan	Milo	Barrington	Watershed-wide score (out of 24)
4.1: Steep Slopes									
Action 4.1.A: Revise municipal comprehensive plans to include commentary on steep slope development issues.	3	2	1	1	2	3	2	3	**17**
Action 4.1.B: Consider adopting a municipal steep slope development law.	1	1	2	1	3	1	2	1	**12**
Action 4.1.C: Include steep slope development safeguards in municipal subdivision regulations.									**0**
Action 4.1.E: Produce educational materials about steep slope development issues for the public.									**0**
4.2: Working Agriculture Protection and Enhancement									**0**
Action 4.2.A: Encourage new development that is compatible with agriculture	3	2	1	1	3	2	3	3	**18**
Action 4.2.B: Preserve high quality and unique agricultural and viticultural areas by guiding non- agricultural development into other areas of the Watershed.									**0**
Action 4.2.C: Explore ways to advertise agriculture lands in the watershed that are up for sale across the country, perhaps through some sort of "Agriculture Development Agency."									**0**
Action 4.2.D: Encourage farmers to participate in New York State's Agricultural Environmental Management (AEM) program.	1	1	1	1	1	1	3	1	**10**
Action 4.2.E: Encourage farmers to participate in New York State's Conservation Reserve Enhancement Program (CREP).	2	1	1	1	1	1	3	1	**11**
Action 4.2.F: Publicize information about farm and viticulture operations to non-farm residents	2	1	1	1	2	1	1	2	**11**
Action 4.2.G: Publicize information about agricultural conservation easements to local landowners	3	1	2	1	2	1	1	3	**14**
Action 4.2.H: Research and support Purchase of Development Rights (PDR) programs for local farmers.	3	1	1	1	2	1	3	1	**13**

Goals and Action Items	Hammondsport/Urbana	Wayne	Pulteney	Branchport	Jerusalem	Penn Yan	Milo	Barrington	Watershed-wide score (out of 24)
4.3 Regional Resources									**0**
Action 4.3.A: Hold an annual watershed-wide "conference" among local officials and board members to discuss land use issues, trade information, network, review the current status of major development projects, and serve as a "clearing house" of information about land use issues in the watershed.									**0**
Action 4.3.B: Create a directory of resources that are common to the municipalities that will encourage greater intermunicipal coordination.									**0**
Action 4.3.C: Support compatible land use plans/regulations for all municipalities in the Keuka Lake watershed.									**0**
Action 4.3.D: Keep all land use plans and regulations up-to-date									**0**
Action 4.3.E: Publicize land use training programs for municipal staff and board members									**0**
Action 4.3.F: Work with Yates and Steuben County planning departments to assess the impacts of proposed developments.									**0**
Action 4.3.G: Submit proposed development projects to County Soil and Water Conservation Districts for									**0**
Action 4.3.H: Improve coordination with State agencies, such as New York State Department of Environmental Conservation (NYS DEC); the New York State Department of Transportation (NYS DOT); and the New York State Office of Parks, Recreation, and Historic Preservation (NYS OPRHP).									**0**
Action 4.3.I: Identify locations throughout the Keuka Lake Watershed that may be suitable for Critical Environmental Area (CEA) designation and work with appropriate agencies and land owners in an effort to evaluate the need to designate such areas.									**0**
Action 4.3.J: Support sustainable forest management on public and private lands throughout the watershed.									**0**
Action 4.3.K: Encourage local planning and development practices that address biodiversity conservation									**0**

Goals and Action Items	Hammondsport/Urbana	Wayne	Pulteney	Branchport	Jerusalem	Penn Yan	Milo	Barrington	Watershed-wide score (out of 24)
4.4 Keuka Lake Water Quality									0
Action 4.4.A: All municipalities should continue to support the Keuka Lake Association (KLA), the Keuka Watershed Improvement Cooperative (KWIC), and the Keuka Lake Outlet Compact (KLOC).	2	3	1	1	2	2	2	2	15
Action 4.4.B: Support the environmental stewardship objectives of the Great Lakes Basin Compact	1	1	1	1	1	1	1	1	8
Action 4.4.C: Continue to monitor the health of Keuka Lake	3	2	2	1	3	2	3	2	18
Action 4.4.D: Support efforts that minimize invasive and exotic animal and fish species/non-native plants	2	2	1	1	1	2	1	2	12
Action 4.4.E: Protect watercourses by requiring setbacks from streams and gullies that feed into the lake.	1	1	1	1	2	2	2	2	12
Action 4.4.F: Reduce the use of pesticides and fertilizers on private yards, farm fields, and vineyards	3	1	1	1	1	3	1	1	12
Action 4.4.G: Support ongoing public education/outreach programs about lake water quality									0
Action 4.4.H: Develop a series of educational publications (brochures/flyers/pamphlets) about water quality for the public.									0
Action 4.4.I: Publicize the availability of the revised Keuka Lake Book, which includes Best Management Practices (BMP) for homeowners in the watershed.	1	1	1	1	1	1	1	1	8

Goals and Action Items	Hammondsport/Urbana	Wayne	Pulteney	Branchport	Jerusalem	Penn Yan	Milo	Barrington	Watershed-wide score (out of 24)
4.5 Sustainable Development									0
Action 4.5.A: Enact municipal stormwater management regulations to reduce stormwater runoff									0
Action 4.5.B: Continue to promote effective municipal and private wastewater management practices through the KWIC.	3	2	1	1	2	2	3	3	17
Action 4.5.C: Promote sustainable agriculture and viticulture	3	2	1	1	2	2	2	2	15
Action 4.5.D: Consider the location of existing and proposed roadways and roadway access (driveways) when reviewing and permitting new development.	3	1	1	1	2	3	2	1	14
Action 4.5.E: Protect significant viewsheds from insensitive development	3	3	2	2	3	3	3	3	22
Action 4.5.F: Revise local codes to encourage the use of "Green Building" techniques									0
Action 4.5.G: Include environmental considerations as a component of Subdivision approvals	3	3	1	1	3	3	2	2	18
Action 4.5.H: Include environmental considerations as a component of Site Plan approvals	3	1	2	1	2	2	2	2	15
Action 4.5.I: Require an assessment of water supply and treatment capabilities as a component of municipal review of proposed development projects.	3	2	1	1	1	2	2	3	15
Action 4.5.J: Develop a series of educational publications (brochures/flyers/pamphlets) about sustainable development issues for the public									0

Goals and Action Items	Hammondsport/Urbana	Wayne	Pulteney	Branchport	Jerusalem	Penn Yan	Milo	Barrington	Watershed-wide score (out of 24)
4.6 Focusing New Growth in Village/Hamlet Areas									0
Action 4.6.A: Use Comprehensive Plans to recommend that new development be focused within hamlet areas.	3	1	1	3	2	3	3	3	19
Action 4.6.B: Include hamlet zoning districts within municipal Zoning laws	1	1	1	3	1	2	1	1	11
Action 4.6.C: Include provisions in Subdivision laws that, in designated locations, support the creation of small building lots for hamlet developments.									0
Action 4.6.D: Include provisions in Site Plan Review laws that, in designated locations, support the development of street and pedestrian-oriented buildings.									0
Action 4.6.E: Focus public investments such as roads, utilities, and community facilities into designated hamlet areas.	2	1	2	3	2	3	3	3	19
Action 4.6.F: Encourage the use of "Cluster Development" practices in rural areas	3	1	2	2	3	3	3	3	20
Action 4.6.G: Encourage local planning and development practices that address biodiversity conservation.	3	2	1	1	2	2	1	1	13

Goals and Action Items	Hammondsport/Urbana	Wayne	Pulteney	Branchport	Jerusalem	Penn Yan	Milo	Barrington	Watershed-wide score (out of 24)
Other Action Items									**0**
Address food systems planning	1	1	1	2	2	1	1	1	**10**
Parks and Open Space planning	3	3	2	1	3	3	2	2	**19**
Educate citizens and encourage the protection of historic resources	3	2	2	3	3	3	3	1	**20**
Nominate eligibile historic sites towards the national register for tourism, better funding etc.	1	1	1	3	3	1	3	1	**14**
Local codes to protect historic resources	3	1	1	3	3	2	2	2	**17**
Tourism - better signage, movement of people, trails, curb appeal (Wayfinding)	1	1	3	3	3	1	3	1	**16**
Measures to address industry performance and viability	2	1	1		2	3	3	3	**15**
Diverse housing stock to address changing population and demographic needs	3	2	2	1	3	3	3	3	**20**
Address needs of Amish and Menonite population	1	1	1	2	3	1	3	2	**14**
Promote greater access to the lake for the public	2	1	1	3	3	3	1	2	**16**
Promote public access to cultural educational resources and heritage	2	2	1	2	3	3	2	2	**17**