

MEMORANDUM (DRAFT)

Date: January 14, 2014

To: Mack Cook, Director of Administration and Finance, City of Cortland
Chris Bistochi, Director of Public Works Department, City of Cortland
Amanda Barber, Cortland County Soil and Water Conservation District
Kathy Bertuch, Central New York Regional Planning and Development Board

From: Alisa Hefner, Skeo Solutions
Matt Robbie, Skeo Solutions
Miranda Maupin, Skeo Solutions

Re: Tioughnioga Urban Headwaters Action Plan Kick-off Meeting Summary

Introduction

The City of Cortland was awarded a National Fish and Wildlife Foundation Technical Assistance Grant in August 2014. To fulfill the grant, Technical Assistance Provider Skeo Solutions will support the City of Cortland and regional partners to develop a green infrastructure action plan for targeted urban areas within Tioughnioga River watershed. On November 5, 2014, Skeo Solutions facilitated a kick-off meeting with the project's work group. The work group is comprised of City of Cortland staff from the departments of Administration and Finance, Public Works and Waste Water Treatment; and regional partners including the Cortland County Soil and Water Conservation District and Central New York Regional Planning and Development Board.

Participants

- Bruce Adams, Waste Water Treatment Plant Operations Manager, City of Cortland
- Chris Bistochi, Public Works Director, City of Cortland
- Mack Cook, Director of Administration and Finance, City of Cortland
- Nick Dobi, Public Works Facilities Manager, City of Cortland
- Amanda Barber, Executive Director, Cortland County Soil and Water Conservation District
- Kathy Bertuch, Central New York Regional Planning and Development Board
- Alisa Hefner, NFWF Technical Assistance Work Assignment Manager, Skeo Solutions
- Matt Robbie, NFWF Technical Assistance Project Manager, Skeo Solutions

Kick-off Meeting Activities

The kick-off meeting activities included a discussion of project goals and objectives, review of maps to identify watershed issues and opportunities, a tour of the project area and discussion of potential green

infrastructure strategies. This memorandum summarizes key discussion points gathered during the kickoff meeting including project next steps.

Project Goals

The Tioughnioga Urban Headwaters Action Plan is being developed based on grant objectives outlined in Cortland's 2014 grant proposal, along with specific project goals outlined by work group participants during the November 5 kick-off meeting.

Grant Objectives

- Identify potential green infrastructure technologies to store, treat and infiltrate stormwater runoff and reduce impacts in the Upper Tioughnioga River Watershed.
- Coordinate green infrastructure opportunities with transportation and corridor investments and with implementation of the local and regional initiatives.
- Prioritize vacant and underused land for transformation into public assets that can reconnect the community and watershed.
- Identify opportunities for future acquisition of riparian corridors to protect water quality.
- Build capacity across jurisdictions to advance green infrastructure solutions in the watershed.

Work Group Project Goals

City of Cortland staff identified the following goals and considerations:

- Portions of the Clinton Avenue corridor paralleling the West Branch of the Tioughnioga River represent the City of Cortland's best opportunity for infrastructure investments. Clinton Avenue is the focus for redevelopment, increasing tax revenues and improving access and visibility to the river.
- Invest in sewer, storm and streetscape improvements around Clinton/West Branch areas to support redevelopment. The City has 50% un-taxable properties and there is a need to offset this revenue loss with strategic redevelopment.
- Identify opportunities to reduce maintenance burden and coordinate infrastructure upgrades.
- Promote stormwater management and water quality improvements for Tioughnioga River.
- Improve recreational and fishing access to the West Branch and Upper Tioughnioga River.
- Reduce hydraulic loading at the City of Cortland's Waste Water Treatment Plant.

Regional partners identified the following additional goals for the project:

- Support City efforts to identify green infrastructure planning and design opportunities.
- Seek opportunities to integrate green infrastructure and water quality into planned infrastructure work.
- Expand education around green infrastructure concepts for the County.
- Identify opportunities and connections to the TMDL program for the larger Tioughnioga-Susquehanna basin.

Project Study Area Considerations and Existing Initiatives

The project focuses on portions of the West Branch and Upper Tioughnioga River in the City of Cortland and Cortland County, New York.

Context

For the purposes of identifying relevant issues, opportunities and initiatives that may affect the project, the context study area includes northern portions of the City of Cortland, including the Main Street / Homer Avenue Gateway Corridor, Clinton Avenue/ Route 13 Gateway Corridor and Port Watson Corridor. This larger context area includes portions of the City of Cortland and Town of Cortlandville. Participants confirmed a targeted Focus Area for identifying and evaluating urban green infrastructure strategies that can help to meet shared project goals. The Focus Area comprises northern portions of the City of Cortland, including portions of the West Branch Tioughnioga River and the strategic Clinton Avenue corridor. Figure 1 below illustrates the study area context and focus area.

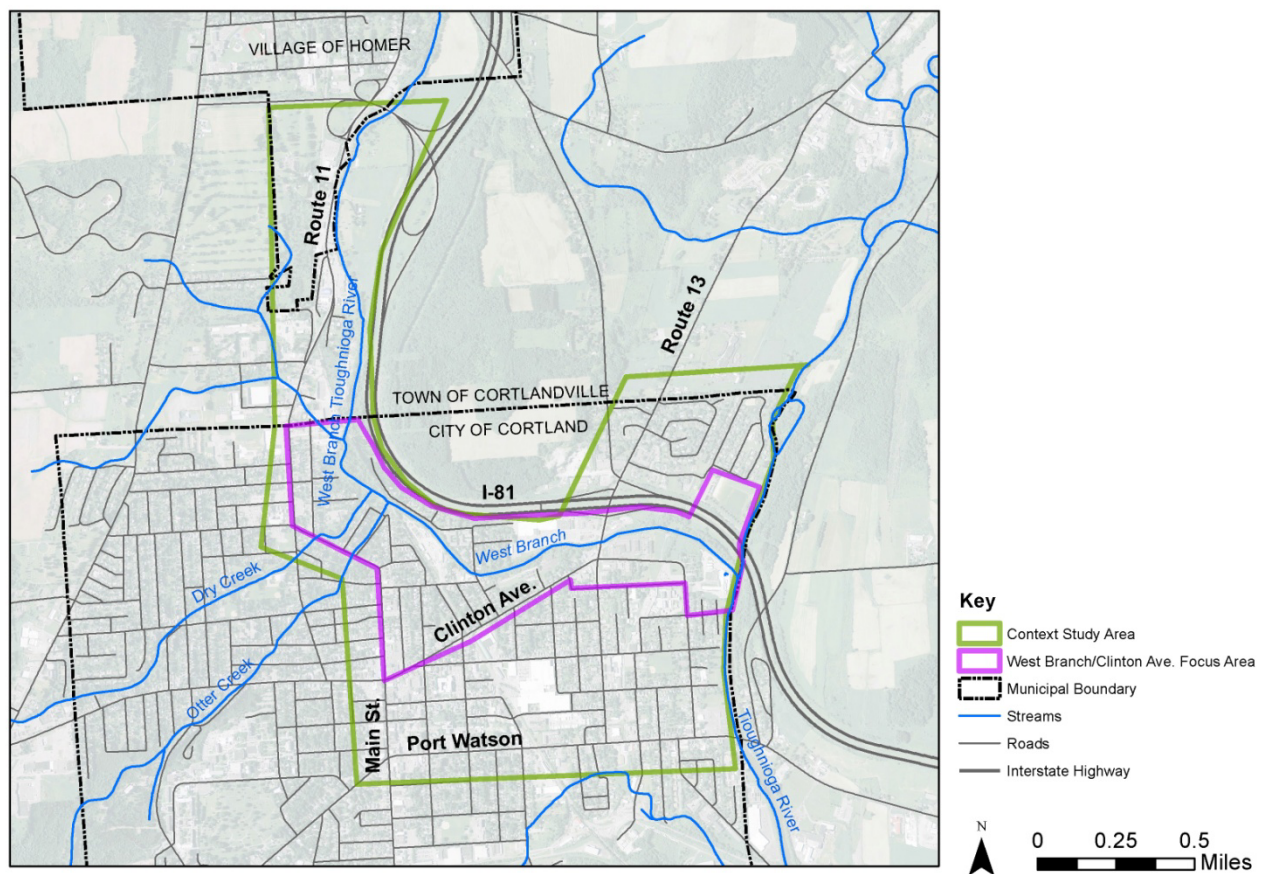


Figure 1. Context Map

Primary Surface Water Features

Primary surface water features in the focus area include the West Branch Tioughnioga (West Branch), Tioughnioga River, Otter Creek and Dry Creek. Figure 2 below illustrates surface water features and flood zones.

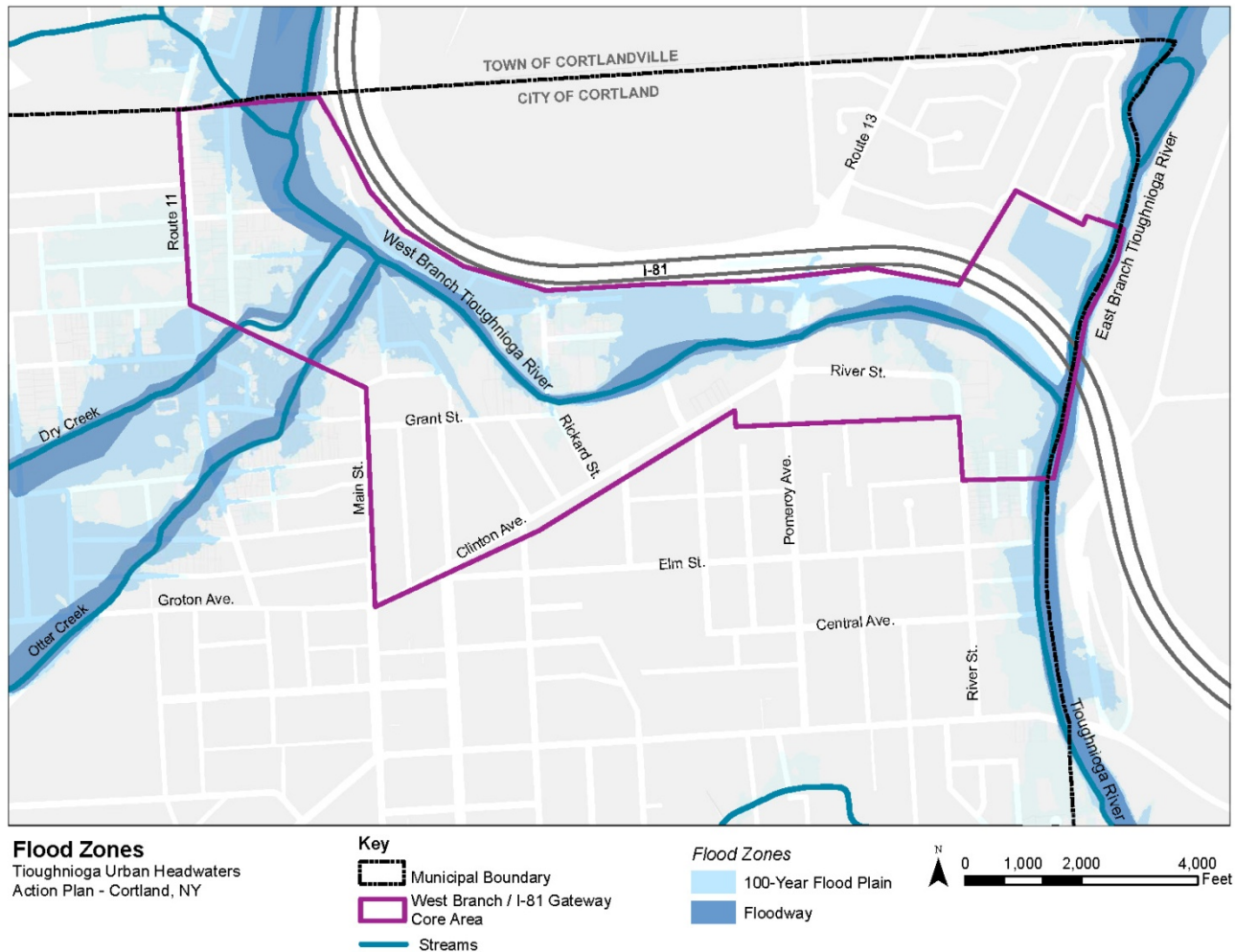


Figure 2. Surface Water and Flood Zones Map

- West Branch** – traverses the study area from the City’s northern boundary to the confluence with the Toughnioga. The West Branch borders low density commercial and industrial uses in the northwest; multi-family residential housing, the Riverside Plaza shopping center, the Clinton Avenue/I-81/Route13 gateway intersection in central areas; and commercial uses, hotels and industrial areas to the east.
 - Portions of the Focus Area along the West Branch are designated as a 100-year flood zone. Flood zones encompass bordering residential, commercial and light industrial uses.
 - Casey Fields (athletic fields for Town of Cortlandville and Village of Homer), located east of Route 11 and the West Branch are prone to flooding. Frequent flooding in West Branch makes the small access bridge to Casey Fields impassable.
- Toughnioga** – a larger and navigable river that provides flat water boating access.
- Otter Creek** – a small tributary of the West Branch that drains primarily residential areas on the west side of Cortland. Portions of Otter Creek are channelized.

- **Dry Creek** – a small tributary of the West Branch. Paralleling Otter Creek, this stream drains residential and commercial areas in northwestern Cortland.

Stormwater Considerations

Municipal Storm System

- The City of Cortland maintains separate sanitary and storm sewer systems.
- The City's stormwater infrastructure system includes three major conveyances that direct stormwater to streams:
 - Downtown/Main Street: conveyance from Main Street to Upper Tioughnioga (Elm Street)
 - Clinton and Gates Avenue: conveyance to West Branch at Rickard Street.
 - Northwest: Dry Creek and Otter Creek (channelized streams) collect drainage from areas north and west of Clinton Avenue and discharge to the West Branch.
- Public works department staff clarified that each of these major conveyances directs approximately 30% of the city's stormwater to outfalls at their respective discharge points. Cortland is not subject to NYDEC MS4 stormwater management requirements.

Location Specific Stormwater Issues

- Participants noted persistent issues related to on-street stormwater backup at the bend in River Street and on upper portions of Otter Creek.
- Clinton Avenue corridor suffers from degraded storm infrastructure and is a top priority for infrastructure replacement including replacing catch basins damaged from heavy truck traffic, and aging storm water and sanitary sewer lines. The City plans to replace Clinton Avenue storm and sanitary sewer lines along with catch basins and structures and streetscape features as part of a significant infrastructure investment in the next five years.
- City staff suspect that cross sanitary-storm sewer contamination may be occurring in some locations near Clinton Avenue based on fecal coli form levels in stream samples.
- Many off-street impervious surfaces such as parking areas on commercial properties along Homer Avenue and at Riverside Plaza lack stormwater infrastructure, resulting in sheet flow running directly into the West Branch. Participants also noted that there may be sanitary sewer issues at Riverside Plaza.
- There are significant opportunities for on-street stormwater infiltration on Clinton Avenue and coordination of traffic calming and pedestrian and biking improvements with infiltration.

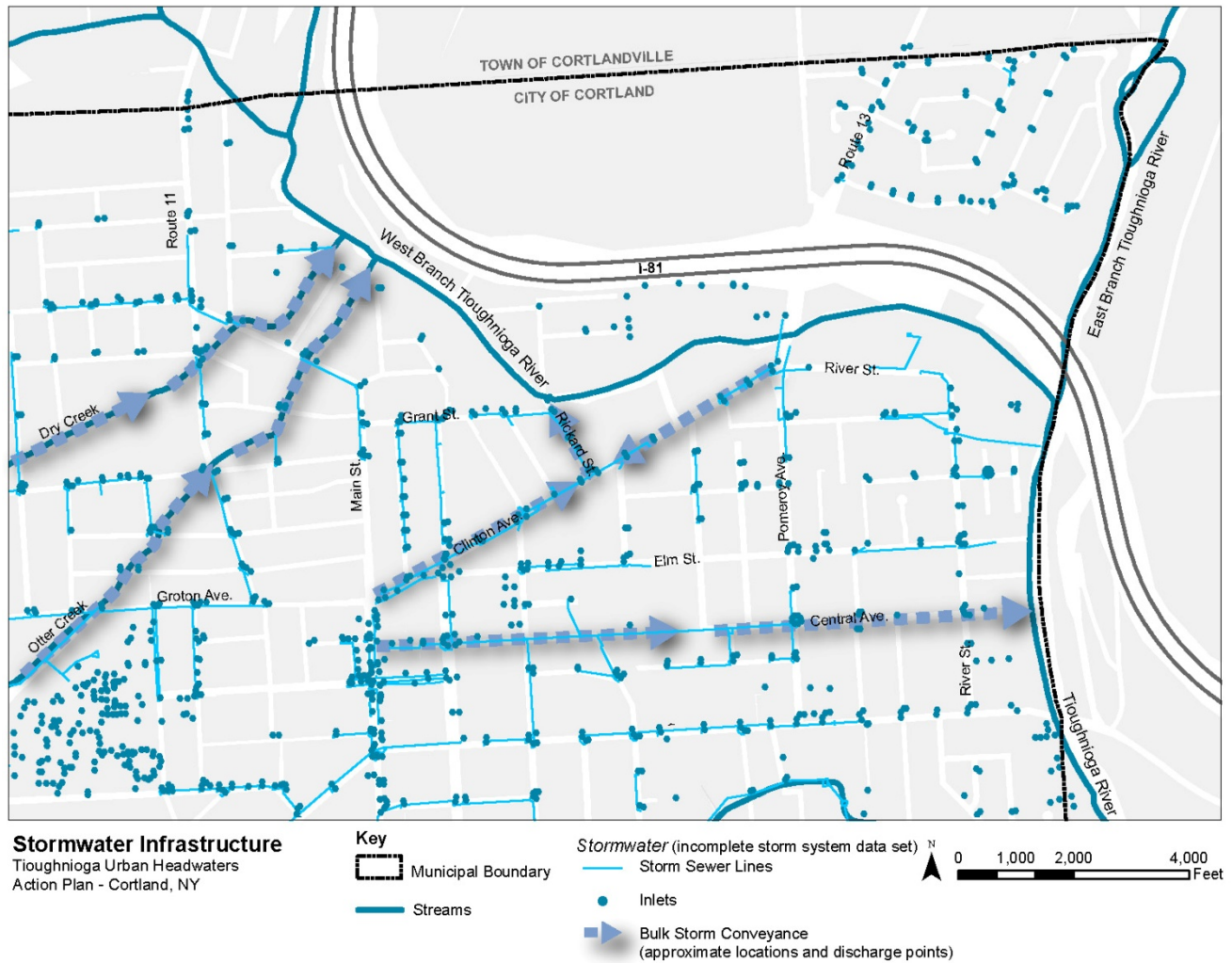


Figure 3. Stormwater Infrastructure Map

Recreation and Trails

Work group participants discussed several past and on-going recreation and trail initiatives.

- **Tioughnioga River Trail** - A regional trail initiative envisioned the construction of the Tioughnioga River Trail, a gravel multi-use trail paralleling the West Branch from Homer through Cortlandville and Cortland to Yaman Park on the banks of the Upper Tioughnioga. Cortland County solicited a trail design and feasibility study for the trail in 2010. The trail effort was stalled due to lack of political support.
- **Parks Conservancy** - City of Cortland, Village of Homer and Town of Cortlandville are in the process of forming a parks conservancy to acquire land along the West Branch on east side of Route 11 for open space. Local government representatives are working on an inter-municipal agreement and

targeting several properties including: abandoned motel, circus house, junk yard, and several other properties.

- The City has identified a need to improve pedestrian and bicycle connections around the I-81 Gateway and Yaman Park. I-81 exit and entrance ramps, combined with a busy four way intersection (Clinton, Pomeroy, River Street) create a dangerous environment for pedestrians. Yaman Park is currently accessible via a residential street located off of Route 13 north I-81.

Fishing

- The area's most popular fishing spots are along the West Branch from the Route 13 bridge to the confluence of the Upper Tioughnioga. Most anglers access the West Branch via walking trails behind Wendy's and hotels on River Street.
- Fishing line manufacturer Cortland Line is based in Cortland. The company has a retail store at Riverside Plaza (selling fishing gear and supplies, licenses). This retail shop would be a good spot to promote river access and watershed awareness issues.

Investments and Initiatives

The City of Cortland is looking to leverage a series of investments in stormwater infrastructure and trails to promote river access and water quality improvements.

- Clinton Avenue on-street infrastructure improvements are estimated at approximately \$7,000,000, including replacement of storm and sanitary systems, and streetscape improvements). The infrastructure improvements are currently unfunded. The City anticipates seeking \$2,100,000 for storm and sanitary improvements from the NY Environmental Finance Corporation through the 2015 Consolidated Funding Application process (CFA).
- The City currently has \$650,000 for streetscape improvements on Route 13 bridge – pedestrian, gateway treatments.
- The City received a \$39,000 intermodal transportation grant, which will be used to explore pedestrian connections from I-81 exit/Clinton/Route 13 gateway to Yaman Park.

Green Infrastructure Opportunities and Considerations

After discussing the Focus Area issues and opportunities, the work group participated in a tour of the focus area and a working session to identify potential green infrastructure opportunities. Opportunities identified to date are listed below and grouped by physical infrastructure improvements and programmatic opportunities.

Physical / Infrastructure Improvement Opportunities

- A. On-Street Opportunities** – include major streets where sidewalks and natural drainage strategies can be integrated to improve walkability and stormwater management. Primary focus on Clinton

Avenue with potential secondary applications on River Street and Elm Street. Natural drainage strategies that can be integrated with pedestrian and cycling improvements include:

- Linear engineered tree trenches and planting wells
- Planted or grassy swales in medians
- Curb extensions

B. Off-Street Stormwater Flows – Best management practices to promote stormwater infiltration, storage and healthy stream buffers, typically configured as amenities to capture unmanaged stormwater runoff.

Riverside Plaza retrofits

- Enhanced buffers along edge of West Branch
- Infiltration wells, filter strips, island planting wells in parking lot

Natural drainage along trails and rights-of-way

- Swales or rain gardens aligned with trails or along paved areas to capture unmanaged stormwater runoff

C. Safe Crossings – Integrated stormwater infiltration and traffic calming measures located at strategic intersections, mid-block crossing points and greenway access points.

Intersections and Mid-block Crossings

- Stormwater bumpouts with traffic calming and pedestrian safety measures.
- Mid-block crossing with bumpouts along Main Street and school crossing.

Greenway Access

- Provide safe access to river and potential greenway. Potential access points include:
 - West Branch/Rickard Street
 - West Branch/Route 13
 - River Street
 - Tioughnioga/Elm Street

D. Trails and Greenways – Strategies for improving pedestrian and bicycle access to waterways and open space areas.

Potential Greenway System

- *West Branch Greenway* – Establish greenway trail system paralleling the West Branch. This greenway would improve pedestrian access from downtown and multi-family housing around Rickard and Grant Streets to shopping destinations at Riverside Plaza, popular fishing holes north of River Street and the Tioughnioga River. Extending the greenway north

along the West Branch could be further explored, railroad and river crossings might be difficult.

- *Yaman Park Connector* - potential greenway trail connection from River Street Avenue to Yaman Park utilizing City of Cortland right-of-way (R.O.W.) along former Lehigh Valley Rail Line. City R.O.W. extends along a viaduct under I-81 and could extend from West Branch Gateway to provide pedestrian and bike access from Cortland neighborhoods to Yaman Park.
- *Elm St. /Dexter Connector* - potential greenway connection would continue the West Branch greenway south from the confluence utilizing City R.O.W. along the Tioughnioga to Elm Street with on-street connections to Dexter Park.
- *Pedestrian Bridges* - to enhance pedestrian access across West Branch at Riverside Plaza/State Grange property and River Street/City R.O.W. to Yaman Park.

Potential On-Street Greenway System

- Existing streets and sidewalks can provide greenway connections linking Cortland's neighborhoods and Downtown to the potential West Branch Greenway. On-street greenway connections on Grant, Elm and North Main streets would create a looped greenway network. Connections can be enhanced by adding bike lane striping, crosswalks as needed, signage to identify greenway system, route maps and distance markers to key features.

Programmatic Opportunities

- E. Riparian Land** – Strategies to coordinate management of stream buffers and riverfront properties.
 - Coordinate open space acquisition with improved stormwater management and riparian management along Route 11 corridor.
 - Cortland County Soil and Water Conservation District programming.
- F. Residential** – Strategies to encourage neighborhood-based action.
 - Promote rain barrel programs in residential neighborhoods to capture and store roof-top runoff.
- G. Education** – Strategies to increase watershed awareness and education for residents and visitors.
 - Increase river awareness to help build recognition of river as a public asset.
 - Integrate public art and signage to promote watershed awareness at greenway and river access points.
 - Explore partnership with Living History Center to include green infrastructure demonstration project as part of outdoor learning programming.



Figure 4. Potential Green Infrastructure Opportunities Map

Stakeholder Engagement and Partnership Building

Participants noted several strategies and steps to build stakeholder partnerships and share project outcomes.

Potential partners to engage in future discussions:

- Living History Center (Route 11)
- SUNY Cortland – Recreation Management and GIS programs
- Cortland Regional Medical Center and 7 Valley Health Care
- City Commission
- Upper Susquehanna Watershed Coalition – represents a key opportunity to share project findings with regional professionals.

- NYSDEC – engage with DEC stormwater staff early on. Potential DEC Staff: Jim Dempsey, Julie Melaricon, Jackie Landrun.

Next Steps

- **Memo and Opportunities (January 2015)**– Share memo and opportunities map with work group to confirm goals and opportunities.
- **High Level Strategies Review (February 2015)** - Refine and develop strategies map and supplemental descriptions for work group review via teleconference.
- **Strategies Working Session (March 2015)** - Develop detailed strategies (maps, diagrams, examples and explanatory text) for presentation at in-person working session with work group and expanded stakeholder group. Prioritize strategies, identify implementation action items and funding opportunities.
- **Regional Forum (March 2015)** – Share draft findings with regional watershed professionals (e.g., Upper Susquehanna Watershed Coalition meeting). Coordinate timing of forum with Strategies Working Session.
- **Draft and Final Action Plan (April 2015)** – Based on work group, stakeholder and regional forum input, integrate revised strategies with implementation action items and funding opportunities into an Action Plan.