Restoring Our Waterfront

Enhancing Tonawanda’s Economy, Environment and Community

Healthy Niagara – Waterfront Land Use Plan Update

Town Board Presentation
March 10, 2014
Today’s Agenda

• Brief Background
• Final Plan Development
• Key Highlights
Brief Background

• 2010 Environmental Protection Fund grant
• Healthy Niagara-Strategic Watershed Management Planning
• Partnership with Buffalo-Niagara Riverkeeper & Erie County
• Various components: Watershed Report/Plan, Waterfront Land Use Plan update, Two-Mile Creek stabilization
Current Land use
Current Zoning

Map 6: Zoning

Legend
- Municipal Boundaries
- Expressways
- State Roads
- Local Roads
- Waterbodies
- First Residential (A)
- Second Residential (B)
- General Business (C)
- Restricted Business (C-1)
- General Industrial (G-I)
- Multi-Family Dwelling (M-F)
- Performance Standards Use (P-S)
- Retail-Highway Commercial (RHC)
- School-Park-Cemetery
- Waterfront Business (WB)
- Waterfront Industrial (WID)
- Waterfront Mixed Use (WMU)
- Business Transition Overlay
- Light Industrial Corridor Overlay
- Thruway Impact Overlay
Concurrent Initiatives
Tonawanda’s Vision for Its Waterfront

“The Town of Tonawanda desires a highly valued waterfront that encourages *diverse activities* and sustainable investment. The waterfront area will attract water-focused businesses, *support* existing industries, encourage passive and active *recreation*, allow for *natural areas and open space*, accommodate appropriately located residential development and balance the *diverse uses* located within the waterfront region.

The Town, along with community stakeholders, will continue to act as *environmental stewards* and ensure sustainable planning and design solutions are implemented by public and private *partners*. In this way the waterfront will improve as a key amenity that both enhances *public access* and fosters new investment.”
Study Area Goals

- Waterfront
- Sustainability
- Environmental Stewardship
- Economic Development
- Community Design
Future Land use
Waterfront Action Items

Strategies (summarized from Chapter 2)

1. Increase public access to and views of the waterfront.
2. Encourage water-dependent uses and expanded passive recreation along the water’s edge.
3. Relocate ill-suited development as opportunity and resources are available.
4. Engage regional partners to pursue joint initiatives.

Landfills as Green Energy?

Although often considered the antithesis of sustainability, landfills offer opportunities to be retooled for renewable energy. The EPA’s RE-Powering America’s Land Initiative (2011) partners the agency and the U.S. Dept. of Energy’s National Renewable Energy Laboratory (NREL) in evaluating the feasibility of siting renewable energy facilities on brownfields, superfund sites and former landfill or mining sites. Several sites throughout the country, including the Bethlehem Steel Winds site in Lackawanna, NY (below), have successfully been reused for renewable energy generation. While development on landfills present several challenges (e.g., settlement, landfill caps, regulations, etc.), potential remedies and opportunities are being evaluated and designed to make redevelopment of these areas possible.

S-4. Continue to explore “green” alternatives for redevelopment of closed landfills.

Timeframe: Short - Medium
Stakeholders: TTDC, Planning, Town Board, Private landowners
Estimated Costs: None
Funding Sources: CFA, NYSERDA

Details: The intent to redevelop Cherry Farm from a former landfill to the recreational park is a good adaptive reuse for the community. There already has been some interest generated for the other landfills by outside agencies (e.g., EPA) and creative redevelopment options should be explored with an emphasis on green strategies such as solar arrays, wind energy generation, additional recreational amenities or other green pursuits. As a champion for successful redevelopment, the Town can become an integral liaison, resource, and provide support between interested agencies and the private companies that own the landfills. Additional examples, case studies and information on landfill redevelopment is found in Appendix E.

WF-1. Expand public lands along waterfront

Timeframe: Medium-Long
Stakeholders: Town Board, TTDC, private landowners, Trust for Public Land
Estimated Costs: Dependent on market value
Funding Sources: CFA, NRGC

Details: Several significant parcels located along the waterfront have been identified as potential/future public parks, including Cherry Farm and Riverfront. The Town has initiated talks with outside sources regarding partnerships and avenues for converting these lands from public to private. Continue to actively pursue developing these lands into public resources with direct access to the waterfront. Conceptual development plans and other details are provided at the end of this chapter.

WF-2. Trail interconnections

Timeframe: Short-Medium
Stakeholders: Planning, Town Board
Estimated Costs: Unknown
Funding Sources: Private, NRGC, EPF

Details: Trail spurs in the form of loops, vantage points, connecting boardwalks or other means of public access should be incorporated into the development of all properties immediately adjacent to the river. Where any public or private development is located adjacent to the river.

NFRC - Niagara River Greenway Commission
EPF - Environmental Protection Fund
CFA - Consolidated Funding Application

WF-3. Expand trail network

Timeframe: Short - Medium
Stakeholders: Planning Board, GBNRTC, Erie Co, Parks Dept.
Estimated Costs: $20,000 - $40,000
Funding Sources: GBNRTC UPWP, CFA, TAP

Details: This plan identifies several key locations for future trail connections and loops within the study area as well as one significant east-west trail connection. Although these locations are identified, further work is required to determine their feasibility. The Town should work with Greater Buffalo-Niagara Regional Transportation Council (GBNRTC) to develop a formal trail masterplan for the Town with special focus on trails and loops connecting to the Riverwalk Trail. The master plan would explore manufacturing technology development and on-site power applications and building research & development programs.

CFA - Consolidated Funding Application, NYSERDA - NYS Energy and Research Dev. Authority, GBNRTC UPWP - Greater Buffalo-Niagara Regional Transportation Council Unified Planning Work Plan, TAP - Transportation Alternatives Program/MAA-31

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Clark Patterson Lee
The Cecil Group
FXM Associates
Waterfront Land Use Plan
Town of Tonawanda

ES-4. Identify preferred shoreline stabilization methods

Timeframe: Short
Stakeholders: Planning Board, BNRK
Estimated Costs: None to $10,000
Funding Sources: Local budget

Detail: Shoreline erosion contributes to decreased water quality and property loss, among other impacts. Where new development is proposed adjacent to the River and shoreline stabilization is identified as an issue, the use of bioengineering techniques should be the primary recommendation as part of development review. The Town should incorporate reference to bioengineering techniques into the site plan review process as well as identifying examples in design standards to ensure its use. The use of rip-rap and retaining walls should be discouraged and replaced where feasible.

Bioengineering is a combination of structural components and plant material to produce a dense stand of vegetation that serves as a "living system" to protect streambanks and shorelines. This technique works to stabilize many, but not all, erosion problems. One challenge in bioengineering is protecting the bank from erosion until the vegetation becomes established, which could take one to two years. There are a number of structural components available to provide temporary protection while the plant growth becomes established.

ES-5. Enhance shoreline setbacks

Timeframe: Short
Stakeholders: Planning Board, BNRK
Estimated Costs: None
Funding Sources: None

Detail: Currently, the Town requires a 50 foot buffer (setback) from the high water mark only along Two Mile Creek and Rattlesnake Creek within the Waterfront Business (WB) and Waterfront Industrial (WI) districts. In coordination with the recommendations from the Buffalo Niagara Riverkeeper, this buffer should be expanded or further enhanced to preserve water quality.

Waterfront Land Use Plan
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representations provides a clearer direction for both the approving Board and the applicant and the document would be directly referenced in the site plan approval process.

CD-2. Equal aesthetic treatment for waterfront properties

Timeframe: Short
Stakeholders: Planning Board
Estimated Costs: None (if done with design standards)
Funding Sources: Local budget

Detail: Properties between the Niagara River and River Road are in a unique position in that they essentially have double frontages, with both needing equal design emphasis to improve the appearance of the waterfront corridor. Development in this area should include architectural details for both water facing and road facades. For development on the east side of River Road, road facade facades would have primary architectural emphasis. The specific architectural details for each facade would be outlined in the design standards mentioned previously.

CD-3. Revise landscape plan regulations.

Timeframe: Short
Stakeholders: Planning Board
Estimated Costs: None (if done with zoning updates)
Funding Sources: Local budget

Detail: The current landscape plan regulations are included within each separate district. While this does provide a “one-stop shop” for determining requirements within a specific district, providing a single section related to landscaping, buffering and screening (included fences) would help to streamline the code and establish greater uniformity throughout the Town and especially the waterfront area. Specific requirements for landscaping in the waterfront area should include, but not be limited to:

- Use of native species in landscaping materials

Improving waterfront visibility

Design standards can be used to improve not only views of the waterfront, but also other key viewpoints throughout the Town. For the waterfront specifically, this can be achieved through the following:

- Smaller building footprints to open up views
- Grouping of structures
- Strategic siting to create interactions with the waterfront
- Higher amounts of windows
- Large walls without windows, service areas, and utilities should not be located on water-oriented facades
- Maximum heights of 3 stories or 50 feet for residential or 2 stories for commercial
- Include interior landscaping and trees, but not excessive amounts that fully obscure waterfront views.
Callouts and Key Areas

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What is Good Community Design?

Good community design is based on some commonly accepted “rules” of physical form. At Tonawanda, it defines its baseline “rules” that must address a wide range of topics, from building site design to facades and details. The following should serve as the baseline for future design standards.

**Context**
- Appropriately relate proposed development and redevelopment to existing designs, styles, building forms and land uses.
- Encourage and promote the sensitive and contextual design of buildings, signs, sites and public spaces through the use of design elements, details, styles and architectural features as well as other amenities, materials or treatments that may be appropriate to further the design standards.
- Encourage and promote a sense of design continuity that appropriately relates the historic part of the area to ongoing revitalization and redevelopment efforts.

**Site Planning**
- The scale of buildings should reflect the character of the area.
- Building orientation should be aligned with the sun.
- Paved surfaces should be limited to what is necessary.
- Parking should be placed at the side or rear of buildings.
- Encourage shared access, shared parking and bike lanes.
- Entrances should be easily visible from the street.
- Parking lots should be regularly shaped and free of blind corners.
- Pedestrian linkages from buildings and adjacent pedestrian systems. The use of the waterfront should be explored and reimagined.

**Form, Scale and Massing**
- Place a majority of the building mass at the street edge.
- High-access, public functions (e.g. entryways) should be prominently located at the front of buildings, with thoroughfares located to the side or rear of buildings.

**Going ‘Green’ Development Strategies**

**Native Landscaping**
The addition of landscaping to any otherwise blank, grassy area adds not only aesthetic value but also valuable habitats for animals and additional vegetation to absorb and filter rainwater. However, not all plants are created equal. Native plants should be utilized in both commercial and residential landscaping projects. Native plants and trees are uniquely adapted to the local weather and climate, soil, and water conditions. Choosing these types of plants decreases the amount of water needed, maintenance, fertilization and also decreases the likelihood of diseases and untimely death. In addition, some native species are specially suited to unique local conditions, such as compacted soils, areas around parking lots or road-prone areas near high-volume roadways.

**Rain Gardens**
Rain gardens contain native vegetation and allow water to be naturally infiltrated into the ground. They are usually located adjacent to impervious surfaces, such as parking lots, buildings. Rainfall during a storm can carry sediment and pollutants as it travels along impervious surfaces. Native plantings and soil filter out these pollutants and allow natural breakdown. In a rain garden, the plantings also provide a visually appealing landscaped buffer.

**Rainwater Harvesting**
Utilizing basins and cisterns, rainwater harvesting captures and stores rainwater. After being filtered to remove any sediment, this water can then be pumped to an irrigation system and/or used for watering landscaping. Rainwater cisterns can easily be disguised aboveground or landscaped or be placed below ground if space and design allow. Commercial and residential applications are viable options.

**Living or Green Roof**
Green roofs utilize a low-growing, low maintenance, tolerant vegetation instead of a specially designed roofing system. Although this method is more expensive than traditional roofing systems (e.g., asphalt) during design and construction, green roofs provide many valuable benefits. The vegetation on green roofs absorbs the water or delays the time and amount of runoff that occurs. In addition, green roofs also help to insulate the ceiling of the structure from heat loss and sound, provide an extended habitat for birds, help to regulate temperatures and provide a

Local Business Parks

The Town of Tonawanda has had great success locally with the formation of various business parks in the waterfront area. Most recently Riverview Solar. The latest endeavor for the Town is North Youngmann Commerce Center, which is currently under construction north of I-290. Although preliminary analysis of the park indicates that the highest and best uses include traditional industrial uses such as manufacturing and warehousing space, the design of the park should not be an afterthought. Similar levels of quality design and materials similar to Riverview should be incorporated along with landscaping and efficient internal access as shown in the example images above.
Riverfront Park

Future wetland loop trail

Future Riverfront Park

Existing River loop trail

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Thank You!