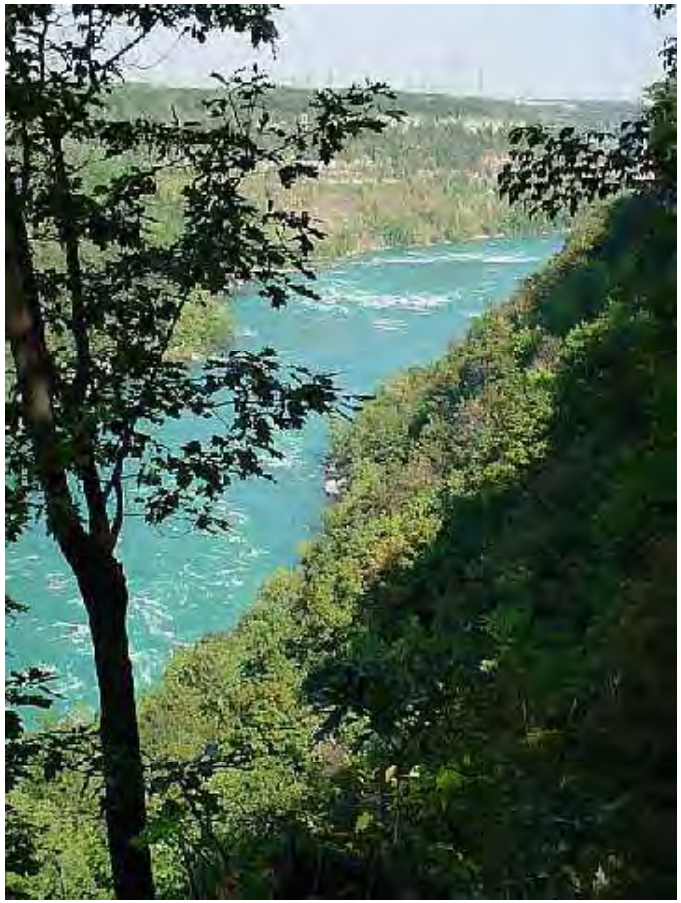
Regional Economic Growth Through Ecological Restoration of the Niagara Gorge Rim

Submitted to:
The Niagara River Greenway Commission

Submitted by:
Niagara Falls and the River Region Chapter of the Wild Ones Native Plants, Natural Landscaping



Douglass R. Brackett, RLA
Robert A. Gallucci, PE

Environmental Design & Research, Landscape Architecture, Planning, Environmental Services, Engineering and Surveying, P.C.

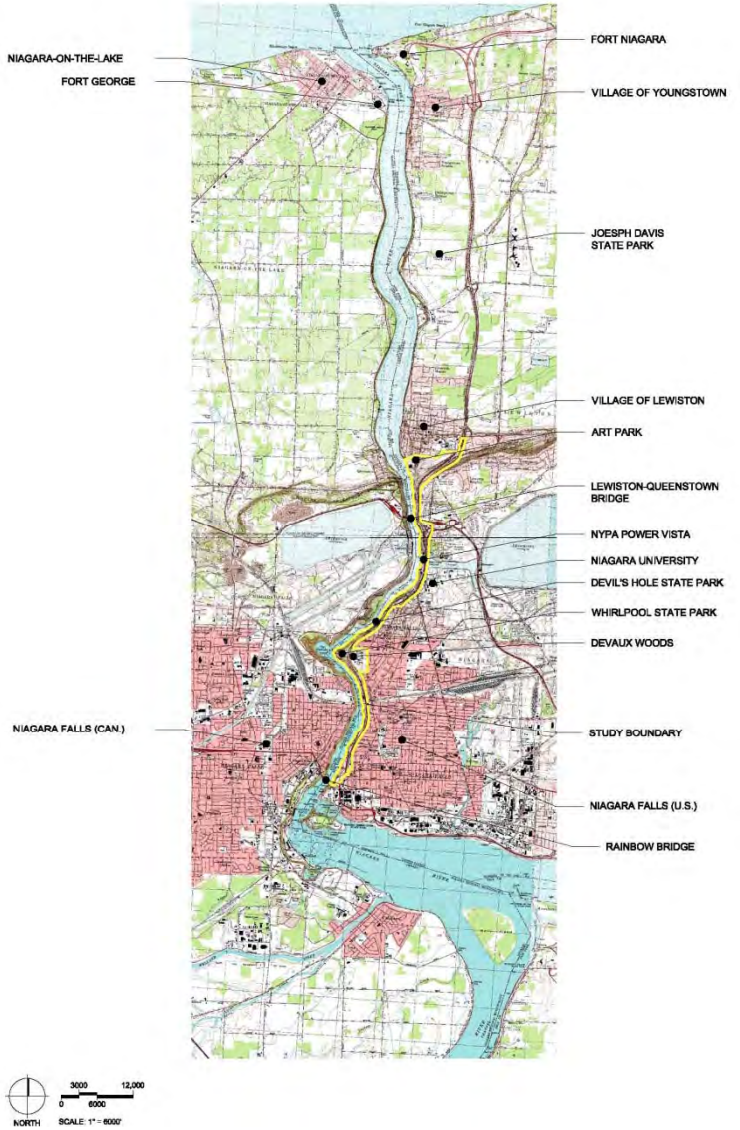
EDR

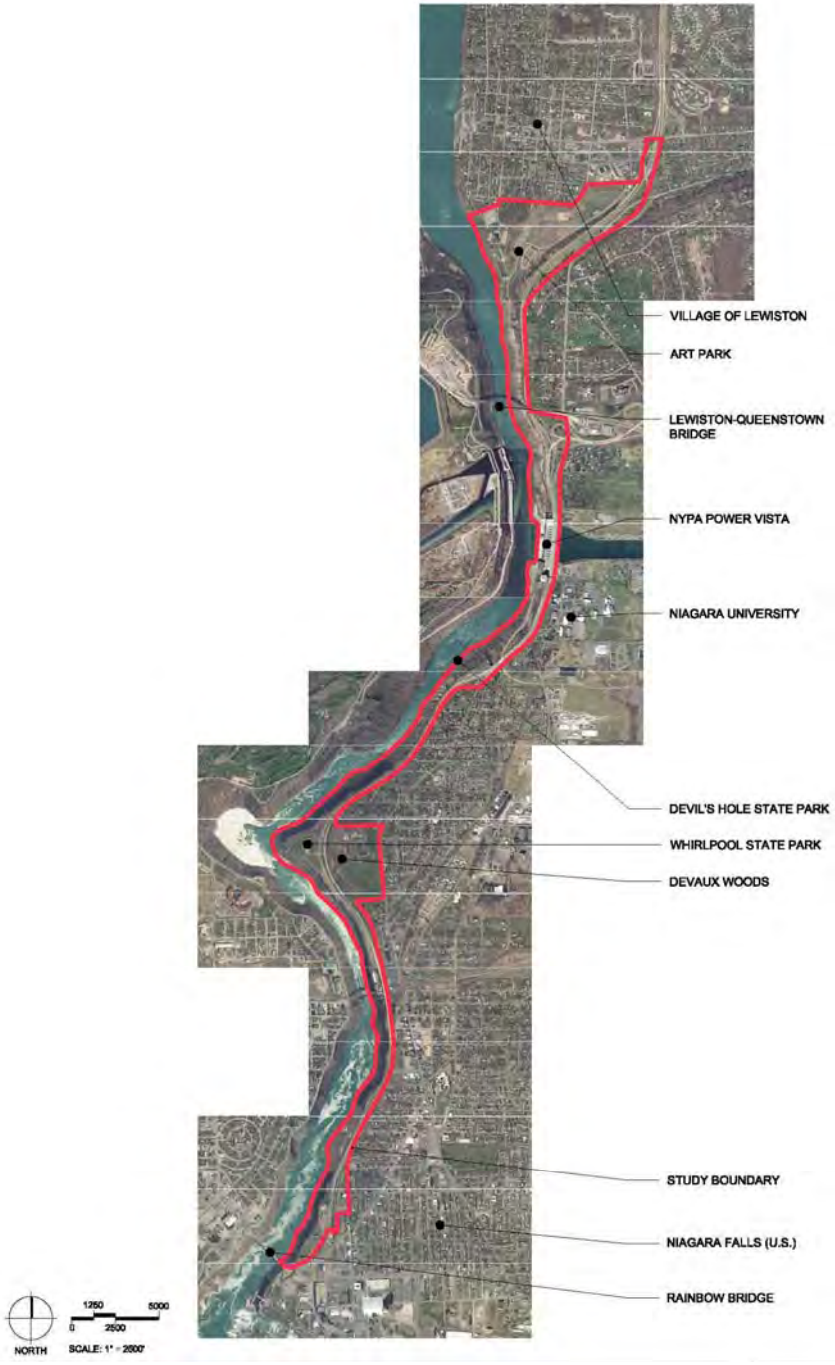
Agenda

1. **Review of the Project**
    a) **Location**
    b) **Purpose**
    c) **Approach**
    d) **Tasks**
    e) **Budget, Schedule & Administration**
2. **Project Advancement of the Niagara Greenway Plan**
3. **Better Site Design Examples**
4. **Questions**

Project Location

Regional Context & Site Boundary





Project Purpose

For An Ecological Restoration Plan

1. **Identify Current Imbalances Within the Ecological and Man-made (Built) Environments**

2. **Identify traffic patterns compatible with ecological restoration**

3. **To Recommend Specific Projects to Reinvigorate Both the Ecological and Built Communities in This Area**

4. **To create long-term ecological restoration and management guidelines that will identify economic, educational, cultural, heritage and ecotourism, and wildlife benefits**

5. **To Provide a Unifying Tool for Bringing the Multiple Jurisdictions Together to Restore This Area**

Project Approach

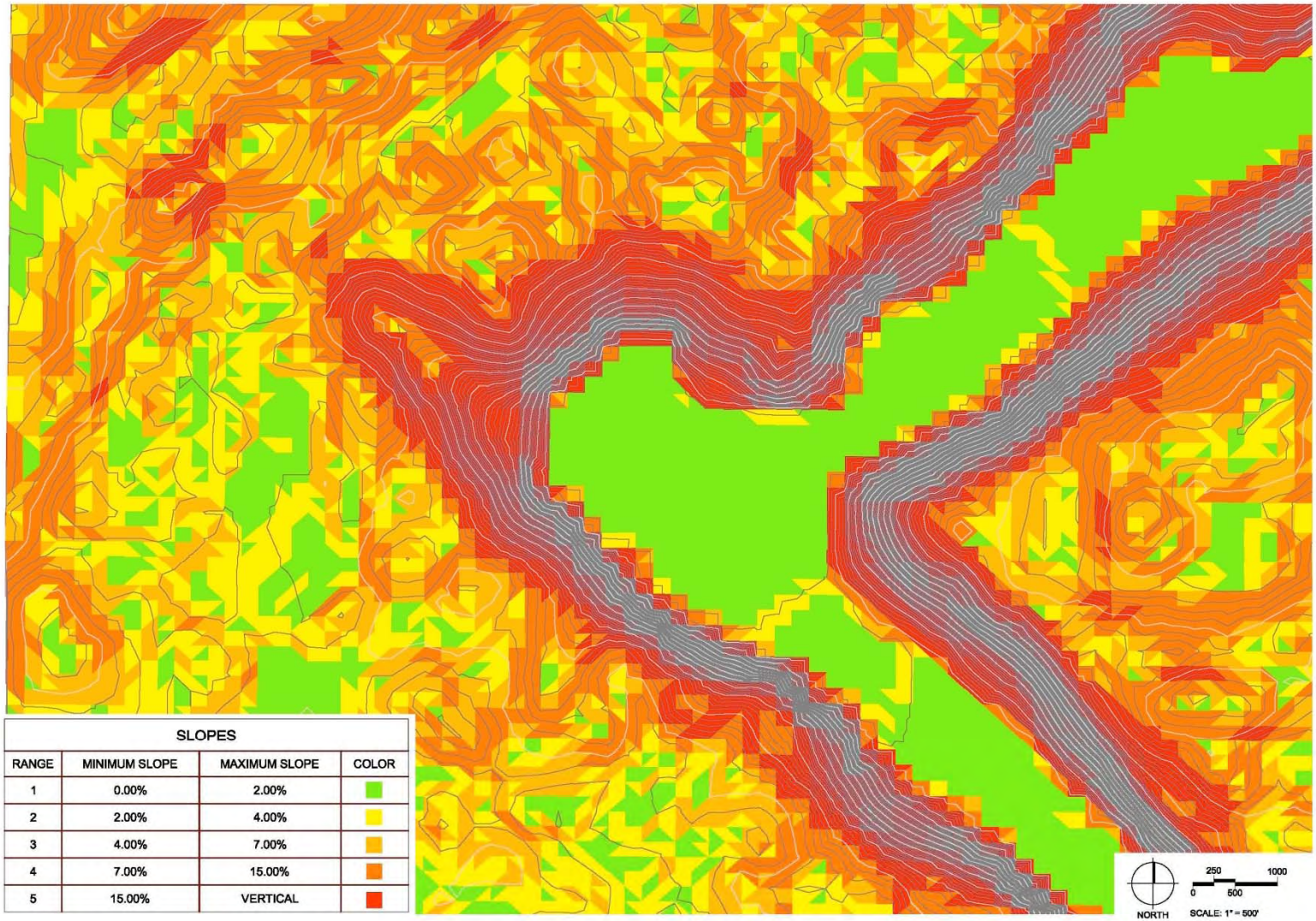
An Ecological Resource-Based Approach

1. **Utilizes available data sources and analysis tools to provide an efficient and cost-effective assessment of natural systems and built resources**

2. **Responds to natural resources in a economical and ecological sustainable manner for the long-term**

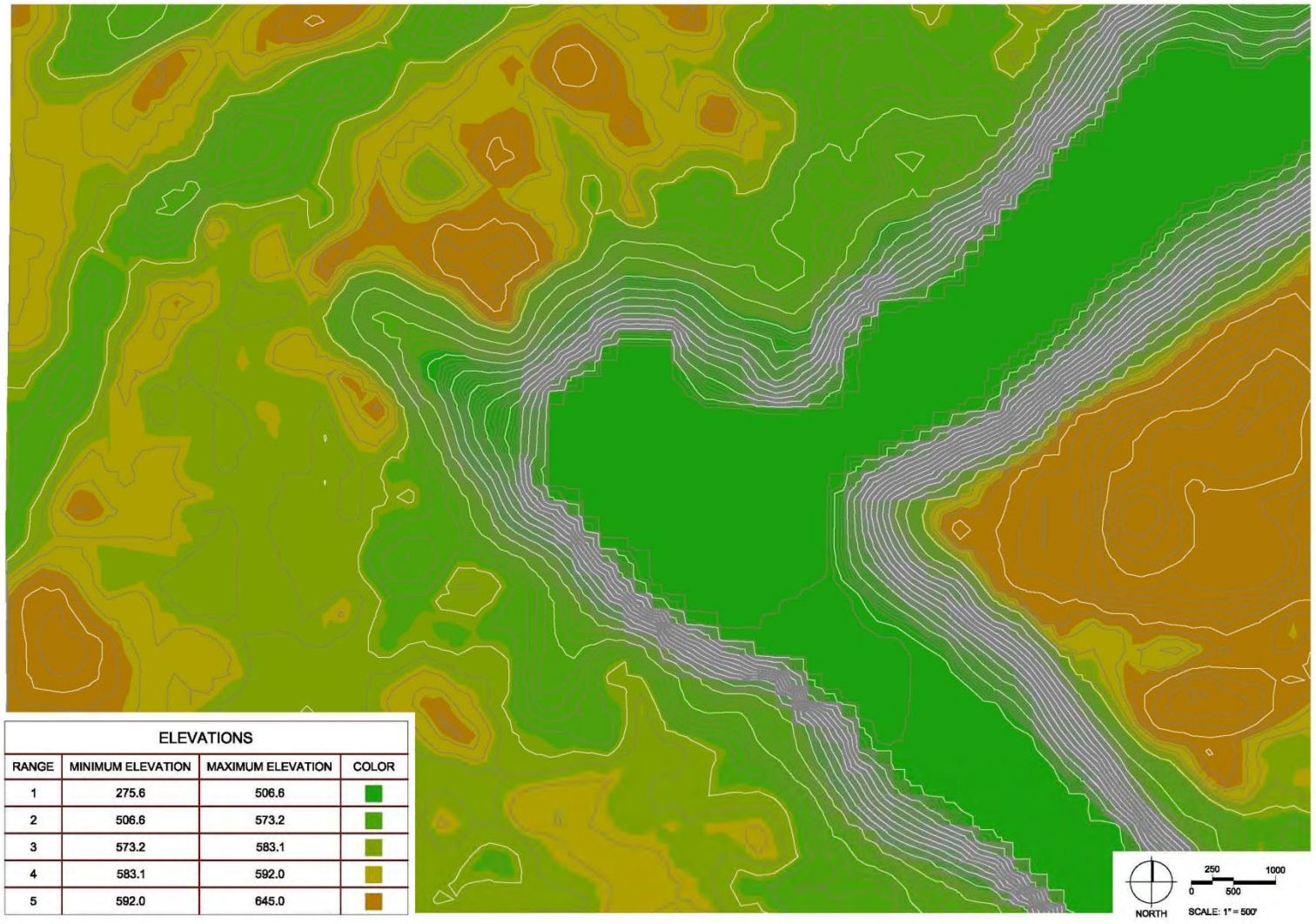
3. **Uses landforms, plant communities, soils, and hydrology to establish a framework to guide sustainable community development**

Ecological Resource-Based Approach – Slope Map



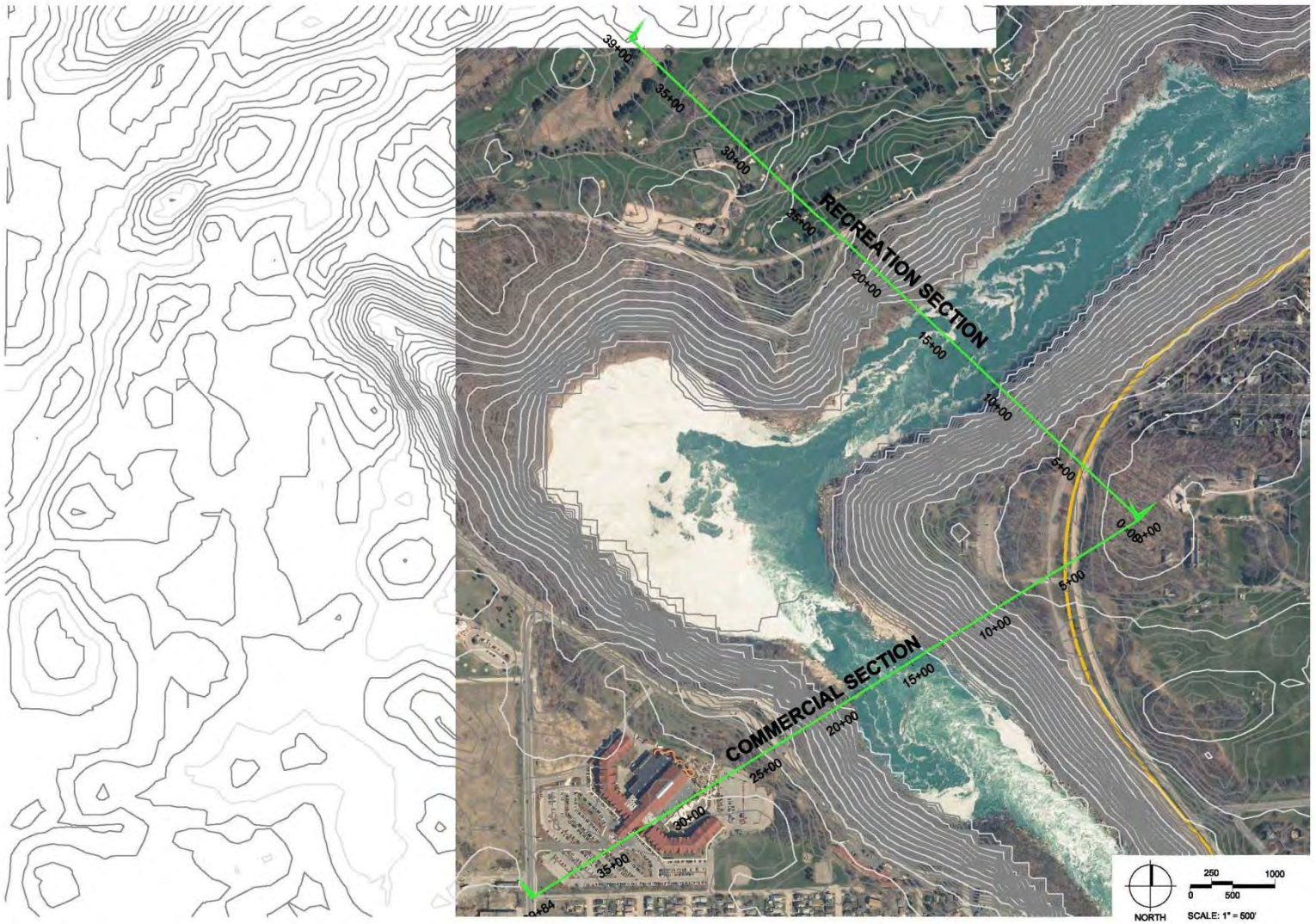
Use of GIS mapping, LIDAR topographic data and 3-D landform models to understand current and potential relationships between ecological resources and land development patterns

Ecological Resource-Based Approach – Elevation Map



Use of GIS mapping, LIDAR topographic data and 3-D landform models to understand current and potential relationships between ecological resources and land development patterns

Ecological Resource-Based Approach – Gorge Section Location Map



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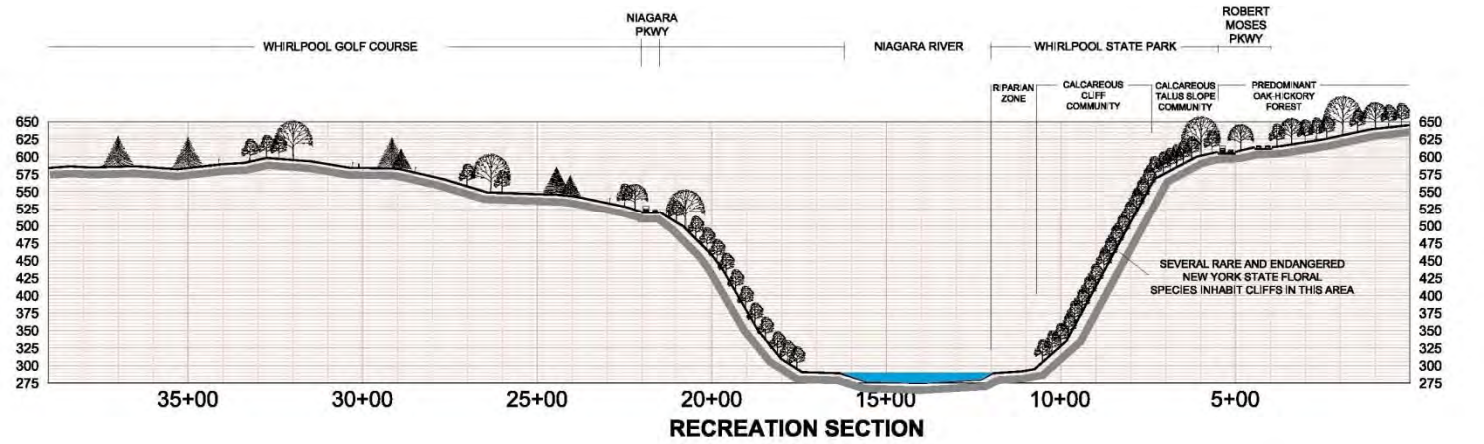
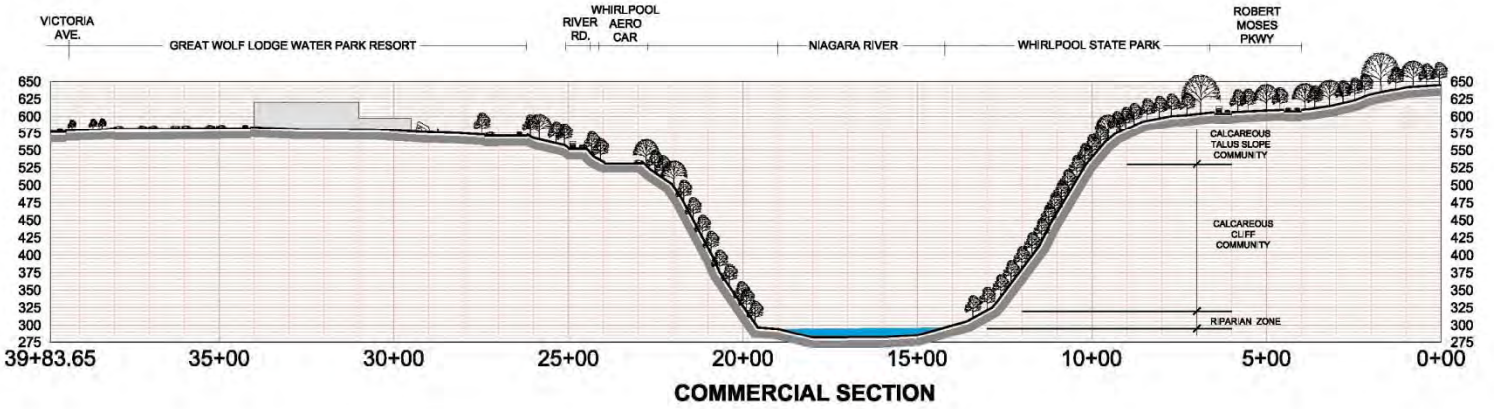
Ecological Resource-Based Approach – Gorge Section





VERTICAL EXAGGERATION - 2 TO 1

Use of GIS mapping, LIDAR topographic data and 3-D landform models to understand current and potential relationships between ecological resources and land development patterns

Project Task 1

Gorge Inventory

1. Historic & Ecological inventory- Analysis Using Existing Databases and GIS Mapping

- New York State Natural Heritage Program data
- NYS Dept. of State Significant Coastal Fish and Wildlife Habitat data
- NYS Breeding Bird Atlas
- NYS Reptile and Amphibian Atlas data
- NYSDEC Significant Habitat files
- County and municipal planning and land use reports
- Niagara County Soil Survey
- USGS Topographic Maps
- Aerial Photography
- National Wetland Inventory and NYSDEC Freshwater Wetland Maps
- New York State Museum (Geologic Survey) Maps and Files
- Other Niagara Gorge Area Plans or Studies

2. On-Site Reconnaissance-level Field Review

Project Task 2

Gorge Rim Inventory

1. **Historic & Ecological inventory- Analysis Using Existing Databases and GIS Mapping**
   - New York State Natural Heritage Program data
   - NYS Dept. of State Significant Coastal Fish and Wildlife Habitat data
   - NYS Breeding Bird Atlas
   - NYS Reptile and Amphibian Atlas data
   - NYSDEC Significant Habitat files
   - County and municipal planning and land use reports
   - Niagara County Soil Survey
   - USGS Topographic Maps
   - Aerial Photography
   - National Wetland Inventory and NYSDEC Freshwater Wetland Maps
   - New York State Museum (Geologic Survey) Maps and Files
   - Other Niagara Gorge Area Plans or Studies

2. **Review of Historic Environmental Conditions Prior to Robert Moses Parkway**

3. **On-Site Reconnaissance-level Field Review**

Project Task 3

Restoration Plan

1. **Compare historical conditions to the current conditions**

2. **Provide recommendations to restore and maintain the diverse, sustainable ecological communities in the area currently occupied by Robert Moses Parkway.**
    a) Representative of historical natural conditions
    b) Large enough to support a full suite of native species
    c) Significant enough to provide educational and tourism benefits

3. **Map locations for establishing different ecological communities**

4. **Outline realistic means of achieving restoration goals**

Project Task 4

Circulation Plan

1. **Balance the ecological community as a whole with usage potentials**

2. **Identify appropriate connections for access for people and vehicles**

3. **Create a pedestrian-friendly and humanly scaled riverfront**

4. **Analyze reconfiguring the transportation corridor to open up connection between the waterfront and the adjacent neighborhoods**

Project Task 5

Park Urban Interface Plan

1. **Enhancing connections to the neighborhoods in:**
    a) City of Niagara Falls
    b) Niagara University
    c) Village and Town of Lewiston

2. **Review City of Niagara Falls' 2009 Comprehensive Plan neighborhood connection recommendations**

3. **Make new recommendations for connections to adjacent neighborhoods and land uses**

Project Task 6

Management Guidelines

1. **Develop ecological management guidelines for the built and natural environments**

2. **Acknowledge impacts from neighborhoods, tourists, traffic, and other man-made intrusions.**

Project Task 7

Implementation Plan

1. **Suggest phasing and estimate cost for each phase or segment**

2. **Identify specific projects to be pursued by different entities:**
    a) New York State Office of Parks, Recreation, and Historic Preservation
    b) New York Department of Transportation
    c) Niagara County
    d) City of Niagara Falls
    e) Village and Town of Lewiston
    f) New York Power Authority
    g) Niagara University
    h) Local neighborhood groups

Project Task 8

Graphic Plan and Simulations

1. **Graphic restoration plan**

2. **Prepare several (approx. six) three- dimensional visual simulations of key locations**

Project Task 9

Economic Impact

1. **Identify regional tourism opportunities**
2. **Predict value of economic revitalization to adjacent neighborhoods**
3. **Review any foreseeable economic impacts resulting from the Restoration Plan recommendations**

Project Task 10

Video Presentation

1. **Develop computer-generated fly-over based on the ultimate restoration build-out**
    a) 2-3 minutes
    b) Incorporates graphics and simulations
    c) Promotes the Restoration Plan concepts

Project Budget, Schedule & Administration

2010

1. **Begin Restoration Plan Study in January 2010**
2. **$140,000 Budget**
3. **Administered by Wild Ones Niagara**

Advancement of the Niagara River Greenway Plan

Examples of Supporting the Vision, Goals, Principles, and Criteria

1. **Identifies opportunities for public use and enjoyment**
2. **Creates high-quality, objective analysis for all projects within this corridor**
3. **Employs sustainable techniques for long-term care**
4. **Promotes neighborhood revitalization**
5. **Recommends physical and visual access to the Gorge area for young people, adults, seniors, and persons with special needs**
6. **Improves the health, vitality, and integrity of natural resources and wildlife habitats and the built environment**
7. **Promotes physical activity and community engagement**
8. **Celebrates the unique heritage of the region**

Questions