

Section E Land Use Policy Investigation

There is a large gap between current land use policies available to City decision makers and policies that would enable pursuit of the vision for the Lower Big Creek area presented above. In order to begin to address this gap, NOACA worked with the Cuyahoga County Planning Commission (CPC), the City of Cleveland Planning Commission and the City of Cleveland Community Development Department on an investigation of land use policy options that might be considered by the City of Cleveland for future implementation.

Investigation of a number of land use policy concepts was undertaken by CPC staff and reviewed and revised by NOACA and City of Cleveland staff. These included concepts such as:

- Hillside Stabilization Zoning,
- Open Space Zoning,
- Guidelines for Re-Use of Landfill Sites,
- Aesthetic Design Guidelines for Industrial Uses,
- Outdoor Storage Licensing,
- Principles for Trail Feasibility Analysis,
- Conservation Easement Guidelines,
- Historic/Cultural Resource Protection and Interpretive Planning Guidelines,
- Scenic Viewshed Protection,
- Riparian & Hillside Protection,
- Wildlife Restoration,
- Plant Restoration Guidelines and
- Eco-Industrial Guidelines.

This section summarizes these land use policy concepts and discusses an overall implementation strategy for pursuing changes in the City of Cleveland's land use policies. A proposed methodology for each of these concepts is included in Appendix D.

Implementation Strategy

The Cleveland City Planning Commission, with assistance from the Lower Big Creek Project Advisory Team, the Cuyahoga County Planning Commission and NOACA, should take the lead in developing the overlay district zones for riparian protection and hillside protection in the Lower Big Creek area as a demonstration for citwide application.

See Task A in Section G below.

This should be coordinated with the model code under development by the Cuyahoga County Planning Commission

Hillside Stabilization Zoning

Task: Develop and implement city land use policy mechanisms in the form of zoning and building design standards to assist with future planning efforts for hillside remediation.

Concept: Develop specific standards within a designated hillside susceptibility zone that apply to site, building and infrastructure requirements to assist with further stabilization of new and existing structures.

This work should be coordinated with the technical assessment of Hillside Subsidence problems proposed for Phase 2 implementation.

Open Space Zoning

Task: Develop and implement Open Space Zoning Overlay District mechanism to further protect existing resources and outline parcels for future open space protection.

Concept: Develop a zoning district or overlay zone that 1) protects critical natural resources in the Lower Big Creek Valley 2) outlines specific design criteria for new or redeveloped sites to further protect areas on site.

Re-Use of Landfill Sites

Task: Develop and apply general principles for reuse of the landfill sites within the study area.

Concept: Re-use of underutilized landfill sites into viable land uses in a way that will blend and enhance neighborhood activities, highlight new economic development and integrate restoration of the Lower Big Creek Valley study area.

Aesthetic Design Guidelines for Industrial Uses

Task: Research and develop policies to include in aesthetic design guidelines for industrial and commercial properties within the valley. This should be coordinated with specific guidelines for screening, dust control and infrastructure (roads, curbing, parking)

Concept: The aesthetic design guidelines should be functional and serve multiple purposes on the site beyond serving an appearance role. These may include the following functions: stormwater management, solar collection, catchment and filtration of sediment or hydrocarbons, or driveway sharing to reduce impervious surface cover as well as improved site operations and infrastructure costs.

Industrial facilities are unique from commercial/retail centers and need to function differently, thus different site design parameters are necessary.

Outdoor Storage Licensing

Task: Develop and implement an Outdoor Storage Management program utilizing an Overlay District concept for requiring an annual license for certain outdoor storage practises.

Concept: An Outdoor Storage licensing program is a means of regulating land uses, particularly adjacent to streams, for environmental protection, that incorporates design issues to limit water quality impact. This approach utilized annual licensing, similar to the City's Parking Lot program. One recommendation would be to utilize the floodplain boundaries to delineate the overlay district, as these storage impacts relate to water quality and stream functions.

Guidelines for Trail Feasibility Analysis

Task: Apply design guidelines/conditions to Trail Alignment and Feasibility Analysis for Lower Big Creek Study area.

Concept: Develop a multipurpose trail to connect the Cleveland Metroparks Zoo to the Towpath Trail near Harvard Road and connections to an open space plan for the adjacent community neighborhoods.

Guiding Principles:

Use *an innovative design approach* that includes minimizing infrastructure and restoring ecosystem functions.

Plan for a trail loop system and other *neighborhood connectors* that links to the main spine. Connect adjacent neighborhoods such as Old Brooklyn, Brooklyn Centre, Archwood/Denison, Memphis Area to encourage expansion for tourism, recreation and alternative transportation for commuting.

Connect to the larger regional trail system as a means of rejuvenating the original emerald necklace concept. This includes connection to Big Creek Metroparks, Towpath Trail and the Lakefront Bikeway/Edgewater Park.

Allow for *active neighborhood and business involvement* in the analysis process to ensure local input, encourage citizen creativity, and develop a partnership/ownership for the future trail.

Develop a route that provides utilizing the trail for a *diversity of users and uses* of the trail system and a variety of activities which includes the feasibility of micro-tram buses for route.

Use *open space concepts* for an integrated trail to neighborhood blocks, city parks

and major thoroughfares to emphasize the social, cultural and physical attributes of the local community.

Integrate the natural resources such as the stream and valley dynamics, hillside characteristics, forest remnants to allow the trail user to explore these unique ecosystems and find opportunities to restore the pre-settlement landscape.

Use interpretive markers to ***educate the trail user*** on the historical and cultural resources of the area; and utilize historic resources in the trail design.

Consider the ***adjacent land uses, especially industrial operations***, and their daily operation activities to minimize disruption of these activities and/or their influence on trail activity.

Conservation Easement Guidelines

Task: Utilize conservation easements for natural resource protection and trail development in the Lower Big Creek Study area.

Concept: Employ several options for land protection. Purchasing property outright should only be used on properties that have significant resources, are severely threatened by impacts, or are essential to trail or community planning objectives, as this can become very costly.

A property owner can donate the land by will or other arrangements to a public entity for future protection. Tax benefits can begin prior to the death of the individual in some arrangements. This option should be educated to property owners more actively by the local land trusts and public agencies.

Easements can be an option for property owners to hold their land, but provide tax benefits to preserve and allow access on a part of their property.

Types of Easements that may be applicable for the Lower Big Creek:

Conservation Easement – A conservation easement is designed to exclude certain activities on private land. Its primary purpose is to conserve natural or man-made resources on the land. The easement is legally binding and runs with the property deed for a specified time or in perpetuity. An easement can provide substantial tax benefits. Working with an attorney knowledgeable with land use law can provide the tax implications.

Public Access Easement – An easement that permits or requires public access for trail or scenic purposes. This can provide additional agreements for public access onto an easement for trail/recreational use.

Historic Preservation Easement/Scenic Easement –An agreement that provides assurance that significant historic, cultural or scenic properties will be preserved through subsequent ownership.

Historical/Cultural Resource Protection and Interpretive Plan

Task: Develop a guidance outline for elements and process procedures to develop a Historical/Cultural Resource Protection and Interpretive Plan to be coordinated with the detailed land use and trail plan.

Concept: The Lower Big Creek Valley is an essential piece of and integral to the heritage of the Cuyahoga Valley and the Northern Ohio region. Remembrance and education of its historical and cultural heritage should be woven into and considered throughout the various planning efforts to enhance, protect and interpret the resources that residents and tourists can become aware of in future recreational planning efforts.

Cultural Resource Planning is planning for the rehabilitation and preservation of architecture and landscapes. This planning process has been identified in consultation with various existing initiatives: Ohio & Erie Canal Heritage Corridor Plan, City of Cleveland historic structures inventory. Further consultation with these regional efforts will help the Lower Big Creek Area focus on additional cultural resources to consider for future planning efforts.

Interpretive Planning is planning for the Visitor Component. The main goals of interpretation are to consider Who is the *audience* you interpret, What are the *stories* you want to tell, and What is the *experience* for visitors you want to have.

Scenic Viewshed Protection

Task: Policy research on zoning overlay districts or other planning practices focusing on viewshed protection.

Concept: Visual preservation of resources and scenic vistas of the valley and adjoining landscapes can play a vital role in the future planning of the valley for re-development and restoration practices. A View Protection Overlay District Zoning category can become a mechanism to protect the visual amenities of the valley.

Riparian & Hillside Protection

Task: Develop a riparian and hillside protection overlay district for the valley and identify the extents and conditions for this mechanism.

Concept for Riparian Setback Zone: This protection strategy should be woven into an overlay district onto general zoning categories that are within a designated riparian and hillside protection zone.

Riparian areas along a stream can provide multiple benefits for the health of the waterway and its inhabitants. Such benefits include filtration, sediment removal, diversity of species, cooling of water temperatures. The protection of the riparian area can be achieved by establishing a riparian buffer ordinance.

Concept for Hillside Protection Zone: Alteration of hillsides can severely alter the landscape's function ability sustain a stable system for the valley. Developing parameters to protect the most sensitive hillsides is recommended as part of the overall planning efforts for the future visioning of the Lower Big Creek Valley.

Wildlife Restoration

Task: Develop potential strategies and research viability of these to apply to the Lower Big Creek Valley to encourage wildlife.

Concept: Wildlife serves as integral piece of human nature that should be part of urban living and bringing nature closer to the city: "Environmental literacy in cities involves an understanding of wildlife as an integral part of natural processes and the relationship of life systems to people, and what it can teach us about coexistence."¹ The current urban ecosystem is fragmented and is not expanding the opportunities for wildlife diversity and introduction. The expansion and introduction of wildlife can be achieved through a Wildlife Restoration Planning Process in coordination with the Plant Restoration Guidelines.

Plant Restoration Guidelines

Task: Develop design tools/guidelines to first prioritize plant areas of concern which are threatened or have restoration potential. Secondly, provide tools for materials and practices to assist in restoration. This includes but not limited to: plants, management of invasive species and planting/protection practices for hillside/riparian areas.

Concept: Ecological Restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed.² A restoration plan should include the following elements: a) address why is restoration needed; b) include ecological description of project site, c) set goals and objectives of restoration project, d) include designation and description of reference ecosystem, e) include explanation of how proposed restoration will integrate with landscape and its flows of organisms and materials, f) develop plans, schedules and budgets for site preparation, installation and post installation, g) develop performance standards which include monitoring and evaluation protocols, and h) develop strategies for long-term protection and maintenance of restored ecosystem. If feasible, one untreated control plot should be incorporated to compare with the restored ecosystem.³

¹ Micheal Hough, *Cities and Natural Processes*, 1995, p.174.

² Society of Ecological Restoration, *Primer on Ecological Restoration*, Science and Policy Working Group, 2002.

³ Ibid

These restoration principles should apply to Lower Big Creek :

- a) Integrate the restoration of the site into the regional landscape to maintain its identity as part of a larger ecoregion;
- b) Use Native Plant species that are applicable to the specific area of restoration;
- c) Utilize natural ecological succession communities to develop self-sustaining and dynamic environments; and
- d) Protect Significant natural features.

Eco-Industrial Guidelines

Task: This impacted area will mostly be coming out of the Business Survey and Transportation Analysis. However, Developing a general framework for Phase II on *eco-industrial practices* that may apply to this area that can assist in the retention and redevelopment of the industrial hub.

This initiative will encourage the focus on advanced technologies, ecological design principles and sustainable business practices to assist with distinguishing this region and the Lower Big Creek's industrial hub attributes as a economic competitor for industrial as well as new economic businesses.

Concept: Industrial Ecology Definition: Promotes cyclical patterns that are present in the natural systems into the designs of the typical linear patterns of industrial production processes.

This is an approach that takes into consideration the economic, environmental and social ramifications of an industrial business.

Principles of Industrial Ecology include the following⁴:

- a) Fostering cooperation among various industries whereby the waste of one production process becomes the feedstock for another.
- b) Identifying ways that industry can safely interface with nature, in terms of location, intensity, and timing.
- c) Striving to decrease materials and energy output intensity in industrial production.
- d) Re-designing production processes and patterns for maximum conservation of resources.
- e) Development of renewable energy supplies for industrial production.

⁴ Hardin Tibbs, "Industrial Ecology: An Environmental Agenda for Industry," U.S. Dept. of Energy, Center of Excellence for Sustainable Development.

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