Executive Summary

Introduction

The Northeast Ohio Areawide Coordinating Agency received a grant from the Ohio Coastal Management Grant program to undertake an assessment of the land use, transportation and environmental problems in the Lower Big Creek area, to prioritize problems, and to formulate a strategy for addressing these problems.

An overall goal of the project is to plan for and implement long and short-term actions and policies to stabilize and improve physically and environmentally sensitive natural areas in the study area with the intention of eventually connecting the Cleveland Metroparks Zoo with the Canal Towpath which now features a trailhead at Harvard Rd. just east of the study area, and the planned northern terminus at Jennings and Harvard Roads for the Cuyahoga Valley Scenic Railroad. The project has been coordinated with the City of Cleveland's comprehensive approach to neighborhood revitalization planning in the Old Brooklyn and Brooklyn Centre neighborhoods.

NOACA undertook this study in partnership with the City of Cleveland which committed both staff from the Departments of Community Development and the City Planning Commission, and funding provided through City Councilwoman Merle Gordon.

NOACA also received funding for this project from the Ohio and Erie Canal Association, and provided local match funds from its own resources.

NOACA organized a project advisory team to assist in refining study issues, identifying public stakeholders for input in the planning process, and reviewing and commenting on study reports. The Team consisted of representatives from the City of Cleveland Planning Commission, the City of Cleveland Department of Community Development, the Cleveland Law Department, Cleveland Ward 15 City Councilwoman Merle Gordon, Cleveland Metro Parks, the Cuyahoga County Planning Commission, the Cuyahoga River RAP, Northeast Ohio Regional Sewer District (NEORSD), the Ohio Environmental Protection Agency, Ohio Canal Corridor, Inc., the National Park Service, the Ohio Coastal Management Program, the Old Brooklyn Community Development Corporation, and the West Side Industrial Retention and Expansion Network (WIRE-Net). The Team met every one or two months throughout the eighteen months of the study.

The project advisory team has formulated a concept for future planning of the Lower Big Creek study area that embraces the concept of a mixed industrial, recreational and open space use of the valley floor, preserves and expands greenspace along the valley floor and hillsides, integrates and links neighborhood open space with recreational trails, connects the Metroparks Zoo with the Ohio Canal Reservation with a valley floor trail, and enhances the economic relationship between upland retails and valley floor recreational users.

The project study area included the area bounded on the north by I-71, on the west by Ridge Road and the Cleveland City limits, on the south by the Cleveland City limits, and on the east by the Cuyahoga River. The focal point of the study was the Lower Big Creek valley area from Fulton Rd. east to the Cuyahoga River and south along the west side of the Cuyahoga River to the City of Cleveland municipal boundary. See Figure 1.

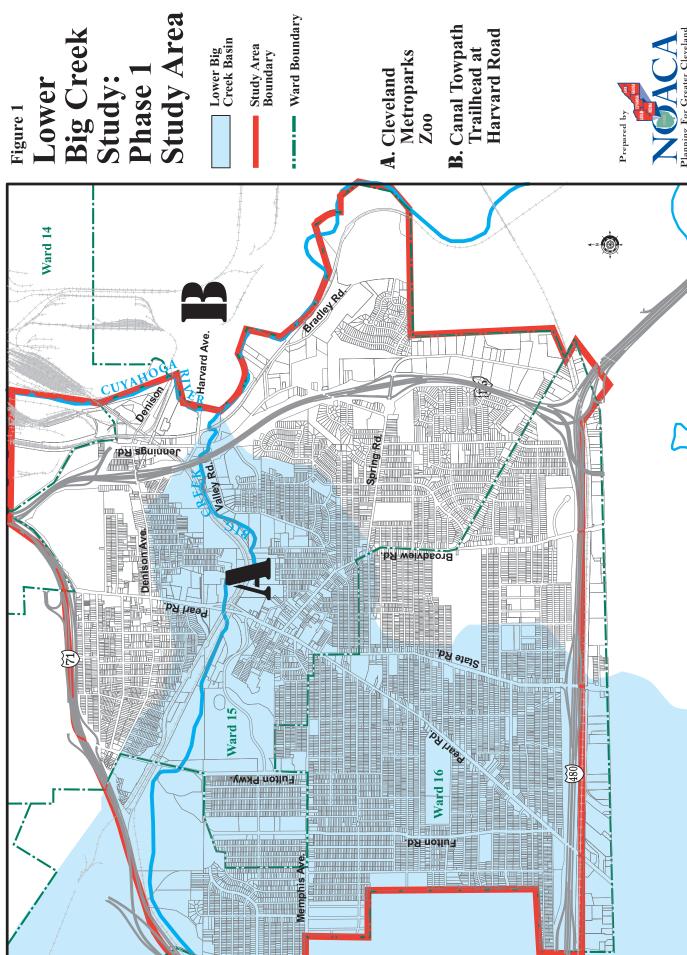
The study was organized and proceeded as follows:

- NOACA's Environmental Planning Division conceptualized the study, secured
 the necessary funding, and provided overall coordination and direction for it in
 consultation with staff from the City Planning Commission and the Department of
 Community Development; NOACA's Transportation Planning Division
 undertook an assessment of transportation issues.
- NOACA contracted with the Cuyahoga County Planning Commission to undertake a land use and environmental assessment, and research land use policy options protective of the natural resources in the study area that might be pursued in phase two of the study.
- NOACA also contracted with Cannata Communications to assist with the design and implementation of a public stakeholders meeting to engage neighborhood residents in a discussion of study issues and preliminary findings. A public meeting was held on January 24, 2002.

Special effort was made to outreach to the business community. An introductory meeting was held with representatives of the business community on December 16, 2001 to provide an overview of the study and to listen to business concerns. A decision was made to undertake a survey of businesses in the study area to develop more systematic information about business conditions and concerns.

With input from the Cleveland Planning Commission staff and the Cleveland Department of Community Development staff, NOACA designed and administered a survey to 47 local businesses during March and April of 2002. NOACA was aided in this effort by staff from the West Side Industrial Retention and Expansion Network (WIRE-Net) who assisted by making personal contacts with businesses to encourage them to respond to the survey.

The Lower Big Creek Study benefited from several important planning initiatives underway Citywide, Countywide and within the Cuyahoga River Valley. These include the City of Cleveland's Connecting Cleveland 2020 Citywide Plan, the National Heritage Corridor Management Plan, Cuyahoga County Planning Commission's Towpath Trail Plan and Greenspace Plan and the Cleveland Metroparks plans for the Canal Reservation and the Metroparks Zoo. These various plans provide a context for this study in terms of overall community goals, and help to shape a concept for future action within the Lower Big Creek area.



Key Findings

A major objective in this phase of the project was to assess conditions, and prioritize issues. Toward this end a number of Key Findings have been formulated which will help guide more detailed planning in phase two of the study. Key Findings address several major issues including (a) Stream Impairments, (b) Land Use Conditions, (c) Land Impairment Assessment Issues, (d) Transportation Infrastructure Issues, (e) Business Survey Results and (f) General Public Concerns.

Stream Impairments

- The Lower Big Creek original drainage patterns and riparian zone have been severely altered and fragmented as a result of channelization, spillway structures, culverting, and land use encroachment of the stream. This has increased flow volumes, decreased diversity and livability of habitat and limited the potential for stream recovery.
- The floodplain and floodway has been severely encroached upon by railroad rights of way, landfill operations, and industrial land uses. This has limited floodplain and stream capacity and increased the frequency and scale of flooding of properties, and restricted floodplain and riparian habitat diversity.
- Water quality of the Lower Big Creek is degraded, limiting the useability of this
 stream for recreational purposes. Bacteria levels frequently exceed water quality
 standards. Ecological water quality conditions are typical of those within an
 urban area with fish habitat in the fair range, fish communities poor but improving
 and macro-invertebrate communities poor but improved from grossly polluted
 conditions of twenty years ago. The degraded water quality is a result of the
 presence of combined sewer overflows (CSOs), urban runoff and alteration and
 encroachment onto the stream.
- The biological resources are severely limited within the valley due to land use practices and stream alteration, as well as a proliferation of invasive species. Pockets of historical plant communities still remain. These provide the potential to protect the remaining areas and restore other areas that can help bring an active plant and animal community back to the valley.
- The topography of the valley, with its steep slopes, is a defining feature of the landscape, but is being severely threatened by widespread instances of hillside subsidence.

See Figure 2 Ecosystem Remnants in Lower Big Creek.

Figure 2 Ecosystem Remnants in Lower Big Creek



Pockets of Forested Hillside Remain



Steep Shale Cliffs are a Significant Feature



Areas of Intact Riparian Vegetation Remain



Excellent Riparian Cover is Abundant Near the Mouth of Big Creek

Land Use Conditions

- The Lower Big Creek area has an abundance of historical and cultural resources that includes Brookside Park, Wade Park Zoo Barn, Jeremiah Gates Home, Old Pearl Road Bridge, the Brooklyn Center Historical District, and inclusion in the Ohio & Erie Canal National Heritage Corridor, the National Scenic Byways District and the American Heritage Rivers Designation.
- The Lower Big Creek Valley has been identified as a trail connector to the Towpath Trail as well as the city and regional trail systems in various planning efforts. The natural and cultural features within the valley make it a valuable piece for integration into the trail network.
- The urban land use has an existing mixed use layout that creates conflict and incompatibility on adjacent land uses. Its diversity of uses can also provide an opportunity to create a unique urban area that can expand the economic, recreational, and quality of life benefits for the community.
- The study area has some parks, an abundance of open space and access to regional recreational facilities, but there is a lack of connection to open space and trail opportunities within the valley from the neighborhood block to the regional system.
- Protection of the few remaining undeveloped land parcels is critical to any future open landscape in the valley and study area.
- Major infrastructure elements such as railroads, highways and drainage systems exist within the study area and pose limitations for valley restoration efforts.
- Industrial use is pre-dominant in the lower valley and along the Cuyahoga River, and is a vibrant hub for industrial activity for the City. Pre-dominant industrial uses include truck terminals, manufacturing, and contract and construction services.
- Current zoning in much of the study area is unrestrictive and does not provide for protection of critical resources or dedication of areas to consider additional design guidelines that could assist in the reclamation and sustainability of the valley.
- The environmental and recreational resources of the Cuyahoga Valley and its
 tributaries are emerging as an important community asset for the region. This is a
 departure from old ways of valuing the river valley lands and landcapes and is
 transforming public expectations about future land uses and industrial practices.
 Work is underway locally to develop new land use standards.

Land Use Assessment Issues

- Business activity in the Lower Big Creek area remains active with few (4) fully unoccupied or vacated buildings and sites within the study area.
- A significant percentage of land in the valley floor (69 parcels, or 36% of the industrial/commercial valley) is either undeveloped, vacant, or underutilized. In particular, a number of key properties directly adjacent to the Lower Big Creek below and east of Pearl Rd. (US 42) represent marginal or underutilized land uses. These include an auto salvage yard, construction demolition operations, a container storage facility, a closed C& DD landfill, and a large road salt storage site, among others. These uses pose a barrier to recreational improvements and represent an ongoing threat to environmental quality. However, opportunities may exist for re-use of landfill and underutilized sites, and this could be the impetus for long term regeneration of the valley.
- Public roads, curbs and sidewalks in the valley floor are in a poor condition that includes the absence of curbs and storm sewers. Some roads are covered with dust and debris. In addition, there is a drainage problem in the vicinity of Jennings and Bradley Rd. such that surface water flowing in sheets across the Bradley Rd. Peninsula to the Cuyahoga River can sometimes be observed. This impairs the potential of some business activity as well as the aesthetic appearance of the district.
- Hillside subsidence is an extensive and multifaceted problem. Issues include threatened structures, temporary and inappropriate stabilization measures, natural erosion, and building practices that pose limitations in regards to safety of property and protection of resources.
- The outdoor storage of bulk materials is a predominant feature within the valley that contributes to aesthetic and water quality issues that limit the valley's scenic potential and stream vibrancy.
- Parking areas accessory to businesses along the valley floor area are largely unpaved and not properly drained which combine to have a detrimental effect on water quality of Big Creek, the Cuyahoga River, and nearby groundwater resources.
- The operating Construction & Debris landfill at Bradley Rd. poses a challenge to assure that rules are being complied with, especially with respect to grading, encroachment on stream beds and maintenance of an adequate buffer from adjacent land uses.
- Limitations on past assessment of closed landfill facilities in the area will pose a challenge to determining constraints on their reuse, but there remains an opportunity for reclamation of land and reuse for the community

• Exterior building facades are generally in good condition and are being maintained. However, there is a lack of cohesion in architectural styles and site design in new and old structures. All of this contributes to a lack of definition to the valley industrial zone. This is largely attributable to an absence of design guidelines for industrial buildings, the lack of a design review mechanism, and the piecemeal nature of development within the valley.

See Figure 3 Streamside Land Uses in Lower Big Creek and Figure 4 Transportation Issues in Lower Big Creek.

Transportation Findings

General Findings

- Transportation improvements in the valley should strengthen and support existing industrial base while safely making room for emerging uses;
- Transportation system findings must be tied to relevant watershed findings to provide recommendations that reflect integrated planning.

Specific Findings

- There are infrastructure problems in the valley and in the neighborhoods that should be addressed with respect to both condition and design to better accommodate different modes and remediate existing watershed problems;
- Freight access should be improved for viable businesses in locations that do not create significant watershed problems and compatibility issues with emerging economic uses;
- Businesses that do create significant watershed problems and are situated in close proximity to emerging uses should be provided relocation assistance to areas in the valley or City that have more direct freeway access and less exposure to waterways and related uses;
- The extension of the Towpath Trail from Harvard Road to the Flats will provide the last link in a project that offers Northeast Ohio an opportunity to re-discover its natural beauty and begin to shape a new economy, one that is in harmony rather than at war with nature;
- Bicycle and pedestrian pathways and connections between neighborhoods and existing and planned valley destinations should be established.

Business Survey Results

 Businesses surveyed in the Lower Big Creek Valley area are a diverse lot and remarkably well established. A number have made recent improvements to their operations, but most have no plans to expand. None has plans to relocate at this time.

Figure 3 Streamside Land Uses in Lower Big Creek



Henninger Land Fill



Brookside Auto Salvage Yard



Norfolk Southern and CSX Railroads Rights of Way Parallel the Creek



Industrial Facility below US-42

Figure 3 Streamside Land Uses in Lower Big Creek continued



Aluminatech Dross Pile at Cuyahoga River's Edge



Road Salt Storage Site lies to north of Stream



Debris Dumping on Valley Floor



Storage of Construction Material Adjacent to Stream

Figure 4 Transportation Issues in Lower Big Creek Area



West 14th Street is in poor condition for vehicular traffic



Parking of Truck Rigs under Jennings Freeway



Truck Container Storage Site on Valley Floor

- Most businesses express optimism about their economic future. The impact of LTV's closing appears to be limited. Businesses have relatively strong connections to the City and neighborhood in terms of customer base and employment.
- Good freeway access is a key factor in businesses locating in the area. At the same time, roadway conditions are problematic. In fact, there are widespread concerns about deficient infrastructure including concerns about drainage and flooding, sewers, lack of sidewalks and curbs, bad railroad crossings, but most especially poor roadway conditions. Many businesses have specific suggestions about making infrastructure improvements.
- Most businesses are satisfied with City services, with the exception of streets maintenance which is seen as deplorable.
- Although a few businesses are supportive of recreational trails, most are not enthusiastic unless attention is also paid to basic infrastructure problems. A frequently made comment is that recreational trails are the wrong priority when infrastructure issues are not getting the attention they deserve.
- Since business response was voluntary, the effects of self selection cannot be discounted. This factor would most likely bias the results in favor of more established and economically viable businesses. However, survey results are more useful, in fact, if they represent well established businesses because these are the economic anchor for the area and have a greater stake in the future of the area.

Public Concerns

- There is a marked difference in neighborhood perspectives about the past, present and future. Thinking about the past brings wonderful memories of baseball diamonds, supermarkets, theaters, local drug stores, wild turkeys, deer, and kids playing in the woods at Calgary Park. The present conjures up images of junkyards, truck depots, air and land pollution, poor schools, unsightly housing, a lack of amenities, and a continuous battle to clean up the area regularly surfaced.
- Stories about the Lower Big Creek Valley of the past abound. They include trips on the train that went to "Dollyland," the Civil War encampment under the Pearl Rd. Bridge, steam trains, ponds for ice-skating, the colors of the Big Creek (bluegreen-yellow) from the Phoenix Dye Co., men cutting down trees along the Big Creek and children walking through the wallpaper factory.
- Two themes underlie neighborhood resident concerns today: the revitalization of the housing stock and general condition of the neighborhoods, and the reestablishment of business and industry in the Valley. Erosion of home values,

- safety issues, loss of private property, lack of services and amenities are mentioned among residents concerns.
- In addition, residents want to attract more people to the area, develop a higher scale of retail with more local restaurant options, convert land parcels to green space, and develop a bike trail.
- In regards to business and industry, the residents would like to maintain current establishments and add new businesses and industry to the Valley. They would also like business and industry to play a greater role in the maintenance and vitality of the Valley. The residents feel that businesses should be a cooperative partner with the neighborhoods and residents to make the Valley an attractive place where people would like to live, work and play. The attendees often referred to Ohio City and the Tremont area as examples of what they would like to see for the Lower Big Creek area.
- Many residents currently interact with the Lower Big Creek Valley by visiting the Cleveland Metroparks Zoo, by going for bike rides or strolls on the towpath, or by simply traversing the neighborhood streets. Many work in the neighborhood and some own businesses.
- Residents thoughts on what they would like to see happen in the Lower Big Creek Valley include a clean up of the Valley both aesthetic and environmentally, better lighting of the neighborhoods, rezoning to eliminate many of the bars on Denison and Fulton, refurbished infrastructure, a clean-up of the junkyards and recycling facilities, improved retail with storefront renovation, removal of truck traffic on residential streets, additions of hotels and bed and breakfasts, and a historic preservation movement.
- Residents wish lists include a city golf course in the Valley, an incline trolley ride similar to ones in Pittsburgh and Niagara Falls to get out of the Valley up to neighborhoods and retail, a bike lane added to Denison and Fulton Roads, the bike trail connected to the Towpath and Zoo, and the purchase of a riparian corridor in Lower Big Creek by the Metroparks Zoo to enhance the recreational amenities of the neighborhood.

Overall Assessment of Existing Conditions

An overall assessment of existing conditions includes the following observations.

- There is no central focus on the Big Creek as a resource for management and protection through land use planning and urban design strategies.
- Parklands in the study area are isolated, both within upland areas and between the upland and the valley floor. Existing trails are unconnected to each other.

- Pockets of forested open space exist in the areas connecting the valley floor to upland neighborhoods, but these are unprotected from future development.
- There are important concentrations of business and industry in the valley floor area east of Jennings Avenue below Harvard Avenue, along Valley Road west of Jennings Road, and along Bradley Road adjacent to the Cuyahoga River, east of Jennings. There are also a few isolated industries below the Brooklyn-Brighton Bridge, on which Pearl Road (US 42) crosses Big Creek.
- Land adjacent to the Lower Big Creek is generally vacant or underutilized, and existing uses restrict stream recovery and floodplain function.
- Upland neighborhoods are isolated from the valley floor by topography, economics, land use practices and transportation system design.
- Major transportation corridors-railroads and highways-traverse the study area and contribute to the isolation of the valley floor to upland neighborhoods.
- Landfill practices impact on the quality of life of neighborhoods and contribute to their isolation from natural areas in the valley floor and hillside

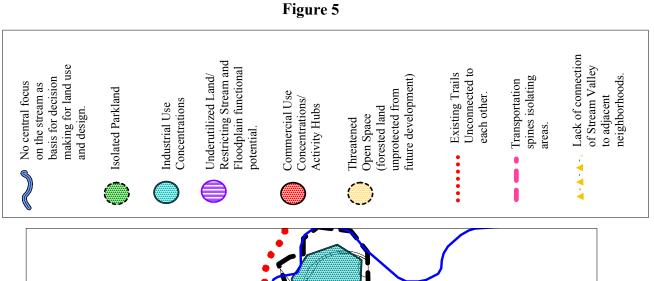
Figure 5 illustrates the Overall Assessment of Existing Conditions.

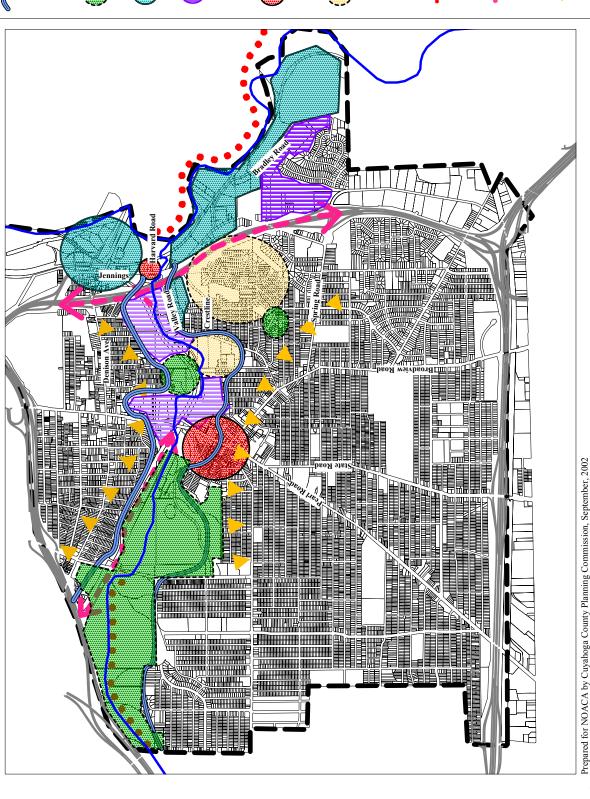
A Concept for Future Planning of the Valley

As noted above, in response to this assessment, the project advisory team has formulated a concept for future planning of the Lower Big Creek study area that

- embraces the concept of a mixed industrial, recreational and open space use of the valley floor,
- encourages policies fostering development and retention of compatible industrial uses, and supporting retail,
- preserves and expands greenspace along the valley floor and hillsides,
- integrates and links neighborhood open space with recreational trails,
- connects the Metroparks Zoo with the Ohio Canal Reservation with a valley floor trail, and
- enhances the economic relationship between upland retail and valley floor recreational users.

This concept has been formulated within the context of city, county and regional plans, approved or underway, that address future land use concerns. These have helped to frame discussions about the future of the Lower Big Creek valley.





Overall Assessment of Existing Conditions

Lower Big Creek Study

Figure 5

Figure 6 illustrates a Concept for Future Planning of the Valley.

Land Use Policy Development

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, in consultation with the City of Cleveland Planning Commission and the City of Cleveland Community Development Department, contracted with the Cuyahoga County Planning Commission to undertake an investigation of land use policy options that should 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 refined 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.

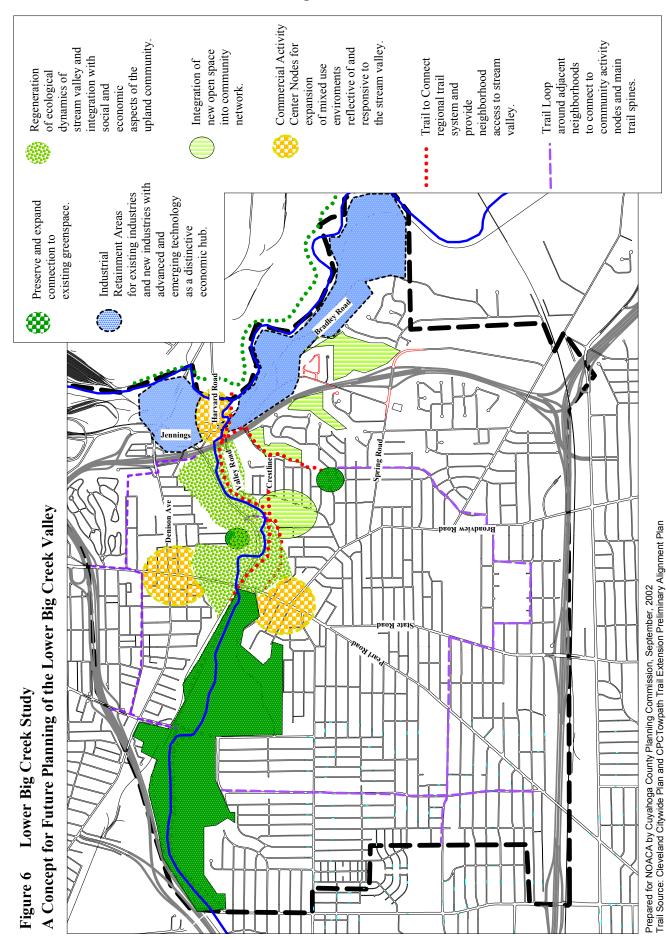
This report discusses an implementation strategy for followup on these land use policy concepts.

Strategy for Phase 2 of the Lower Big Creek Project

This section outlines a strategic plan for Phase 2 that includes both shorter term and longer term action elements.

Problems in the Lower Big Creek Study area are multifaceted and in some cases verge on the intractable. An effective approach for confronting these is to pursue a multifaceted plan of action with sustained involvement by the institutional stakeholders with interests in the Lower Big Creek area. Actions to be undertaken in Phase 2, whether direct project implementation or targeted studies aimed at Phase 3 implementation, are recommended on the basis of issue priority. Direct project implementation is recommended on the basis of immediate practical logic and feasibility. Continuation of the Project Advisory Team concept into Phase 2 is a key element in this approach.

Figure 6



The recommended strategy for Phase 2 encompasses seven elements:

- A) Land Use Planning;
- B) Business Retention, Infrastructure Improvements, and Economic Development
- C) Recreational Trails-Alignment and Design Study;
- D) Transportation Assessment;
- E) Hillside Subsidence Planning and Management;
- F) Coordinated Code Enforcement; and
- G) Overall Phase 2 Coordination

Land Use Planning

This task involves planning and policy development in the Lower Big Creek Valley area that focuses on:

- 1) development of zoning overlay district addressing Open Space, Riparian, Viewshed and Hillside Protection zones in the Lower Big Creek area.
- 2) land use planning for specific parcels which makes specific reuse recommendations; and
- 3) review of City of Cleveland land acquisition policy for parkland development.

Business Retention, Infrastructure Improvements, and Economic Development

This task addresses the needs of existing business and industry in the Lower Big Creek valley area, and encourages the development of appropriate new businesses. This task concentrates on:

- 3) providing enhanced outreach and assistance to existing businesses within the valley including the adoption of environmentally sound or "green" industrial practices.
- 4) infrastructure improvements (e.g. streets, sewers, drainage, etc.).
- 5) identification of types and appropriate locations for new businesses within the valley. Commercial retail business expansion can complement the emerging recreational uses in the valley as well as service the employees of existing business and industry. New Industrial development shall be focused in appropriate areas of the valley and be targeted to attract companies that are compatible with emerging recreational uses.

This task involves further review, assessment and analysis of the feasibility of the recreational trails tentatively identified in Phase 1 connecting the Canal Towpath to the Metroparks Zoo and to upland neighborhoods in Old Brooklyn and Brooklyn Centre.

Recreational Trails-Alignment and Design Study

This task involves further review, assessment and analysis of the feasibility of the recreational trails tentatively identified in Phase 1 connecting the Canal Towpath to the Metroparks Zoo and to upland neighborhoods in Old Brooklyn and Brooklyn Center.

Transportation

This task involves transportation planning activities to address the following goals:

- 1) Transportation system changes and additions should reflect an effort to solve longstanding Big Creek and Cuyahoga River watershed problems;
- 2) Coexistence should be pursued among existing business and industrial uses and emerging commercial and recreational uses in the valley; and
- 3) Neighborhood circulation and connection to the valley by all modes should be strengthened.

Hillside Subsidence

This task is to develop options for technical methods and design solutions that could be applied to hillside subsidence problem sites in the Lower Big Creek Area. A geo-technical stabilization plan is one solution for addressing current threatened property in the Lower Big Creek Study area. Other elements might include:

Technical assistance to home owners at risk in the form of technical standards to control hillside subsidence, a loan program, subsidized technical assistance;

New city standards for road stubs to prevent hillside subsidence:

Program to purchase properties severely at risk from hillside subsidence;

Hillside subsidence zoning overlay district.

Code Enforcement

This task is to coordinate and enhance enforcement of building code, site code, health and environmental regulations and other land management rules across City Departments within the Lower Big Creek Study area.

Overall Phase 2 Coordination

There is a pressing concern to maintain a coordinated effort as the Phase 2 strategies are carried out. This will require a comprehensive planning and oversight function. This task also includes maintenance of the Lower Big Creek project advisory team to continue to provide input on proposed plans and policies, and an ongoing public involvement effort.

