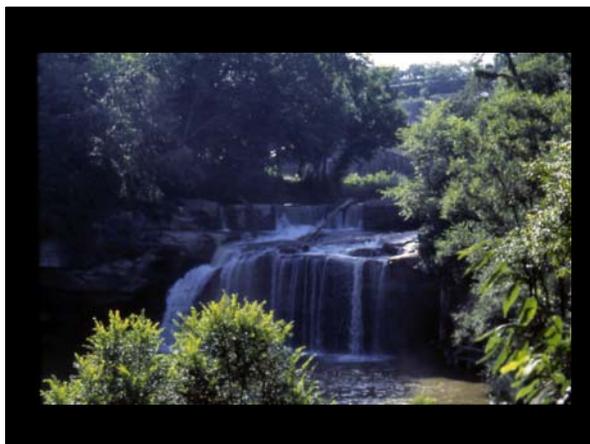


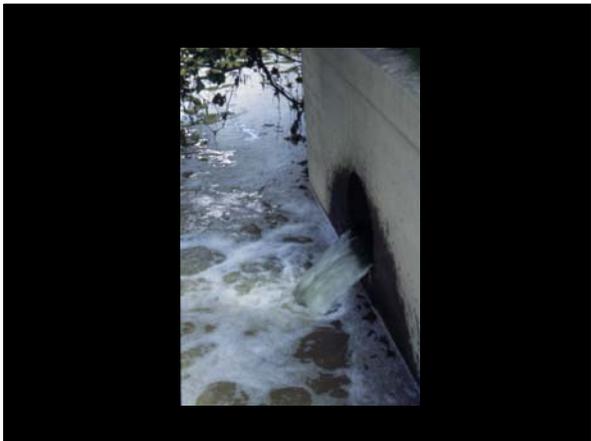
Best Local Land Use Practices

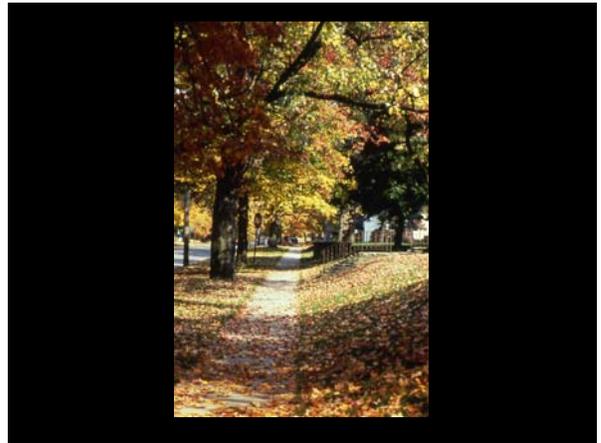
A Project of the Ohio Lake Erie Commission

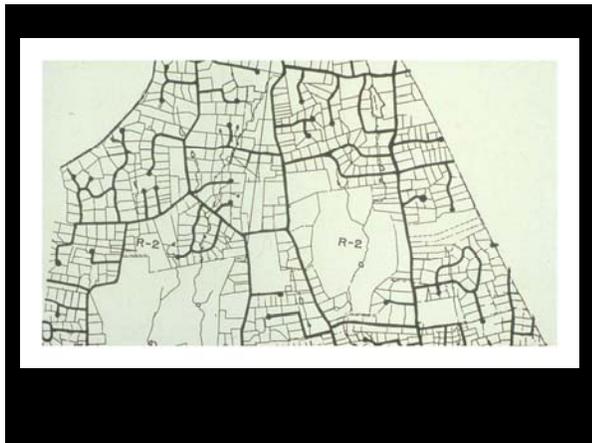
November 9, 2006
Kirby Date, AICP
Countryside Program Coordinator

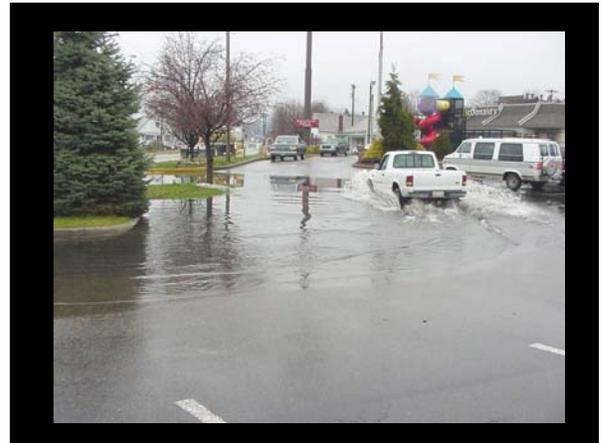
Center for Planning, Research, and Practice



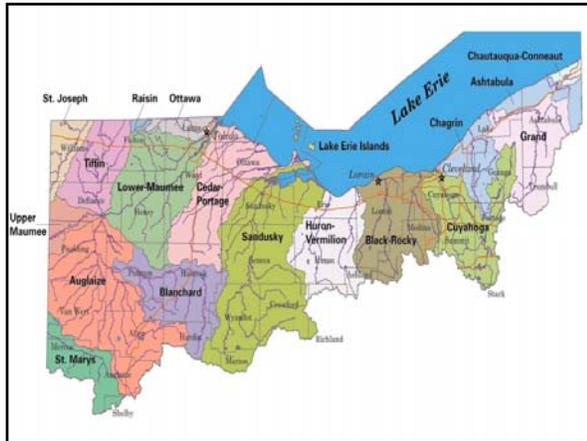








Balanced Growth is a strategy to protect and restore Lake Erie and its watersheds to assure long-term economic competitiveness, ecological health, and quality of life.



Local Governments Can Have a Big Impact on Watershed and Community Quality

- Location of development for minimum impact
- Management and control of storm water and erosion
- Protection of riparian and wetland areas so they can do their job as “free infrastructure”
- Protection of scenic, historic and natural resources to help retain our “great place”

The Ohio Lake Erie Commission’s Balanced Growth Program

- Pilot Watershed Planning Projects
- State incentives for designated priority conservation and priority development areas
- Best Local Land Use Practices



Best Local Land-Use Practices

Purpose of Models

- Guide location and design of development
- Comprehensive planning
- Voluntary adoption & balanced land-use practices



Model Regulations

- Stormwater Management
- Erosion and Sediment Control
- Riparian and Wetlands Setbacks
- Meadow Protection
- (Coastal Protection)



Primary Guidance Documents

- Comprehensive Planning
- Compact Development
- Conservation Development

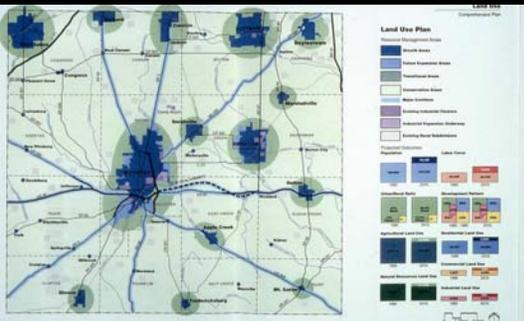
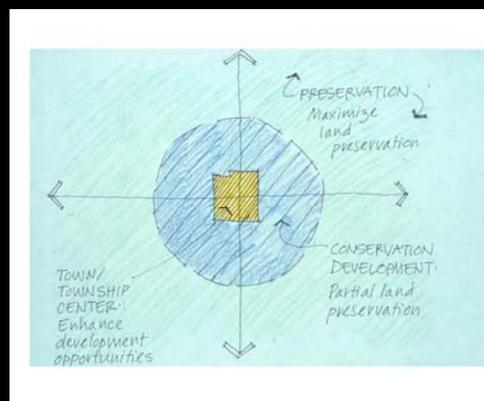


Secondary Guidance

- Woodland Protection
- Steep slope protection
- Scenic protection
- Historic protection
- Access management
- Brownfields Redevelopment
- Transfer of Development Rights
- Agricultural Lands Protection



Comprehensive Community Planning





Local Comprehensive Planning

- Provides framework for zoning that affects watershed quality: zoning alone cannot make public policy
- Identify Priority Conservation and Development Areas
- Plan for riparian, open space, agricultural protection
- Examine local economics, plan for development densities and uses
- Plan for incentives and review possible disincentives

Compact Development

- Residential, commercial or mixed use
- Strong neighborhood design
- Pedestrian Walkability
- Range of housing choices
- Range of transportation choices

Benefits of Compact Development

- Provides diverse set of housing/commercial products for diverse buyer markets
- Helps to revitalize small towns and existing neighborhoods
- Fits well into new “lifestyle center” projects
- Provides an exciting civic environment, enhancing community character
- When implemented across a watershed, will improve overall runoff characteristics of the watershed





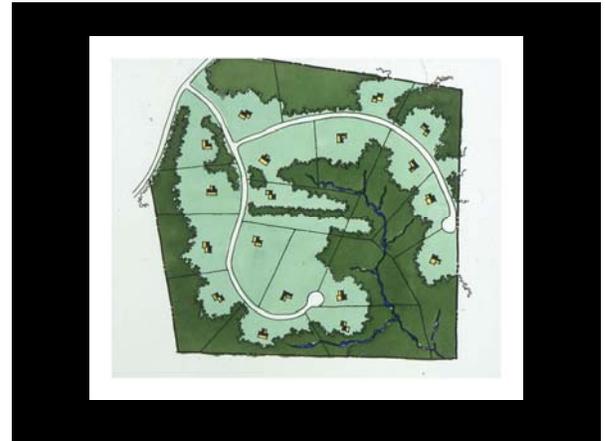
- ### Examples of Compact Development
- City of Barberton: New Haven
 - City of Brunswick: Town Center
 - City of Hudson: First and Main
 - City of Shaker Heights: Lee/Chagrin

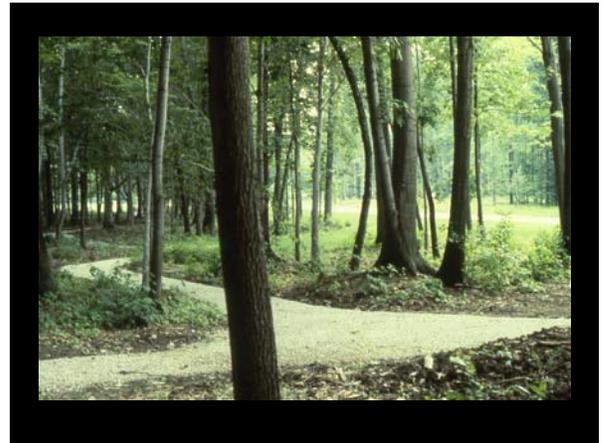
Conservation Development

- A planned unit development with special standards for preserving resources
- Concentrates permitted development capacity on the site, while conserving the rest (at least 40%) in open space
- Open space is used for resource protection
- Residential, commercial, institutional or mixed use
- Usually an option, with incentives

Benefits of Conservation Development

- Property values are enhanced or remain the same
- Diversity of housing product to accommodate diverse buyer market
- Protects natural, scenic and cultural resources
- Can reduce storm drainage, infrastructure costs
- Reduces impervious surface
- Open space provides options for riparian, wetland, and stormwater protection
- Provides opportunity to restore/enhance vegetation







Examples of Conservation Development

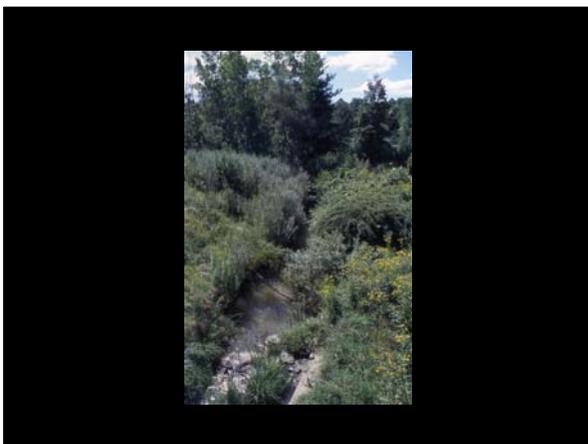
- 12 municipalities and 21 townships in Northeast Ohio alone, including:
- Aurora City
- Hudson City
- Hiram Village and Township
- Pittsfield Township
-

Riparian And Wetland Setbacks

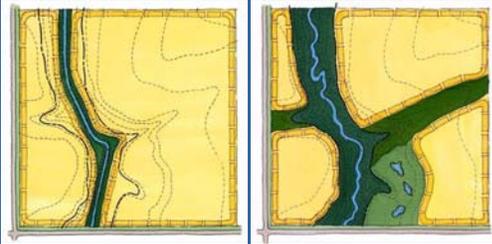
- Zoning setback similar to front and side yards
- Improves storm drainage infrastructure function of creeks and waterways
- Width determined by quantity of water managed in the sub watershed, or wetland drainage area
- Typical setback provisions apply

Benefits of Riparian and Wetland Setbacks

- Provide free storm water and flood protection infrastructure
- Reduce capital and maintenance costs
- Work better than engineered solutions
- Enhance design quality of development
- Enhance vegetation and habitat in development areas



Riparian setback in a conservation development



Wetland Protection in a Conservation Development



Examples of Riparian Setbacks in Communities

- 49 communities and 4 counties have adopted setback regulations in NE Ohio
- Data pending in rest of Basin
- Auburn Township, 25 to 125 feet
- City of Independence, 25 to 300 feet
- City of Aurora, 25 to 120 feet
- City of Green, 25 to 300 feet
- Lake County, 25 to 120 feet

Storm Water Management and LID

- Stormwater management reduces quantity, and improves quality, of runoff in the watershed
- Low impact development works at individual sites to reduce surface flows, filter stormwater, and disperse storage areas

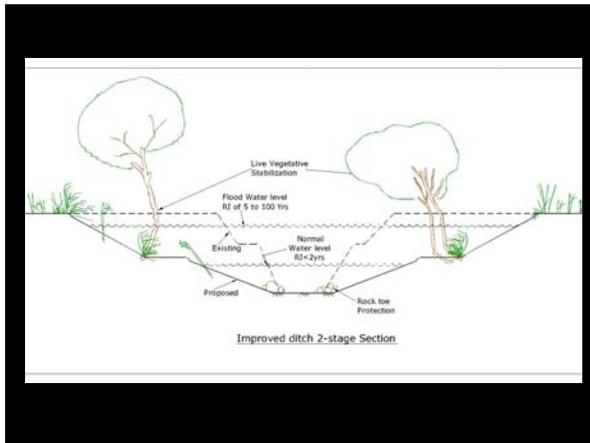
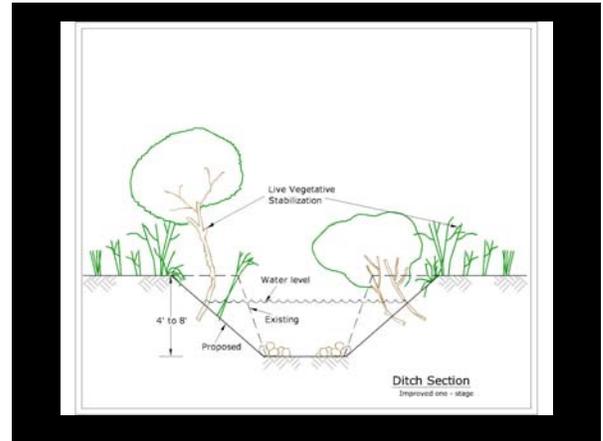
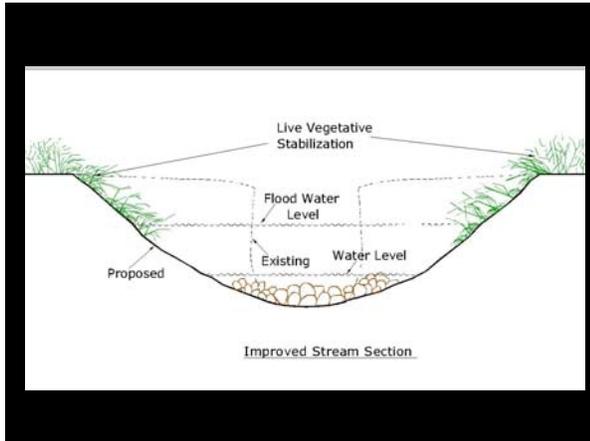


Stormwater Management BMPs

- SPPP (SP3) – Require Stormwater Pollution Prevention Plans on development sites
- Require developers to control the volume, rate, and quality of stormwater coming off sites
- Require good quality installation, and use of low-maintenance facilities
- Decentralize stormwater collection and conveyance
- Minimize stream crossings
- Retain and restore natural stream function
- Enhance function of existing agricultural ditches

Stormwater Management

- Maintain and restore normal stream function
- Enhance agricultural ditches to approximate stream function



Low Impact Development Measures (LID)

- Rain Garden

LID

- Bioretention filters/strips

LID

- Disconnected downspouts

LID

- Pervious pavements



LID

- Natural drainage basins



Meadow Protection

- Allowing natural meadows instead of horticultural lawns, especially in larger open space areas, helps to reduce surface water flows, filter stormwater, and enhance the rural environment
- Controls are needed to ensure landscape quality





Steep Slope Protection

- Generally protect areas over 12% slope, most often along stream and riparian corridors
- Provides for riparian area protection, reduces erosion, and helps with flood control



Woodland Protection

- Woodland open spaces play an important role in filtering and managing stormwater, reduction of erosion, and protection of steep slopes, wetlands and riparian areas, protection of scenic site character
- Protection ordinances should address overall development project design, as well as construction and post-construction measures



Agricultural Lands Protection

- Agricultural lands are a non-renewable resource that provide for food-producing capacity, and help achieve a balance of pervious and impervious surface, open space and development in a community
- Zoning protection ranges from very limited development to value-added commercial uses



Historic Preservation

- Helps to retain original character of small towns and central cities, creates sense of place, spurs economic development
- A comprehensive historic preservation plan will include inventory, evaluation and prioritization of sites
- Ordinances address boundaries, design guidelines, reviewing body



Scenic Protection

- Generally works along roadways to protect rural and scenic character through control of signage, landscaping, uses
- Increases property values, encourages tourism and economic development
- Ordinances establish boundaries and guidelines within those boundaries, establish reviewing body



Advice for Developed Communities

- Update and implement codes for low impact site design options (conservation development, compact development, riparian setbacks)
- Update and implement codes for innovative stormwater techniques (LID, restore stream section, two-stage ditch section, bioretention, grass swales, rain gardens, etc)
- Require provisions for management/maintenance
- Improve control of illicit discharges

Advice for Developing Communities

- Plan and map priority conservation areas, priority development areas, riparian and floodplain protection corridors
- Implement codes for innovative site design
- Implement codes for innovative stormwater management
- Require management provisions

Best Practices Training Program

- Across the Lake Erie Basin
- September 2006 through June 2007
- General awareness sessions
- Technical workshops
- In-depth single community technical assistance



A Few Resources

- Ohio Lake Erie Commission, Balanced Growth Program www.epa.state.oh.us/oleo
- Ohio Planning Conference www.ohioplanning.org
- Smart Growth Online www.smartgrowth.org
- EcoCity Cleveland, www.ecocitycleveland.org
- The Countryside Program, www.countrysideprogram.org

Questions?