Agenda

Best Local Land Use Practices Workshop for Design Professionals

8:00 – 8:30 Registration / Discussion Group Ice Breaker

8:30 – 9:00 Introductions / Objectives
- Overview of Ohio Balanced Growth Program
- Purpose of Case Studies and Workshop
- Introduction to Best Local Land Use Practices

9:00 – 10:00 Major Considerations Affecting Development Decisions
- Developer's Perspective
- Local Government Perspective
- Commonly-Accepted Development Practice "Mythbusters"
- Discussion Group Topic #1: "Opportunities and Barriers to Best Practices"

10:00—10:15 Break

10:15—10:25 "Triple Bottom Line" Site Planning Process
- Introduction to Process / Tools
- Introduction to Case Study Sites

10:25 – 11:15 Step 1: Defining Project Objectives and Performance Standards
- Social (e.g., density, traffic, utilities, "quality of life")
- Environmental/Water Resource (e.g., pollution, erosion, flooding, habitat)
- Financial (e.g., Life Cycle Costs, Sales Prospective)
- Discussion Group Topic #2: "Selecting and Weighting Project Objectives"

11:15 – 12:00 Step 2: Developing a Site Layout Plan
- Assessing Existing Site Conditions (e.g., terrain / drainage, soils, land use, land cover, water resources)
- Key Considerations for Conservation and Development Areas
- Imperviousness controls
- Discussion Group Topic #3: "Site Layout Best Practices"

12:00 – 12:30 Lunch

12:30 -- 2:30 Step 3: Siting and Sizing Storm Water Controls
- Identify and Characterize Available Sites and their catchments
- Delineate Intra-catchment drainage systems
- Sizing Storm Water Controls for Varying Site Conditions
- Delineate Inter-catchment drainage systems
- Discussion Group Topic #4: "Storm Water Control Siting and Sizing"

2:30 – 2:45 Break

2:45 – 3:45 Step 4: Developing a "Triple Bottom Line" Business Case
- Financial
- Community
- Environmental (Water Resource)
- Discussion Group Topic #5: :"Business Case Evaluation of Best Practices"

3:45 – 4:45 Wrap Up
- Discussion Group Reports
- Summary of Conclusions

4:45 Adjourn

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Best Local Land Use Practices Workshop

Discussion Group "Ice Breaker" Instructions

As you are finding your table for the workshop, you are encouraged to do the following as the folks at your table will be your team for the full day workshop:

1. Introduce yourself and what you do for a living.
2. Share one interesting fact about you with the team
3. Share what is it you are looking to get out of this workshop
4. What is your role with storm water management, water quality or water resources?
5. One thing you would rather be doing today, if you were not attending the workshop?

Ohio's Lake Erie Balanced Growth Program: An Overview

working together for a better Lake Erie

Chris Riddle
Ohio Lake Erie Commission

Ohio | Lake Erie Commission

Ohio Lake Erie Commission

Ohio

Department of Agriculture
Department of Development
Department of Health
Department of Natural Resources
Department of Transportation
Environmental Protection Agency

Mission:
Protect & Restore
Lake Erie

lakeerie.ohio.gov

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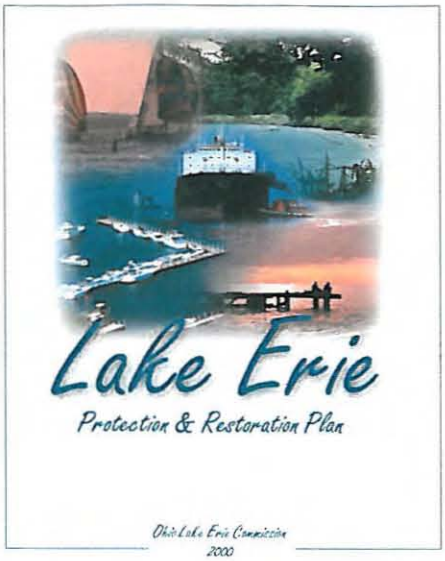

lakeerie.ohio.gov

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Lake Erie Protection & Restoration Plan:

Recommendation H-8: Commission a Balanced Growth Blue Ribbon Task Force, comprised of property owners, government officials, business leaders, conservationists, academia, agriculture and other stakeholder groups to be charged with advising the Lake Erie Commission on ways to:

- Develop strategies that will balance the protection of the Lake Erie watershed with continued economic growth.

lakeerie.ohio.gov

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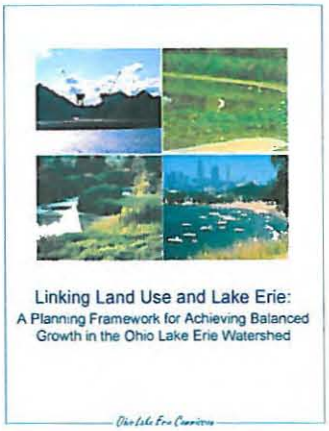
What is Balanced Growth?

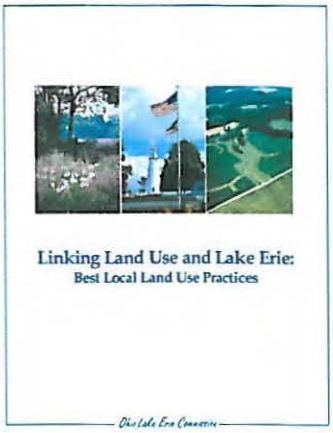
Balanced Growth is a strategy to protect and restore Lake Erie and its watersheds to assure long-term economic competitiveness and quality of life.

Key Aspects of Balanced Growth

- Minimizes new appropriations and legislation
  - Only one legislative recommendation
- Maximizes incentive based initiatives
- Honors Ohio's Home Rule tradition
- Focuses on ecological protection/restoration

Linking Land Use and Lake Erie

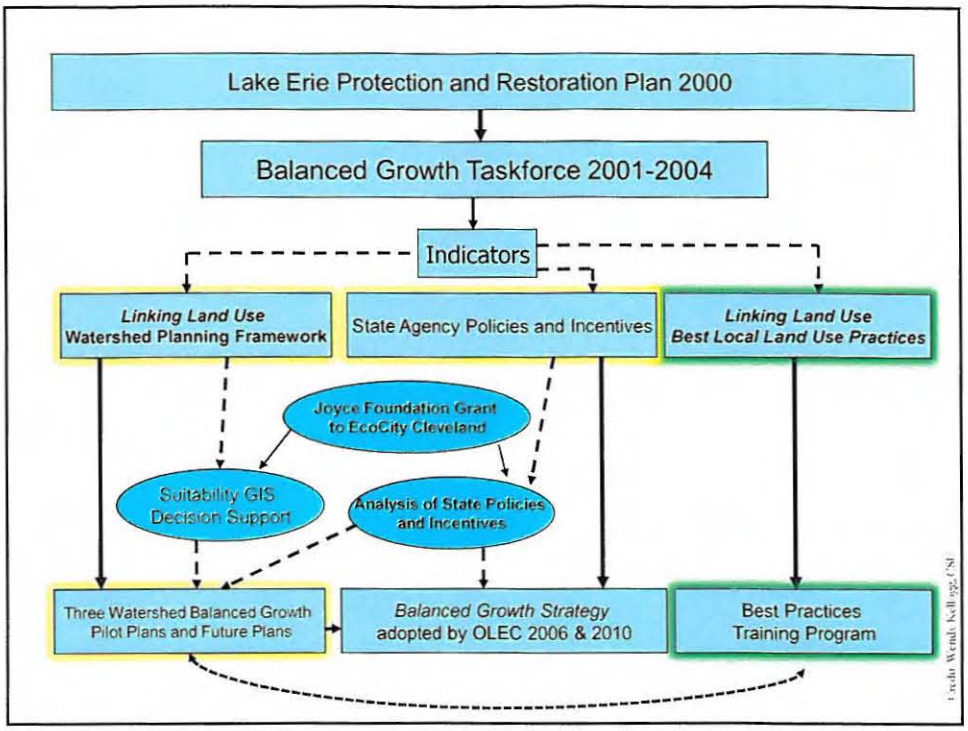




Ohio

Linking Land Use & Lake Erie

"…the development of northern Ohio often occurred without fully understanding or anticipating the impact this development would have on the natural and social environment. Thousands of individual decisions by communities accumulated to create this situation. There has been no framework for individuals and communities to come together to plan for their future and consider the cumulative impact of their development decisions on the health of watersheds."



Ohio

Planning Framework

A Balanced Growth Program must be…

- Voluntary
- Incentive Based
- Watershed as the "regional scale"

A Balanced Growth Program must identify…

- Identify Priority Conservation Areas
- Identify Priority Development Areas
- *Identify Priority Agricultural Areas*

Ohio

Priority Conservation Areas

- Locally designated areas targeted for protection and restoration
- Critically important ecological, recreational, heritage, agricultural, and public access areas


Ohio

Priority Development Areas

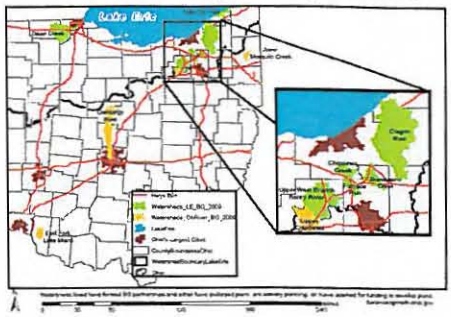
- Locally designated areas targeted for development or redevelopment
- Maximize development potential and efficient use of infrastructure
- Promote revitalization of existing urban areas


Ohio

Testing the Framework

- Pilot Watershed Projects
  - Funded 3 pilots to test the planning framework principles.
  - Implementing Balanced Growth Watershed Plans
  - Alignment of state policies, incentives, and other resources

Balanced Growth Planning Partnership Watersheds



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Watershed Planning Partnerships

- **Lake Erie Basin**
  - Brandywine Creek Watershed - Cuyahoga River
  - Chagrin River Watershed*
  - Chippewa Creek Watershed - Cuyahoga River*
  - Eastern Lake County Coastal Tributaries
  - Furnace Run Watershed - Cuyahoga River
  - Swan Creek Watershed - Maumee River*
  - Upper West Branch Rocky River Watershed*
- **Ohio River Basin**
  - East Fork, Little Miami River Watershed
  - Lower Mosquito Creek - Mahoning River
  - Olentangy River Watershed
  - Upper Chippewa Creek - Tuscarawas River Watershed

*endorsed plans

Ohio

State Support

- Fundamental Principle:
  - If local governments can agree on areas within a watershed where development is to be encouraged (PDAs) and areas where conservation activities are to be promoted (PCAs), the State of Ohio will support those decisions by aligning state programs to support those decisions.

Ohio

State Support Through Endorsement

- 75% local support before state endorsement
- Open and inclusive process – locally led.
- State Assistance Work Group interaction
- Financial and Technical Incentives
- Provides motivation for regional planning at the local level.

Ohio

Ohio River Basin

- Ohio Water Resources Council
- Evaluation by Smart Growth Leadership Institute
- Future for Pilot Planning Partnerships
- Expansion of BLLUP training program

Integrating water resources management with local planning and decision making.

balancedgrowth.ohio.gov

Ohio | Balanced Growth

Ohio | Lake Erie Commission

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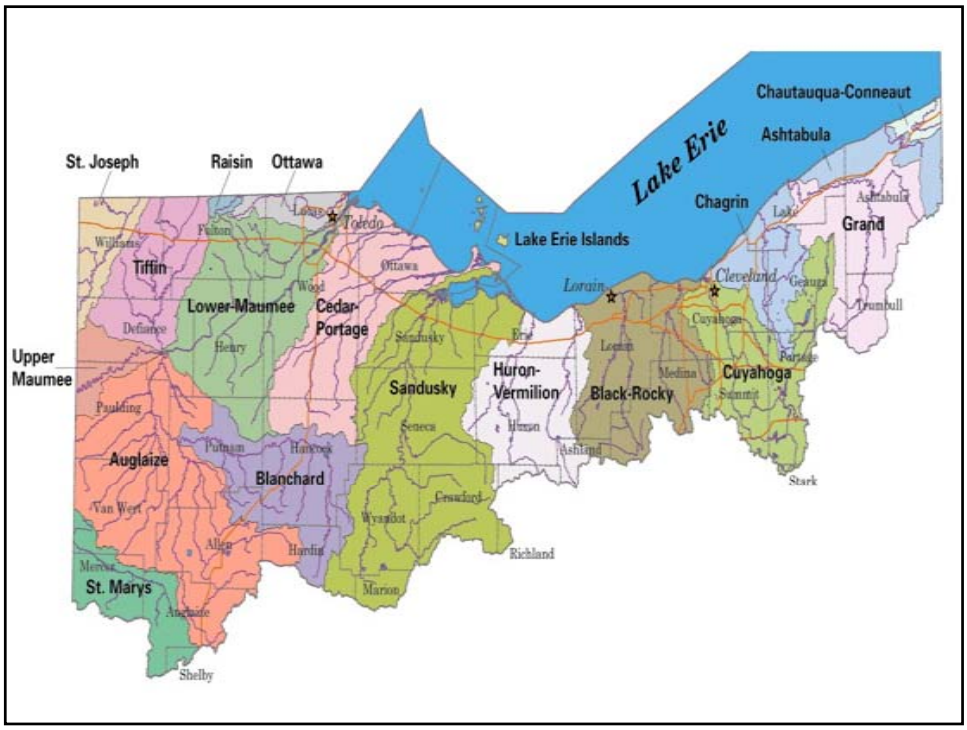
Linking Land Use and Lake Erie:
A Planning Framework for Achieving Balanced Growth in the Ohio Lake Erie Watershed
Ohio Lake Erie Commission
Linking Land Use and Lake Erie:
Best Local Land Use Practices
Ohio Lake Erie Commission
Ohio Lake Erie Commission
Cleveland State University
CDM


Chautauqua-Conneaut
Ashtabula
Lake Erie
Chagrin
Grand
St. Joseph
Raisin
Ottawa
Lake Erie Islands
Tiffin
Lower-Maumee
Cedar-Portage
Upper Maumee
Sandusky
Huron-Vermilion
Black-Rocky
Cuyahoga
Auglaize
Blanchard
St. Marys
Shelby
Richland
Stark


Developers and Local Governments Affect Watershed / Community Quality
Location of development for minimum impact
Management and control of storm water and erosion
Protection of stream and wetland areas so they can do their job as storm water infrastructure
Protection of scenic, historic and natural resources to help retain our "great place"
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Top Priority
Best Local Land Use Practices
1. Comprehensive Planning
2. Storm Water Management
3. Stream and Wetland Setbacks
4. Conservation Development
5. Meadow Protection
6. Compact Development
Enables Implementation
Project Focus
Provides Means of Implementation
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Other Best Local Land Use Practices

1. Steep Slope Protection
2. Woodland Protection
3. Agricultural Land Protection
4. Historic Preservation
5. Scenic Protection
6. Transfer of Development Rights

7. Source Water Protection
8. Access Management
9. Brownfields Redevelopment

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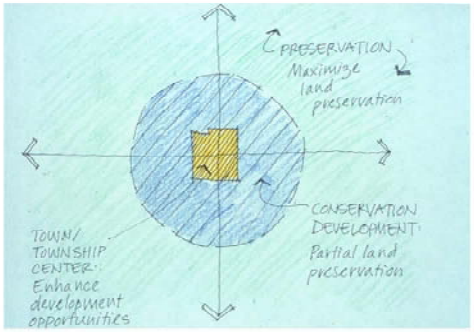
Balancing Conservation and Development

- **Up front community vision and planning**
- **Landowner planning and assistance**
- **Effective zoning implementation**
- **Good development projects**



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Project Description
Develop case studies that illustrate and increase understanding of the land development implications of implementing OLEC Best Local Land Use Practices
Engage stakeholders in land development in identifying key opportunities and barriers to use of best practices
Use case studies in training workshops
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Project Objectives
Resolve real and perceived barriers to acceptance of best practices by:
Developers
Local Governments
Buyers / tenants
Illustrate how properly-applied best practices can reduce costs and enhance property values
Provide adequate detail to support cost-effective implementation
Be repeatable for on-going education
Others? (as an outcome of today's meeting)
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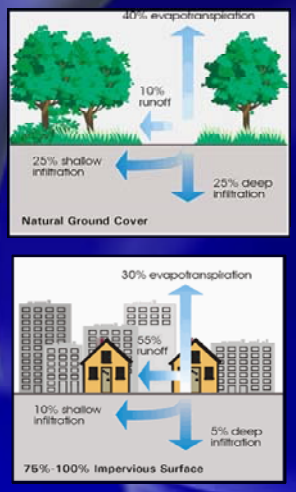
Managing Storm Water Quantity



- **Impervious Surface: surface with minimal infiltration**
- **Impervious surface model: 5 to 8 % change triggers degradation of watercourses**

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THE NATIONAL ACADEMIES
REPORT IN BRIEF

Urban Stormwater Management in the United States

This report calls for an entirely new permitting structure that would put authority and accountability for stormwater discharges at the municipal level. A number of additional actions, such as conserving natural areas, reducing hard surface cover (e.g., roads and parking lots), and retrofitting urban areas with features that hold and treat stormwater, are recommended.

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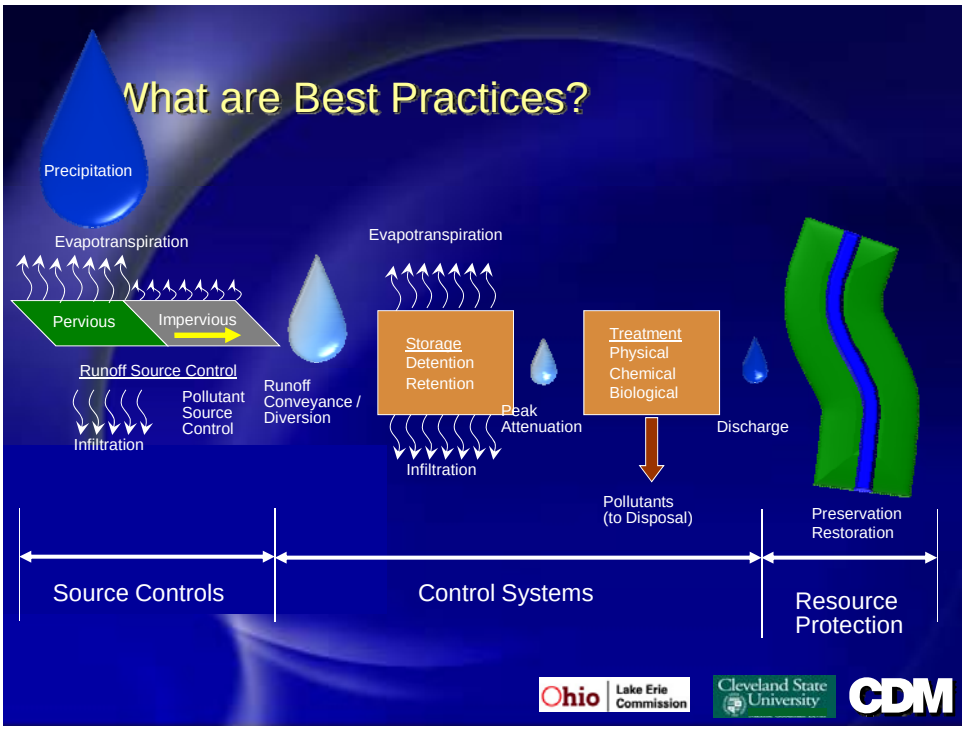
What are Best Practices?
Precipitation
Evapotranspiration
Pervious
Impervious
Runoff Source Control
Pollutant Source Control
Infiltration
Runoff Conveyance / Diversion
Evapotranspiration
Storage
Detention
Retention
Peak Attenuation
Infiltration
Treatment
Physical
Chemical
Biological
Discharge
Pollutants (to Disposal)
Preservation
Restoration
Source Controls
Control Systems
Resource Protection
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What are Best Practices?
Precipitation
Evapotranspiration
Pervious
Impervious
Runoff Source Control
Infiltration
Source Controls
Reduced Imperviousness
Conservation Development
Downspout Disconnection
Permeable Pavement
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What are Best Practices?
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What are Best Practices?
ins
Evapotranspiration
Swales & Strips
Runoff
Conveyance /
Diversion
Storage
Detention
Retention
Peak
Attenuation
Treatment
Physical
Chemical
Biological
Discharge
Gross Pollutant Traps
Infiltration
Pollutants
(to Disposal)
Control Systems
Filters
Infiltration
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What are Best Practices?
Stream Setbacks
Bank Stabilization
Preservation
Restoration
Resource
Protection
Stream Cleanup
Stream Restoration
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What are Best Practices?
Education
Remember, you're not just fertilizing your lawn
STORM DRAINS AREN'T GARBAGE CANS!
CALL THE ROUGE HOTLINE (313) 361-6724
STORMWATER POLLUTION SOLUTIONS
Sacramento Businesses That Care About The Future
CLEAN WATER BUSINESS PARTNER
YOLO COUNTY RESOURCE CONSERVATION DISTRICT
PARTNERS
PROGRAMS
DIRECTORY
ON FARM PRACTICES
ABOUT US
EDUCATION
LIBRARY
QUESTIONNAIRE
Yolo County RCD Online Questionnaire
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What are Best Practices?
Regulation
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Ohio Lake Erie Commission
Best Local Land Use Practice Case Studies
Approach to Case Studies

Objective

The objective of the Best Local Land Use Case Studies being developed for the Ohio Lake Erie Commission is to *illustrate a "triple bottom line" (i.e., financial, social, and environmental) decision-making process for developing site plans for multi-objective land development projects.* These case studies will be assembled in a format that can be distributed as well as used in case study workshops with developers, local governments, and their design and/or review professionals.

Case Study Content

Two case studies are being developed to help illustrate the proposed decision-making process: one a typical medium-density single-family residential development and the other a high-density retail commercial development. Both developments will be typical of development within the Lake Erie watershed. Case studies will focus on existing developments that were built without use of best local land use practices, and used to illustrate how such best practices could be integrated into these sites while meeting other development objectives.

Best practices to be illustrated through these case studies were drawn from those recommended by OLEC's balanced growth initiative and recommended for inclusion by a focus group of development industry representatives that was convened on October 28, 2009:

- Imperviousness control (e.g., reduce, disconnect, permeable materials)
- Enhanced inlets / manholes
- Vegetated Filter Strips and Swales
- Infiltration practices (e.g., "rain gardens", trenches, dry wells)
- Filters / underdrains (bioretention, soil amendments, sand, other)
- Basins (dry, wet, wetland, vaults)
- Stream, floodplain and wetland setbacks and enhancements

The case studies are expected to include the following materials:

- An overview stating the objectives of best local land use practices and how to use the case studies and supporting material.
- Three versions of the development site plan for each site: predevelopment, existing development, existing development with best local land use practices.

- A documented, step-by-step decision-making process for site planning, supported by flow charts, work sheets, assessment forms, and cost-estimating tools, with annotated examples of its application to the two case study sites.

- "Fact sheets" for the best local land use practices relevant to these case studies, providing selection criteria (i.e., opportunities, barriers) sizing criteria, maintenance requirements, and typical costs, supported by photographs, design drawings, costs, and other pertinent information about previously-installed best practices within or near the Lake Erie basin.

- Summary of pertinent state and national regulations, along with typical local regulations, relevant to the use of best practices for land development.

- A "mythbusters" fact sheet about current development and local land use practices that present real and/or perceived barriers to the use of "best" practices.

Case Study Workshops

The case study workshops are intended to inform developers, local governments, and their design and/or review professionals about the best local land use practices and the site planning decision-making process, as illustrated through the case studies. Materials should be adaptable for use with design professionals and other stakeholders in land development. The attached agenda, oriented toward a design professional audience, is envisioned.