OTHER APPROACHES TO MANAGING POLLUTANT SOURCES

Laws and Land Use

[Chapter 10.2]

Rules of Thumb

Rule 1
One management measure alone rarely achieves the desired result.

Rule 2
Both structural and non-structural measures are frequently required to achieve the desired result.

Political and Jurisdictional Hierarchy

Political Jurisdiction

Federal
State
County
Town, City, & Village

Clean Water Act
NR 102, NR 104
County Ordinances
Local Ordinances

Legal Approaches

- General Zoning
- "Design with Nature"
- Regulate development to avoid pollution impacts
- Locate new development appropriately within the landscape

- Floodland Zoning
  - Promote development outside of the floodplain
  - Eliminate development in the floodway
  - Ensure adequate separation between development and forecast water surface elevations in the flood fringe; minimize development to the extent possible

- Shoreland Zoning
  - Encourage development such that an appropriate degree of separation exists between structures and the shoreline; adopt shoreline setbacks
    - Provides space for installation of shoreland buffer strips
    - Ensure continuity of shoreland habitat for amphibians and other wildlife

Legal Approaches

- Shoreland Zoning
  - Encourage development such that an appropriate degree of separation exists between structures and the shoreline; adopt shoreline setbacks
    - Provides space for installation of shoreland buffer strips
    - Ensure continuity of shoreland habitat for amphibians and other wildlife
Legal Approaches

- **Wetland Zoning**
  - Minimize intrusion of development into wetlands
  - Limit wetland fill
    - Ensure continuity of wetland habitat for wildlife and birds
    - Reduces flood risk and risk of foundation failures
  - Incorporate wetlands and shoreland woodlands into "Environmental Corridors"

- **Subdivision Regulation**
  - Provide for minimum lot sizes; front-, side- and rear-year setbacks; minimum site services [water and sewerage requirements]; impervious surface coverages; and, related standards for larger-scale development
  - Can incorporate "Public Open Space" requirements
  - Often require provision of access roads, stormwater practices, etc. as a requirement for sale of properties

- **Sanitation Regulation**
  - May include both solid and liquid waste management requirements
  - Include minimum separations between wells and conventional/alternative onsite sewage treatment systems
  - Supplement public sanitary sewerage systems primarily in rural areas

- **Construction Site Erosion Control Regulation**
  - Seek to minimize area of disturbed lands from which sediments can be transported
  - Encourage mulching, seeding, use of filter fabrics or hay bales, protection of storm sewers, use of tracking pads
  - May include staged or phased development requirements to limit the area of open lands

- **Stormwater Regulation**
  - Seek to minimize runoff from urban lands by retention of water onsite
    - May regulate sediment loads as well as water loads from sites
  - Can be applied per property, subdivision, or municipal jurisdiction
    - Typically involves structural practices such as detention/retention/infiltration ponds
    - May include "rain gardens", downspout disconnection, and "green infrastructure"
Land Use Management

- Role of land use planning
  - Based on inventory of current land uses
  - Encourages community-based consideration of future growth patterns
  - Ensures community development in an orderly manner, compatible with the ability to provide public services
  - Promotes orderly transitions between land uses

Land Use Management

- Land Use Inventory
  - Establishes a base from which to plan and evaluate future growth
  - Identifies existing land uses; complements plat maps that document land ownership
  - Land use maps may highlight areas with potentially incompatible land uses

Land Use Management

- Urban land uses include:
  - Residential
  - Commercial
  - Industrial
  - Governmental
  - Institutional
  - Transportation and Utilities
  - Recreational

- Rural land uses include:
  - Agricultural
  - Wetlands
  - Woodlands
  - Water Resources
  - Landfills or extractive uses
  - Other open lands

Land Use Management

- Land Use Plans
  - Place future growth projections in the context of existing development
  - Allow assessment of public service needs
  - Promotes development and supports development policies that limit negative environmental impacts

Land Use Management

- Land Use and Watershed Protection Plans
  - Serve complementary objectives
  - Allow assessment of the relationship between the human or built environment and the natural environment
  - Promotes understanding of good environmental stewardship that ultimately contributes to "quality of life" and "healthy communities"
Land Use Management

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<th>Recovery Time</th>
<th>Sensitivity</th>
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<td>Large</td>
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<td>Fast</td>
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