

Lorain County Storm Water District Open House

Implementing
a Storm Water District

October 4, 2010

Lorain County's Storm Water Challenges

- Unfunded & mandated Ohio EPA NPDES Phase II water quality regulations
- The environment
- Water pollution
- Flooding and drainage including maintenance of storm sewers and ditches and development of retention/detention facilities
- EPA requirement to remove storm water from sanitary sewers (I/I Reduction)
- Lack of dedicated funding source

EPA Ohio EPA NPDES Phase II Water Quality Regulations

- The County and 7 Townships are Phase II MS4 permittees as required by Ohio and U.S. EPA

- Amherst Township
- Carlisle Township
- Columbia Township
- Eaton Township
- Elyria Township
- Grafton Township
- Sheffield Township

EPA Mandated Minimum Control Measures

- Public Education & Outreach
- Public Participation/Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post Construction Runoff Control
- Pollution Prevention/Good Housekeeping

Flooding & Drainage Problems

- Development and growth increase the amount of storm water runoff and the speed at which water drains
- Runoff from roofs, parking lots and roads can overwhelm the current system of ditches and storm sewers causing flooding



Inflow and Infiltration Problems

- When storm water makes its way into sanitary systems the result is Sanitary Sewer overflow which pollutes our lakes and streams.



Storm Water District Concept

- Establishes a dedicated funding source
- Fee is based on contribution to runoff
- District will send bills on county property taxes
- No new bureaucracy
- Comprehensive watershed approach
- Business plan based program
 - Defined level of service
 - Cost of service based rate
- Ohio Counties/Agencies such as:
 - NEORSD, Butler, Hamilton, Lake, Trumbull and Warren
- More than 60 Cities in Ohio



Business Plan Highlights

- 2 Year business plan developed
- Activities & responsibilities identified
 - Ohio EPA NPDES Phase II water quality regulations compliance
 - Drainage and Flooding
 - I and I problems
- 2 year rate plan
- Auditor provides billing services 2 times per year
- First billing date – January 2011



Billing Policy Highlights

- Considerations / policies:
 - Treat gravel as impervious
 - Public roadways part of MS4
 - Owner gets the bill
- No exemptions
- Residential
 - Single family, Duplexes, Farms, Condos
- Non-Residential
 - All other including tax exempt
- Credits will be offered
- Using Impervious Area Method



Rate Structure

- Basis is Impervious Area
 - Based on Contribution to runoff
 - Legally Defensible
- Residential
 - Single Family, Duplexes, Agricultural & Condominiums
 - 1 Equivalent Residential Unit (ERU) flat rate billing
- Non-residential
 - Industrial
 - Commercial
 - Churches
 - Schools



Rate Structure (con't)

- Residential ERU = 6,000 sq. feet
- Based on a random sample of 400 residential properties
- Non-residential properties measured for hard surface (impervious area) – ERUs calculated
- Example: 12,000 sq. feet of impervious surface area divided by 6,000 = 2 ERUs



Residential (example)



Non-Residential (example)



Rate Study Revenue Analysis

- Rate is dependent on defined level of service
- Credits will be offered for:
 - Green Infrastructure
 - BMPs
- Initial fee of \$1.50 per month for residential
- Initial fee of \$1.50 per month per ERU for non-residential
- Will generate approximately \$600,000 annually



Business Plan Year 1

24% I & I Stimulus Project Loan
Reimbursement

10% EPA, Legal, & Admin. Reimbursement

33% year 1 only Implementation Cost

21% Ohio EPA NPDES Phase II water
quality regulations compliance

11% Storm Water Management
Infrastructure Maintenance

1% annually for street sweeping



Business Plan Year 2

24% I & I Stimulus Project Loan Reimbursement

10% EPA, Legal, & Admin. Reimbursement

34% Ohio EPA NPDES Phase II water quality
regulations compliance

11% Storm Water Management Infrastructure
Maintenance

20% Floodplain Management Design /
Construction

1% for street sweeping



Storm Water Information

- Storm Water Brochure
- Five Year Business Plan
- NPDES Phase II Water Quality Plan for the Unfunded Federal Mandate
- Storm Water Web Site Page
- Frequently Ask Questions
- Funding / Rate Plan
- Public Education Plan



Question & Answer

