

Phase I - Stormwater Fee Feasibility Study
DuPage County, Illinois
Presented to the DuPage County Stormwater Management Planning Committee




August 7, 2007



Agenda

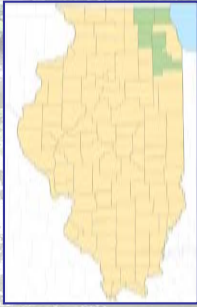

- Background information
- Stakeholder groups and recommendations
- Stormwater business plan alternatives
- Rate estimations
- Examples
- Consultant recommendations
- Questions



DuPage County Stormwater Management

Public Act 85-905

- Enacted November 1987
- Countywide authority
- Five counties, including DuPage
- Property tax funding
- Countywide stormwater plans
- Opt in / out provisions for county line communities

DuPage County Stormwater Management

- DuPage County Stormwater Management currently provides services in 5 program areas:
 - Flood Plain Mapping
 - Watershed Management
 - Water Quality
 - Operation and Maintenance
 - Permitting




DuPage County Stormwater Management

Current expenditures

- FY2007 budget (rounded), excluding special revenue based projects:

Flood Plain Mapping	\$ 250,000
Watershed Management	\$ 220,000
Water Quality	\$ 500,000
Operation and Maintenance	\$ 600,000
Permitting	\$1,500,000
Total	\$3,070,000




DuPage County Stormwater Management

Balance sheet

Total Expenditures	(\$3,070,000)
Bond Payment	(\$7,300,000)
Revenues	\$ 900,000
Tax Levy	\$8,500,000
Total Net	(\$ 970,000)*

* The \$970,000 comes from the stormwater reserve fund, which is on the verge of depletion



DuPage County Stormwater Management

Curtailed or deferred services

- Deferred voluntary flood prone property buyouts
- Stream maintenance reduced from \$400,000 to \$200,000
- Facility maintenance and repairs deferred
- Flood control projects deferred
- Water quality projects deferred
- Audits of waiver communities deferred
- Deferred updates to stormwater ordinance, guidance document and appendices



Approach

- Program assessment
- Needs assessment
- Stakeholder process
- Business plan development
- Cost of service analysis
- Alternative development
- Rate modeling
- Recommendations
- Implementation plan



Citizen stakeholder group

- No. Illinois Homebuilders
- Farm Bureau
- Private consultant
- Ecumenical Council representative
- Large church
- Park District
- School District
- Shopping center
- Warehousing
- Resident
- Homeowners association
- Chamber of Commerce
- Federal government (obs)
- Condo association
- Conservation Fund
- University
- Watershed group
- Environmental Commission



Citizen stakeholder group

Recommendations

- If a user fee is adopted;
 - it should be sufficient to fund the entire stormwater program
 - the tax levy should be terminated
 - the rate base should be the imperviousness of each property
 - there should be a credit program
 - the County should implement a comprehensive public information and outreach program



Municipal stakeholder group

Work group participants

● Mike Marchi, Dist 1	● Martin Bourke, DMMC
● Dale Durfey, Dist 2	● Ross Hill, FPDDC
● David Barber, Dist 3	● Tony Charlton, DCSM
● David Gorman, Dist 4	● Nick Kottmeyer, Uninc.
● Bill Novack, Dist 5	● Clayton Heffter, DCSM
● Dan Lynch, Dist 6	



Municipal stakeholder group

Recommendations

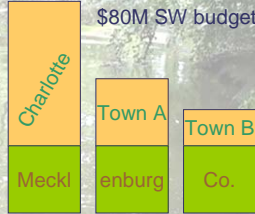
- Charlotte \ Mecklenburg multi-entity model
- Impervious surface as rate base
- No flat rates, 500 sq-ft increments
- Demand based: all properties produce runoff, all pay
- Don't bill public roadways
- Credit program that allows credits for all properties
- Consolidated billing, once per year
- Keep it simple



Countywide stormwater utility examples

Charlotte-Mecklenburg, NC

- County-wide stormwater utility
 - County: major systems
 - City/towns: local systems
 - Collaborate on NPDES
- One bill – “Menu” concept with composite fee
- Wide range of local programs



Study report

EXECUTIVE SUMMARY

1. INTRODUCTION

2. BACKGROUND

2.1. History

2.2. Project Approach

3. PROGRAM DESCRIPTION

3.1. Flood Plain Mapping

3.2. Watershed Management

3.3. Water Quality

3.4. Operations and Maintenance

3.5. Regulatory / Permitting

4. STORMWATER MANAGEMENT

4.1. Problems, Needs, and Goals

4.2. Stormwater Management Business Plan

5. COST OF SERVICE

5.1. Costs by program area

5.2. Cost of Service for Alternative 2

5.3. Cost of Service for Alternative 3

6. FUNDING FEASIBILITY

6.1. Where does our current stormwater management funding come from?



Legal considerations

- ILCS – Public Works Statute
 - 55 ILCS 5/5-15002 (defines a “sewerage system”)
 - 55 ILCS 5/5-15005 (how you can finance a sewerage system)
 - 55 ILCS 5/5-15006 (overlapping jurisdiction)
 - 55 ILCS 5/5-15007 (drainage related services)
 - 55 ILCS 5/5-15010 (fees for sewerage systems)
- ILCS – Stormwater Management Commissions
 - 55 ILCS 5/5-1062(a) (countywide watershed management)
 - 55 ILCS 5/5-1062(g) (fees for detention/retention)
- Existing Stormwater Utilities in Illinois
 - Home Rule - 8
 - Non-Home Rule - 1
 - Municipalities/Counties Considering - Numerous



Business plan alternatives

Minimum program

- All program activities funded at pre-2002 level, plus;
 - LOMR / CLOMR reviews
 - Model maintenance on 10-year cycle
 - GIS mapping tools updated
 - NPDES public outreach (projects)
 - NPDES outfall monitoring (IDDE, wet weather)
 - Operations and maintenance (routine maintenance, long term repair and replacement fund)
 - Billing program (customer service, financial, data, billing)
 - Adds required staff



Business plan alternatives

Minimum program

DePage Counts		Year 1	Year 2	Year 3	Year 4	Year 5
Funding Possibility Rate Model - Minimum Program						
Expenses						
Administration	1,118,551	1,119,330	1,117,040	1,173,913	1,211,177	
Floodplain Mapping	167,785	379,318	618,382	418,302	128,000	
Watershed Management	1,337,537	1,197,238	1,616,226	2,042,100	1,391,644	
Water Quality	854,827	810,011	858,788	1,025,177	1,057,959	
Operations & Maintenance	1,925,146	1,917,014	2,012,219	1,972,349	2,116,113	
Regulatory / Permitting	1,655,832	1,711,232	1,749,550	1,654,180	1,577,108	
Pay As You Go Capital Projects	C	0	0	0	0	
Annual Operating Expenses	7,162,028	7,324,164	8,163,547	8,437,200	8,176,104	
Subtotal Administration	7,162,028	7,324,164	8,163,547	8,437,200	8,176,104	
Capital Projects Funded Through Bonds	C	0	0	0	0	
Subtotal with Inflation & Bonds	7,162,028	7,324,164	8,163,547	8,437,200	8,176,104	
Sold State Credits and Debt Service	7,360,437	7,360,437	7,362,038	7,367,426	7,361,459	
Operating Reserves	C	0	0	0	0	
Emergency Reserves	C	0	0	0	0	
Total Expenses	14,922,465	15,190,624	15,547,627	15,843,025	15,937,520	



Business plan alternatives

Intermediate program

- Reinstate voluntary flood-prone buyout \$300K
- Pay As You Go capital program – runoff quantity \$250K - \$500K
- Pay As You Go capital program – runoff quality \$500K
- **Incremental Cost: \$1.05M - \$1.30M**


Comprehensive program

- Additional water quality monitoring – in-stream data \$250K
- As-built review and inspection staffing \$280K - \$340K
- Additional funding for flood-prone buyouts \$100K
- Additional Pay As You Go capital – runoff quantity \$500K
- **Incremental Cost: \$1.13M - \$1.19M**



Rate modeling - assumptions

- 500 square foot increments, rounded to nearest whole
- No public roadways billed
- 0% escalation in impervious area
- 2.5% inflation
- Credits begin at 3% and rise to 5% in 2 years
- Bad debt starts at 3% and drops to 1% over 5 years
- 3% delinquency rate
- 99% recovery of delinquencies
- Year 1 in model is FY2009
- Evaluated countywide and watershed-based billing



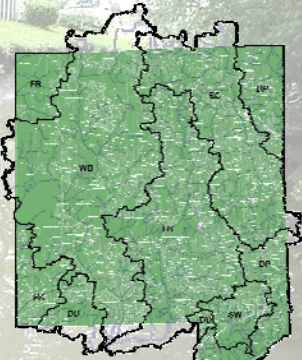
Rate modeling - scenarios

Countywide

- All costs countywide


Watershed-based

- Facility maintenance costs by watershed
 - East Branch
 - West Branch
 - Salt Creek
 - Fox River Tribs
 - Des Plaines Tribs
- All other costs countywide



Preliminary rate ranges

	Alternative 1 Minimum Program	Alternative 2 Intermediate Program	Alternative 3 Comprehensive Program
Countywide Fee	\$4.00 - \$4.48	\$4.35 - \$4.85	\$4.67 - \$5.19
Watershed Based Fee			
East Branch	\$3.84 - \$4.32	\$4.19 - \$4.69	\$4.51 - \$5.03
West Branch	\$3.92 - \$4.40	\$4.27 - \$4.77	\$4.59 - \$5.11
Salt Creek	\$4.41 - \$4.89	\$4.76 - \$5.26	\$5.08 - \$5.60
Fox Tributaries	\$3.84 - \$4.32	\$4.19 - \$4.69	\$4.51 - \$5.03
Des Plaines Tribs	\$3.84 - \$4.32	\$4.19 - \$4.69	\$4.51 - \$5.03



Preliminary rate ranges

	Alternative 1 Minimum	Alternative 2 Intermediate	Alternative 3 Comprehensive
Cost per bill per bill cycle	\$0.40 - \$0.52		
Watershed District Fee			
Cost per bill for debt service	\$1.92 - \$2.40		
West Branch			
	\$3.02 - \$4.40	\$4.97 - \$4.77	\$4.99 - \$6.11
Cost per bill for Aurora	\$0.004		
Fox Tributaries			
	\$3.04 - \$4.32	\$4.19 - \$4.99	\$4.91 - \$6.09
Don Plains Tribe			
	\$3.04 - \$4.32	\$4.19 - \$4.99	\$4.91 - \$6.09



Rate example



Single family residential		
Impervious area (sq ft)		3,144
Billing units (500 sq ft)		6
Annual fee	(Minimum)	\$24 - \$27
	(Intermediate)	\$26 - \$29
	(Comprehensive)	\$28 - \$32



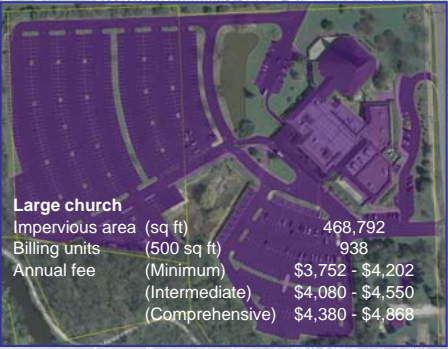
Rate example



Government complex		
Impervious area (sq ft)		268,602
Billing units (500 sq ft)		537
Annual fee	(Minimum)	\$2,148 - \$2,405
	(Intermediate)	\$2,335 - \$2,605
	(Comprehensive)	\$2,507 - \$2,787



Rate example




Large church

Impervious area (sq ft)	468,792
Billing units (500 sq ft)	938
Annual fee	(Minimum) \$3,752 - \$4,202
	(Intermediate) \$4,080 - \$4,550
	(Comprehensive) \$4,380 - \$4,868

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Rate example



Large school

Impervious area	699,964
Billing units	1,400
Annual fee	
Minimum	\$5,600 - \$6,272
Intermediate	\$6,090 - \$6,790
Comprehensive	\$6,538 - \$7,266

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Recommendations

- A stormwater enterprise fund should be established that creates a dedicated funding source for stormwater management in the county
- The primary source of funding for the enterprise fund should be a user fee
- The rate basis for the user fee should be the imperviousness of each property
- Billing should be based on 500 square foot increments of impervious area
- All properties generate runoff and a demand for service, therefore all properties should be charged.

amec


Recommendations

- Public rights-of-way, which contain local drainage infrastructure, will not be charged. Other public properties will be charged.
- There should be a minimum charge to all properties regardless of the intensity of development on the property.
- Special fees, such as plan review and inspection fees, should be retained in the rate structure to add equity to the funding program.
- A stormwater user fee credit program should be included.



Recommendations

- The County should adopt a program strategy at least at the level of the Intermediate Program strategy
- The County should offer to provide any services that are not part of the countywide stormwater program to municipalities and the unincorporated area as a third party service provider. Municipalities or the unincorporated county should include these costs in their own budgeting process.



Questions ?

