

VILLAGE OF DOWNERS GROVE
REPORT FOR THE VILLAGE COUNCIL WORKSHOP
AUGUST 14, 2007 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:
Final Report – St. Joseph Creek, Lacey Creek and Prentiss Creek Watershed Improvement Plan <i>Financial Analysis</i>	Resolution Ordinance ✓ Motion Discussion Only	Cara Pavlicek Village Manager

SYNOPSIS

Staff has prepared a presentation that will provide a financial overview of the recently completed engineering report on stormwater infrastructure conditions in the three watersheds located in the Village of Downers Grove locally known as Lacey Creek, Prentiss Creek and St. Joseph Creek.

Staff is asking the Village Council to review the financial overview prior to a full discussion as part of the regularly scheduled Workshop meeting of September 11, 2007, at which time staff will request a motion to accept the Final Report and direction related to the preparation of the FY08 annual budget. In addition, staff proposes scheduling a public information meetings to allow for an informal presentation of the Final Report to the public prior to acceptance of the report by Village Council:

- Tuesday, August 28, 2007, at 5:30-6:30 p.m.
- Friday, September 7, 2007, at 7:00-8:00 a.m.
- Friday, September 7, 2007, at noon -1:00 p.m.
- Saturday, September 15, 2007, at 9:00-10:00 a.m.

By separate agenda item, the Final Report has been presented. This information should be concurrently reviewed by the Village Council and will be presented as a part of the proposed public information meetings.

STRATEGIC PLAN ALIGNMENT

The Five Year Plan and Goals for 2006-2011 identifies *Top Quality Village Infrastructure and Facilities*. A supporting objective is *Improved Stormwater and Drainage System*.

FISCAL IMPACT

The Final Report contains specific recommendations and preliminary cost estimates for stormwater infrastructure improvement projects within the three watersheds located in the Village. It is recommended that as a part of the FY08 municipal budget process (that will occur in October/November 2007) the Council establish a financial strategy to proceed with recommended infrastructure improvements and fund specific projects.

The Final Report groups potential improvements into categories defined as High, Medium, or Low priority projects. It is important to note that the term “project” is loosely used to define multiple infrastructure improvements that are related by a sub-watershed, i.e. a geographical area. The preliminary cost estimate of the 55 projects is \$340,000,000 in 2007 dollars. It is important to note that 45% of the preliminary cost estimate is for soft costs, i.e. the professional fees that the Village incur designing and bidding the proposed infrastructure¹. In other words, the Final Report has identified \$189 million in estimated construction costs to be spread over three watersheds.

¹ Preliminary cost estimates include 15% for design and construction engineering, 10% for National Pollutant Discharge Elimination System (NPDES) permit program and 20% for general construction contingency.

	Number of Projects	Preliminary Cost Estimate
High	16	\$158,359,000
Medium	24	\$135,282,000
Low	15	\$46,898,000
Total	55	\$340,539,000

As part of the staff process to prepare the FY08 annual budget, a number of options related to funding High priority stormwater infrastructure improvements are being considered. The Village Council will be asked to consider the benefits of a separate capital fund for stormwater infrastructure rather than continuing to fund such capital projects within the capital fund. The benefit of establishing a distinct stormwater capital fund would be to accurately plan for outlays for the construction or purchase of stormwater facilities that will provide benefits and services over a considerable period of time. This will allow for a dedicated multi-year approach to funding stormwater capital improvements and account for a combination of revenues to annually fund expenditures. It will likely be proposed that the Village direct a minimum of \$5 million in revenues per year towards a stormwater capital fund. Staff believes that this multi-year approach would include funding capital projects with *pay-as-you-go financing* (paying for capital projects out of annual revenues), *pay-as-you-use financing* (issuing debt that will be repaid over the economic life of the capital project) or a combination of both annual revenues as well as debt. The *pay-as-you-go* approach has several advantages: it saves interest expenditures, preserves debt capacity for future borrowing and does not encumber future budgets with mandatory debt service expenditures. *Pay-as-you-use* also has advantages; users pay for a capital project as they receive the benefits, and the Village does not accumulate funds before undertaking a project. The determination of when to issue debt via a general obligation or other bond issue would be a function of the annual budget process and based upon careful evaluation of the Village's debt to valuation ratio and similar industry standards for determining the appropriateness of debt to finance capital needs. The Village currently has an underlying bond rating of AA+ with a stable outlook from Standard and Poors; staff will only recommend debt financing at such times as the use of bonds is consistent with the Village financial policies. Revenue sources available for financing stormwater capital projects are detailed in the background section of this report.

RECOMMENDATION

Following completion of the public information meetings, it is recommended that the Village Council hold a Workshop discussion on September 11, 2007, and Council approve a motion to accept the Final Report and provide direction related to preparation of the FY08 annual budget on the September 18, 2007 active agenda.

BACKGROUND

A staff team has been working to evaluate and consider the financial impact of the recommendations for stormwater improvements in the three watersheds within the Village. The focus of the staff review has been the capacity of the Village to fund recommended stormwater projects with first consideration to the scope of the 16 High priority projects and secondary consideration for the 24 Medium priority projects. The staff team consists of the Village Manager, Assistant Village Manager, Finance Director, Interim Assistant Finance Director, Management Analyst and the Manager's Office Intern.

The Village's current equalized assessed valuation (EAV) is \$2,222,875,166 which equates to a market value of property within the Village of over \$6.5 billion. The Village is responsible for the maintenance of municipal infrastructure to support residents and businesses that own property within the Village as well as individuals that visit the community. Municipal infrastructure that is the responsibility of the Village includes but is not limited to a potable water system, public roadway system, stormwater system, pedestrian sidewalk/trail system, commuter parking lot system and urban forest.

Maintaining the municipal infrastructure is a substantial responsibility and takes an annual financial investment. When a municipality fails to reinvestment and/or upgrade the municipal infrastructure

systems consistently it can quickly find itself facing a substantial capital improvement problem. Staff was able to local a report from the U.S. Census Bureau surveyed local government in 1997, generally referred to as the Census of Governments, and reported that local units of government dedicated 13.7% of their annual budget to capital projects. By comparison, the following table illustrates capital spending in the Village of Downers Grove annual budget:

Annual Expenditures	% of Annual Expenditures that are Capital
1997 Census of Governments	13.7%
Downers Grove FY06 * eight month fiscal year	5.2%
Downers Grove FY98* public works facility construction	14.9%
Downers Grove FY97	5.6%
Downers Grove FY96	6.8%

It is our understanding that the US Census Bureau may have conducted a similar survey again in 2002 and staff is working to locate that report. While this comparison does not allow for an apples to apples comparison due to lack of information about the threshold under which each local government defines capital, anecdotally it supports the belief that overtime, the Village has kept spending and property taxes low by limited capital spending.

It can be argued that the Final Report has determined the Village has failed to consistently maintain and/or upgrade its stormwater infrastructure at a level necessary for a community that contains three primary watersheds and is 175 years old. The Final Report estimates the stormwater needs of the Village to be substantial at \$3.4 million. However, when considering that the proposed projects address three watersheds in a community that has a market value of over \$6.5 billion, this number is merely an indication that the Village needs to invest 5% of the value of the community into upgrading a critical aspect of its municipal infrastructure. By comparison, a 5% investment in the Village can be roughly equated to a homeowner with a home that has a market value of \$400,000 facing home improvements of \$20,000.

The Final Report indicates that the Village should begin a significant and long-term capital investment in its stormwater facilities. In an effort to off-set the costs associated with the plan, the staff team developed six potential funding options for Council consideration and prepared a 20 year model and a 30 year model based upon these funding options. It is important to note that these are revenue models, not expenditure models, i.e. the models are not linked to the timing of project construction. The revenues and expenditures will be linked as a part of the annual budget process. These funding alternatives have been evaluated according to twenty and thirty year timelines in order to provide a complete illustration of the long-term funds which will potentially be generated from each revenue stream.

1. Property Tax Increase

The Village could dedicate a portion of the property tax levy towards stormwater projects. Currently, based upon the Village’s property tax levy of \$0.38 per \$100 of valuation (based on an Equalized Assessed Valuation or EAV of \$2,222,875,166) each penny of the property tax levy generates approximately \$220,000. For the purpose of discussion, the Village could implement a property tax increase of as much as \$0.10 and devote these additional revenues towards stormwater improvements. As the Downers Grove property tax rate currently ranks among the lowest in DuPage County (see attached property tax history information), this increase would not result in the Village being substantially misaligned with surrounding communities in terms of property tax rates. The proposed \$0.10 increase per \$100 of EAV would produce an initial revenue influx for the Village of approximately \$2,450,000. Based on historical property value information, staff forecasts EAV within the Village to increase by an average of 5% on an annual basis beginning in FY08. Thus, the initial revenue increase of approximately

\$2,450,000 is forecasted to increase at an annual rate of 5% as well. Over the course of the twenty year model, this \$0.10 increase in property taxes will result in a revenue allocation to stormwater of approximately \$81,000,000. Moreover, according to the thirty year model, the property tax increase will result in a total revenue allocation of approximately \$163,000,000².

In considering a property tax levy increase, the impact on homeowners must be considered. The current median value for a home in Downers Grove is \$389,000. Utilizing this information, the staff has created the chart below to illustrate the impact of the \$0.10 increase on a resident living in a home at the Village's median property market value of \$389,000. For comparison purposes, the impact on a home with a market value of \$600,000 is also shown.

Market home Value	\$ 389,000.00	\$ 600,000.00
EAV	\$ 129,666.67	\$ 200,000.00
Current Annual Property Tax Paid to Village	\$ 492.73	\$ 760.00
Annual Property Tax with \$0.10 Increase	\$ 622.40	\$ 960.00
Annual Increase	\$ 129.67	\$ 200.00
Monthly Increase	\$ 10.81	\$ 16.67

2. Allocate Home Rule Sales Tax Revenue

The Village could allocate a portion of the existing revenues generated from the ½ cent Home Rule Sales Tax specifically to stormwater improvements. Based on historical revenue data, the Village is expected to receive approximately \$4,600,000 of Home Rule Sales Tax revenue in 2007. Further, the Home Rule Sales Tax is expected to increase by 3% on an annual basis. Staff feels that the Village could initially allocate \$1,000,000 of Home Rule Sales Tax revenues to stormwater improvements with the remaining funds continuing to fund other capital needs (such as roads.) The initial \$1,000,000 allocation could then be increased by 3% on an annual basis to reflect forecasted Home Rule Sales Tax increases in subsequent years. According to the twenty year projection model, such an allocation would result in approximately \$25,500,000 being directed towards stormwater. The thirty year model forecasts a total of approximately \$44,200,000 of Home Rule Sales Tax revenues being allocated to stormwater improvement funding.

3. Increase Home Rule Sales Tax

The Village could implement a Home Rule Sales Tax increase of ¼ cent and devote the additional revenues generated from the increase to stormwater improvements. As mentioned earlier, based on historical revenue data, the Village is expected to receive approximately \$4,600,000 of Home Rule Sales Tax revenue in 2007 with a ½ cent tax that is projected to increase by 3% on an annual basis. Thus, a ¼ cent increase in Home Rule Sales Tax for stormwater improvement purposes would result in an initial increase in revenue of approximately \$2,300,000. The initial \$2,300,000 allocation would then increase by 3% on an annual basis to reflect forecasted Home Rule Sales Tax increases in subsequent years. According to the twenty year projection model, such an allocation would result in approximately \$63,600,000 being directed towards stormwater. The thirty year model forecasts a total of approximately \$112,600,000 of Home Rule Sales Tax revenues being allocated to stormwater improvement funding. Due to the potential negative impact that an increase in Home Rule Sales Tax could produce regarding community development and sales tax revenue, this alternative is not recommended by staff.

4. Allocate Capital Fees Collected via Water Sales

The Village could allocate a portion of the capital fees collected via water sales specifically to stormwater improvements. Currently, the Village has approximately 16,000 water customers. The annual revenue collected via the sale of water to these customers totals approximately \$7,300,000 per year. Historical trends have indicated annual water revenues to remain relatively stable, except in years with exceptionally little rainfall, when revenues typically increase due to increased usage among residents.

² Property tax revenue estimates are in 2007 dollars and have not been discounted to account for inflation.

In May 2007, the Village received a rebate of \$3,012,957 from the DuPage County Water Commission. The Village could utilize those funds in FY08 for stormwater improvements (or a combination of water/stormwater projects that are geographically related). Annually, thereafter, the Village could direct revenues from the Water Fund to stormwater capital projects. For discussion purposes, staff recommends an allocation amount for each subsequent year of \$1,000,000. According to the twenty year projection model such a plan would result in a total of \$22,000,000 being allocated for stormwater. The thirty year funding projection plan forecasts a total of \$32,000,000 for stormwater.

Currently, the cost per unit of water is \$2.72 with residents billed for water consumption on a bi-monthly basis. The average water bill per resident based on usage levels is summarized in the table below:

Units of Water Consumed (over 2 months)	Current Bill @ \$2.72 per unit
5	\$13.60
20	\$54.40
50	\$136.00

Utilizing the current water fee of \$2.72 per unit, the Village generates approximately \$7,300,000 on an annual basis. To generate the additional \$1,000,000 for stormwater improvements, the increase in the cost of water could be distributed across the Village's 16,000 water customers as a flat fee. This would result in Village residents paying an additional \$10.42 per bi-monthly water billing cycle. The additional revenue generated by this \$10.42 flat fee would be allocated solely for stormwater improvement purposes. There are multiple scenarios that could be considered relative to this option, such as a tiered fee approach that is tied to consumption levels which would effectively lessen the residential burden while shifting it to large water customers, i.e. commercial and industrial users.

5. Telecommunications Tax Increase

The Village could increase the telecommunications tax by 1%. The Village currently levies a tax of 5% of the gross charges for all interstate and intrastate messages in Downers Grove. This tax includes charges for home phones, cellular phones, internet and pagers. The annual revenue generated by this tax is approximately \$3,900,000. However, due to competition between various telecommunication providers, this revenue stream is forecasted to decrease by 1.5% on an annual basis in future years. The Village is allowed, by law, to levy a maximum tax of 6% on telecommunication charges. Thus, the Village has the ability to legally increase the telecommunications tax by 1%. The result of such an increase would be an initial revenue influx of approximately \$820,000. This initial influx is forecasted to decrease by 1.5% on an annual basis. The twenty year model forecasts a total telecommunications tax allocation to stormwater of approximately \$14,300,000. The thirty year funding projection predicts a total of approximately \$20,000,000.

6. Hotel Tax Increase

The Village could increase its current revenues collected via the hotel tax and allocate this revenue solely to stormwater improvements. The Village currently levies a 4.5% tax on individuals renting, leasing or letting a hotel room within Downers Grove. At this 4.5% tax rate, the Village is expected to collect approximately \$900,000 in hotel tax revenue in 2007. However, due to a combination of increased hotel competition in surrounding communities; as well as a predicted general downturn in room rentals, this revenue stream is expected to decrease in subsequent years. Thus, revenue forecasts indicate the Village will collect a reduced revenue amount of approximately \$850,000 in hotel taxes in future years at the 4.5% rate. Should the Village increase the hotel tax rate by 1%, this would result in approximately \$189,000 in additional revenue for the Village. This additional revenue would then be allocated solely to stormwater improvements as outlined in the Final Report. Based on these revenue projections, the twenty year model forecasts a potential total hotel tax allocation to stormwater of approximately \$3,800,000. The thirty year funding projection predicts a total of approximately \$5,700,000.

7. Create a Stormwater Utility

The Village could consider establishing a Stormwater Utility or participate in the proposed DuPage County Stormwater Utility, should it be enacted. Either of these alternatives could be considered for future years as the lead time to develop/enact/implement a stormwater utility can be on excess of 14 months. Attached is detailed information from DuPage County regarding the process to date and composition of their proposed Stormwater Utility.

Prior to the September 11, 2007 Workshop discussion, staff will present a specific recommendation of the funding options, total expenditures and time table for improvements. It is anticipated that the focus of the staff recommendation will be a funding strategy for the 16 high priority projects and preliminary plans for the 24 Medium Priority projects.

ATTACHMENTS

Dupage County Property Tax History

20 Year Funding Options Timeline

30 Year Funding Options Timeline

DuPage County Stormwater Utility Information



DOWNERS GROVE TAX RATE HISTORY

Comparison of Downers Grove Taxing Body Rates (1999-2006)

Taxing bodies are listed as they they appear on individual tax bills

	1999	2000 **	2001	2002	2003	2004	2005	2006	2006 % of Total
DuPage County	0.2683	0.2536	0.2353	0.2154	0.1999	0.1850	0.1797	0.1713	3.7%
Forest Preserve	0.1797	0.1742	0.1654	0.1534	0.1419	0.1358	0.1271	0.1303	2.8%
DuPage Water Commission	-	-	-	-	-	-	-	-	0.0%
DuPage Airport Authority	0.0306	0.0291	0.0271	0.0248	0.0230	0.0213	0.0198	0.0183	0.4%
Downers Grove Township	0.0377	0.0352	0.0340	0.0324	0.0306	0.0290	0.0278	0.0268	0.6%
Downers Grove Township Roac	0.0524	0.0521	0.0510	0.0486	0.0459	0.0434	0.0416	0.0401	0.9%
Village of Downers Grove-Ex	0.1875	0.1480	0.2037	0.2830	0.3093	0.3110	0.2962	0.2699	5.8%
Village of Downers Grove-Fire	0.0958	0.0548	0.0850	0.0845	0.1274	0.1283	0.1175	0.1100	2.4%
Village of Downers Grove Librai	0.2371	0.2338	0.2275	0.2179	0.2109	0.2033	0.1942	0.1870	4.0%
Downers Grove Park District	0.4409	0.4400	0.4311	0.3828	0.3489	0.3322	0.3188	0.3062	6.6%
Downers Grove Sanitary Distric	0.0387	0.0387	0.0383	0.0366	0.0355	0.0339	0.0326	0.0316	0.7%
Grade School District No. 58	2.2162	2.1783	2.0881	1.9765	1.8523	1.7721	1.7049	1.6523	35.7%
High School District No. 99	1.8455	1.8280	1.7972	1.7204	1.6696	1.5914	1.5365	1.4884	32.2%
Junior College No. 502 (COD)	0.2006	0.1966	0.1930	0.2179	0.2097	0.1972	0.1874	0.1929	4.2%
	5.8310	5.6624	5.5767	5.3942	5.2049	4.9839	4.7841	4.6251	100.0%

Village of Downers Grove 2003 Rate (Excluding Library)

	1999	2000 **	2001	2002	2003	2004	2005	2006	% Change (1999 - 2006)
Village of Downers Grove-Ex Fi	0.1875	0.1480	0.2037	0.2830	0.3093	0.3110	0.2962	0.2699	43.9%
Village of Downers Grove-Fire	0.0958	0.0548	0.0850	0.0845	0.1274	0.1283	0.1175	0.1100	14.8%
Village of Downers Grove	0.2833	0.2028	0.2887	0.3675	0.4367	0.4393	0.4137	0.3799	34.1%

Comparison of Downers Grove Tax Rate with Neighboring DuPage County Municipalities

	1999	2000 **	2001	2002	2003	2004	2005	2006	% Change (1999 - 2006)
Oak Brook	-	-	-	-	-	-	-	-	0.0%
Elmhurst	0.4115	0.3870	0.3727	0.3547	0.3259	0.3077	0.2958	0.2799	-32.0%
Hinsdale	0.4694	0.4220	0.3866	0.3586	0.3338	0.3111	0.3066	0.2902	-38.2%
Downers Grove	0.2833	0.2028	0.2887	0.3675	0.4367	0.4393	0.4137	0.3799	34.1%
Westmont	0.5385	0.5189	0.5138	0.4913	0.4740	0.4546	0.4382	0.4224	-21.6%
Glen Ellyn	0.4063	0.4696	0.4249	0.5329	0.5461	0.5011	0.4580	0.4375	7.7%
Naperville	0.6882	0.6767	0.6796	0.6414	0.5476	0.5036	0.4721	0.4664	-32.2%
Lombard	0.5805	0.5776	0.5670	0.5335	0.5200	0.4983	0.4947	0.4789	-17.5%
Willowbrook *	0.6438	0.6374	0.6343	0.6035	0.5826	0.5524	0.5296	0.5227	-18.8%
Clarendon Hills	0.8372	0.8358	0.7856	0.7518	0.6877	0.6480	0.5918	0.5679	-32.2%
Carol Stream *	0.7032	0.6988	0.6879	0.6466	0.6336	0.6037	0.5923	0.5792	-17.6%
Darien *	0.8121	0.8049	0.7943	0.7594	0.7597	0.7188	0.6720	0.6486	-20.1%
Oakbrook Terrace *	0.6677	0.7633	0.7349	0.7055	0.7229	0.7372	0.7307	0.7531	12.8%
Bensenville	0.8893	0.9183	0.8983	0.8704	0.8810	0.8469	0.7789	0.3575	-59.8%
Villa Park	0.9870	1.0014	0.9688	0.8992	0.8891	0.8356	0.8010	0.7695	-22.0%
Wheaton	0.7424	0.7262	0.7146	0.7289	0.7204	0.7980	0.8302	0.8111	9.3%
Woodridge *	0.9667	0.9137	0.8602	0.9409	0.9241	0.9018	0.8875	0.8634	-10.7%
Lisle *	1.0658	1.0334	0.9974	1.0764	1.0601	1.0354	1.0175	0.9832	-7.8%
Addison *	1.2345	1.2278	1.2298	1.1510	1.1118	1.0748	1.0608	1.0389	-15.8%

* Municipalities served by a separate Fire Protection District

** Decrease in 2000 rate a result of Village Council's abatement of \$1 million in taxes

Source: DuPage County Clerk's Office Report: Tax Code Rates for Principal Cities and Villages

Watershed Improvement Plan - Financial Analysis
Funding Options - 20 Year Timeline

Year	1. Property Tax	2. Home Rule Sales Tax Allocation for Stormwater	3. 1/4 Cent Increase in Home Rule Sales Tax	4. Water	5. Telecommunications Tax	6. Hotel Tax
2008	\$ 2,450,720	\$ 1,000,000	\$ 2,366,362	\$ 3,000,000	\$ 821,670	\$ 189,000
2009	\$ 2,573,256	\$ 1,024,374	\$ 2,437,353	\$ 1,000,000	\$ 809,344	\$ 189,000
2010	\$ 2,701,919	\$ 1,049,478	\$ 2,510,474	\$ 1,000,000	\$ 797,204	\$ 189,000
2011	\$ 2,837,015	\$ 1,075,336	\$ 2,585,788	\$ 1,000,000	\$ 785,246	\$ 189,000
2012	\$ 2,978,865	\$ 1,101,970	\$ 2,663,362	\$ 1,000,000	\$ 773,468	\$ 189,000
2013	\$ 3,127,809	\$ 1,129,402	\$ 2,743,263	\$ 1,000,000	\$ 761,866	\$ 189,000
2014	\$ 3,284,199	\$ 1,157,658	\$ 2,825,560	\$ 1,000,000	\$ 750,438	\$ 189,000
2015	\$ 3,448,409	\$ 1,186,761	\$ 2,910,327	\$ 1,000,000	\$ 739,181	\$ 189,000
2016	\$ 3,620,829	\$ 1,216,738	\$ 2,997,637	\$ 1,000,000	\$ 728,093	\$ 189,000
2017	\$ 3,801,871	\$ 1,247,613	\$ 3,087,566	\$ 1,000,000	\$ 717,172	\$ 189,000
2018	\$ 3,991,964	\$ 1,279,415	\$ 3,180,193	\$ 1,000,000	\$ 706,414	\$ 189,000
2019	\$ 4,191,563	\$ 1,312,171	\$ 3,275,599	\$ 1,000,000	\$ 695,818	\$ 189,000
2020	\$ 4,401,141	\$ 1,345,910	\$ 3,373,867	\$ 1,000,000	\$ 685,381	\$ 189,000
2021	\$ 4,621,198	\$ 1,380,661	\$ 3,475,083	\$ 1,000,000	\$ 675,100	\$ 189,000
2022	\$ 4,852,258	\$ 1,416,454	\$ 3,579,335	\$ 1,000,000	\$ 664,974	\$ 189,000
2023	\$ 5,094,871	\$ 1,453,321	\$ 3,686,716	\$ 1,000,000	\$ 654,999	\$ 189,000
2024	\$ 5,349,614	\$ 1,491,294	\$ 3,797,317	\$ 1,000,000	\$ 645,174	\$ 189,000
2025	\$ 5,617,095	\$ 1,530,407	\$ 3,911,237	\$ 1,000,000	\$ 635,496	\$ 189,000
2026	\$ 5,897,950	\$ 1,570,693	\$ 4,028,574	\$ 1,000,000	\$ 625,964	\$ 189,000
2027	\$ 6,192,847	\$ 1,612,187	\$ 4,149,431	\$ 1,000,000	\$ 616,574	\$ 189,000
TOTAL	\$ 81,035,391	\$ 25,581,843	\$ 63,585,044	\$ 22,000,000	\$ 14,289,576	\$ 3,780,000

Watershed Improvement Plan - Financial Analysis
Funding Options - 30 Year Timeline

Year	1. Property Tax	2. Home Rule Sales Tax Allocation for Stormwater	3. 1/4 Cent Increase in Home Rule Sales Tax	4. Water	5. Telecommunications Tax	6. Hotel Tax
2008	\$ 2,450,720	\$ 1,000,000	\$ 2,366,362	\$ 3,000,000	\$ 821,670	\$ 189,000
2009	\$ 2,573,256	\$ 1,024,374	\$ 2,437,353	\$ 1,000,000	\$ 809,344	\$ 189,000
2010	\$ 2,701,919	\$ 1,049,478	\$ 2,510,474	\$ 1,000,000	\$ 797,204	\$ 189,000
2011	\$ 2,837,015	\$ 1,075,336	\$ 2,585,788	\$ 1,000,000	\$ 785,246	\$ 189,000
2012	\$ 2,978,865	\$ 1,101,970	\$ 2,663,362	\$ 1,000,000	\$ 773,468	\$ 189,000
2013	\$ 3,127,809	\$ 1,129,402	\$ 2,743,263	\$ 1,000,000	\$ 761,866	\$ 189,000
2014	\$ 3,284,199	\$ 1,157,658	\$ 2,825,560	\$ 1,000,000	\$ 750,438	\$ 189,000
2015	\$ 3,448,409	\$ 1,186,761	\$ 2,910,327	\$ 1,000,000	\$ 739,181	\$ 189,000
2016	\$ 3,620,829	\$ 1,216,738	\$ 2,997,637	\$ 1,000,000	\$ 728,093	\$ 189,000
2017	\$ 3,801,871	\$ 1,247,613	\$ 3,087,566	\$ 1,000,000	\$ 717,172	\$ 189,000
2018	\$ 3,991,964	\$ 1,279,415	\$ 3,180,193	\$ 1,000,000	\$ 706,414	\$ 189,000
2019	\$ 4,191,563	\$ 1,312,171	\$ 3,275,599	\$ 1,000,000	\$ 695,818	\$ 189,000
2020	\$ 4,401,141	\$ 1,345,910	\$ 3,373,867	\$ 1,000,000	\$ 685,381	\$ 189,000
2021	\$ 4,621,198	\$ 1,380,661	\$ 3,475,083	\$ 1,000,000	\$ 675,100	\$ 189,000
2022	\$ 4,852,258	\$ 1,416,454	\$ 3,579,335	\$ 1,000,000	\$ 664,974	\$ 189,000
2023	\$ 5,094,871	\$ 1,453,321	\$ 3,686,716	\$ 1,000,000	\$ 654,999	\$ 189,000
2024	\$ 5,349,614	\$ 1,491,294	\$ 3,797,317	\$ 1,000,000	\$ 645,174	\$ 189,000
2025	\$ 5,617,095	\$ 1,530,407	\$ 3,911,237	\$ 1,000,000	\$ 635,496	\$ 189,000
2026	\$ 5,897,950	\$ 1,570,693	\$ 4,028,574	\$ 1,000,000	\$ 625,964	\$ 189,000
2027	\$ 6,192,847	\$ 1,612,187	\$ 4,149,431	\$ 1,000,000	\$ 616,574	\$ 189,000
2028	\$ 6,502,489	\$ 1,654,926	\$ 4,273,914	\$ 1,000,000	\$ 607,326	\$ 189,000
2029	\$ 6,827,614	\$ 1,698,947	\$ 4,402,131	\$ 1,000,000	\$ 598,216	\$ 189,000
2030	\$ 7,168,995	\$ 1,744,289	\$ 4,534,195	\$ 1,000,000	\$ 589,243	\$ 189,000
2031	\$ 7,527,444	\$ 1,790,991	\$ 4,670,221	\$ 1,000,000	\$ 580,404	\$ 189,000
2032	\$ 7,903,817	\$ 1,839,095	\$ 4,810,328	\$ 1,000,000	\$ 571,698	\$ 189,000
2033	\$ 8,299,007	\$ 1,888,641	\$ 4,954,637	\$ 1,000,000	\$ 563,123	\$ 189,000
2034	\$ 8,713,958	\$ 1,939,674	\$ 5,103,277	\$ 1,000,000	\$ 554,676	\$ 189,000
2035	\$ 9,149,656	\$ 1,992,238	\$ 5,256,375	\$ 1,000,000	\$ 546,356	\$ 189,000
2036	\$ 9,607,138	\$ 2,046,378	\$ 5,414,066	\$ 1,000,000	\$ 538,160	\$ 189,000
2037	\$ 10,087,495	\$ 2,102,143	\$ 5,576,488	\$ 1,000,000	\$ 530,088	\$ 189,000
TOTAL	\$ 162,823,004	\$ 44,279,166	\$ 112,580,675	\$ 32,000,000	\$ 19,968,865	\$ 5,670,000

Phase I - Stormwater Fee Feasibility Study

DuPage County, Illinois

Stormwater Management Division



August 3, 2007



EXECUTIVE SUMMARY

The DuPage County Stormwater Management Division (DCSM) has the statutory responsibility for providing a comprehensive management strategy and operation of the inter-community drainage system within the County as a result of the County Board's decision to adopt a resolution assuming that authority in 1989. DCSM currently provides countywide stormwater management services within five general program areas: watershed management; flood plain mapping; water quality; operations and maintenance; and regulatory / permitting services. In addition, DCSM also provides technical guidance, management, and staffing for special projects, when necessary. Within these program areas there are numerous program activities that have been curtailed or deferred due to decreased funding levels during recent years.

The County has undertaken an investigation of alternative funding methods for its stormwater management program over the last three years. The objective of this investigation has been to identify an adequate, stable, dedicated, and equitable method of funding stormwater management in DuPage County. One method that appears to best meet these objectives is demand based funding, or funding that is based on the demand for services that is exerted by each individual property in the County. Utilizing this concept the County could fund the entire stormwater program and remove that burden from property taxes.

The *Phase I Stormwater User Fee Feasibility Study* has been a comprehensive look at both the DuPage County stormwater management program and its funding options. The study utilized a combination of staff, peer group, and citizen input, and research of other stormwater management funding programs, to evaluate the available options. The utilization of these various inputs allowed the consultants to define limits for the stormwater management program in terms of what, at a minimum, the DCSM must be doing to meet both its regulatory and elective requirements, as well as a comprehensive program level that is composed of activities that fully address the goals and objectives outlined in the program's original *Stormwater Management Plan*.

The Working Group of the Municipal Stormwater Advisory Committee discussed and evaluated examples of successful countywide stormwater management funding programs from across the country. The purpose of this evaluation was to identify the characteristics of these multi-entity operational and funding programs that might serve as a model for the development of a multi-entity funding program in DuPage County. The primary examples were: Louisville – Jefferson County, Kentucky; Charlotte – Mecklenburg County, North Carolina, Cincinnati – Hamilton County, Ohio, and the Denver Urban Drainage District. The Charlotte – Mecklenburg County program was seen as the most appropriate model. The characteristics of that program that were seen as most desirable were the multi-entity fee structure and the menu-based program options. The multi-entity fee structure is composed of a common billing system and rate basis for all, with a countywide base user fee to service the major drainage system’s funding needs, in addition to the ability for any of the municipalities to add a user fee to fund their specific local programs. The menu-based program is an element of the program wherein any of the communities in the county may elect to purchase services, such as maintenance, inspection, or NPDES stormwater permit services above those provided by the County’s program, from either the a municipality or county on a contract basis. This is accomplished by entering into an intergovernmental agreement with the preferred service provider. The individual communities compute the cost of those services and contract with the municipality or county to provide the services for a prescribed period of time. The communities must decide whether to fund the contracted services by committing user fees or General Fund revenues.

Three alternative stormwater management programs were identified; a Minimum Program, an Intermediate Program, and a Comprehensive Program. The Minimum Program was defined as the program that must be implemented in order to meet both the regulatory requirements imposed by state and federal government, legal mandates based on past operating practices, and the requirements of managing a countywide stormwater management program for the major drainage system. The Intermediate Program started with the Minimum Program and added two Pay As You Go capital programs, one for water quantity management projects and the other for water quality projects. The addition of these projects is intended to begin to address a \$27.2 million backlog of projects that has been identified through the County’s watershed planning process, as well as to begin addressing capital needs associated with the NPDES Phase II and

TMDL programs. The Comprehensive Program expanded on the Intermediate Program by expanding the Regulatory and Permitting Group's permitting and inspection capabilities to provide better support of the NPDES Phase II permit requirements and to provide as-built plan review and inspection. The Comprehensive Program also proposed an expanded water quality monitoring program in support of both the NPDES Phase II permit and the TMDL program by expanding existing in-stream monitoring programs to cover more stream reaches. This program would collect samples for both dry and wet weather conditions in local streams.

Rate models were developed for each alternative that were based on the cost of service analyses and on a number of assumptions. Some of the significant assumptions made were that:

- The user fee will be based on the imperviousness of individual properties.
- Billing will be based on five hundred (500) square foot increments of impervious surface.
- All properties that discharge stormwater runoff into DuPage County streams create a demand for service and therefore will be billed based on that demand.
- Public roadways will not be billed.

The decision to base the user fee on 500 square foot increments of impervious surface was predicated on the expectation that the County will have an impervious surface theme in its GIS by January 2008. Because the County's impervious surface coverage is not yet complete, the results of preliminary rate modeling present estimated fee ranges rather than an absolute fee for each of the alternatives. Work on this database was approximately 65-75% complete at the time of this study.

For each of the three alternatives, two scenarios were evaluated in the rate models; one scenario assumed that all costs would be disseminated equally countywide, while the second assumed that the long-term maintenance costs of the stormwater detention facilities would be applied to all properties within the watershed where the detention facilities are located. The Rate Analysis Summary table shows the results of each alternative / scenario combination.

Rate Analysis Summary

	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 Tributaries	\$3.84 - \$4.32	\$4.19 - \$4.69	\$4.51 - \$5.03

all rates per 500 square feet of imperviousness per year

In conjunction with the modeling of the alternative scenarios described above, the impact of the existing debt service and of drainage into the DuPage County from portions of the City of Aurora were evaluated. In the case of the debt service, it was determined that each rate payer will be paying \$1.92 - \$2.40 annually under any of the scenarios above for the existing debt service.

When analyzed under the Minimum Program alternative it was found that the Aurora properties would contribute only about 0.09%, or \$0.004 per 500 square feet per year for Flood Plain Mapping and Water Quality program services, so this option was not investigated any further.

The consultant makes a number of recommendations as a result of the alternative evaluations in the feasibility study. Those recommendations include:

- The County should create an enterprise fund dedicated solely to the funding of the stormwater management program.
- The primary source of revenue for the enterprise fund should be from user fees.
- The distribution of costs for the user fees should be based on five hundred (500) square foot increments of impervious surface.
- The rate structure should maintain and dedicate existing special service fees, including permit fees, flood plain mapping fees, fees in lieu-of detention, and GIS fees to the enterprise fund to pay for services that only benefit specific activities.

- There should be a credit program that recognizes the potential beneficial impacts of on-site stormwater management controls.
- The level of service that is adopted should be at least that described as the Intermediate Program. The Intermediate Program addresses the basic program needs, new water quality program needs, significant capital improvement needs that have been identified by the County through the watershed planning process, and future water quality project needs for regulatory compliance.
- The countywide billing alternative adopted recognizes that all not all properties get the same amount of each service in any infrastructure related funding program.
- Following the multi-entity program approach of the Charlotte \ Mecklenburg model, the funding program should allow DuPage County municipalities to add incremental fee amounts to the County's billing to fund local stormwater management programs
- Following the multi-entity program approach of the Charlotte \ Mecklenburg model, the County's stormwater program should allow municipalities to procure stormwater compliance, maintenance, and other services from the County on a contract basis.

Example user fee computations are provided for four properties that have been digitized. The fees for the example properties are summarized in the following table.

Examples of Annual User Fees

Property Type	Impervious Area	Computed Billing Units	Annual Fee Range
Government Complex	268,602	537	\$2,335 - \$2,605
Single Family Residential	3,144	6	\$26.10 - \$29.10
Large Church	468,792	938	\$4,080 - \$4,550
Large School	699,964	1,400	\$6,090 - \$6,790

The recommended funding program will restore the stormwater program to a level that meets the needs of the County and allows it to comply with new water quality requirements of both the United States Environmental Protection Agency (USEPA) and the Illinois Environmental Protection Agency (IEPA).

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




August 7, 2007



Agenda

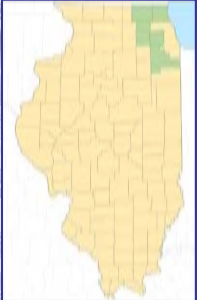

- Background information
- Stakeholder groups and recommendations
- Stormwater business plan alternatives
- Rate estimations
- Examples
- Consultant recommendations
- Questions



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

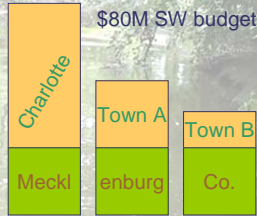
- Charlotte \ Mecklenburg multi-entity model
- Impervious surface as rate base
- No flat rates, 500 sq-ft increments
- Demand based: all properties produce runoff, all pay
- Don't bill public roadways
- Credit program that allows credits for all properties
- Consolidated billing, once per year
- Keep 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
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	1,972,348	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	7,824,164	8,163,547	8,481,208	8,176,104	
Subtotal Administration	7,162,028	7,824,164	8,163,547	8,481,208	8,176,104	
Capital Projects Funded Through Bonds	C	0	0	0	0	
Subtotal with Inflation & Bonds	7,162,028	7,824,164	8,163,547	8,481,208	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	15,184,601	15,525,585	15,848,634	15,537,563	



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



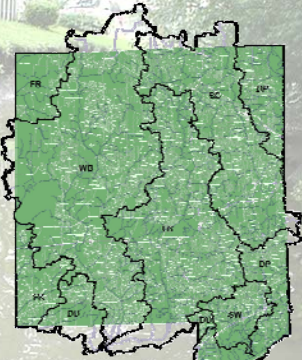
Rate modeling - scenarios

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		
Cost per bill for debt service	\$1.92 - \$2.40		
Cost per bill for Aurora	\$0.004		
West Branch	\$3.02 - \$4.40	\$4.97 - \$4.77	\$4.99 - \$6.11
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

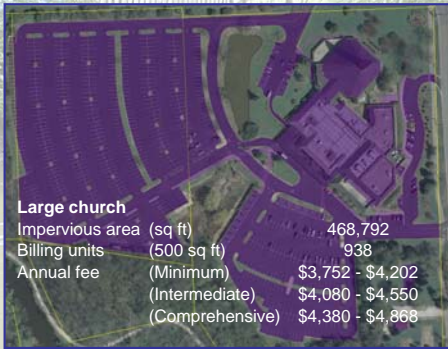


Government complex

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



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




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.




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 ?





DUPAGE COUNTY STORMWATER FEE FEASIBILITY STUDY

MUNICIPAL STORMWATER ADVISORY COMMITTEE

WORK GROUP RECOMMENDATIONS

EXECUTIVE SUMMARY

The DuPage County Municipal Engineers Committee appointed a Work Group to provide input on key issues that might effect how a multi-entity stormwater user fee program for DuPage County would be structured. The Work Group was comprised of six representatives from the Municipal Engineers Committee, three County staff members, and a representative from the DuPage Mayors and Managers Conference. This group discussed a variety of issues in six topical areas:

- 1) Multi-Entity Funding Program Concepts
- 2) Rate Structure
- 3) Credits
- 4) Cost of Service
- 5) Rate Modeling
- 6) Billing

The Work Group made several significant recommendations to the proposed structure of the County's stormwater user fee funding program. The detailed discussion and background information from all their discussions can be found in the attached summary document. The most significant recommendations are:

- If a user fee based program is adopted, the County should retire the stormwater tax.
- Since all properties contribute runoff to the local drainage systems, they should pay based on the demand for the service they create.
- The rate structure should be based on the impervious area of each property as the measure of a demand for service.
- The County should establish a menu of stormwater management services that could be provided on a contract basis to the municipalities.
- A credit program should be established that would allow any property owner to apply for a credit against the user fees if they provide a qualifying level of on-site stormwater management.
- If a user fee program is adopted, the County should create a consolidated billing system that will allow local municipalities that adopt their own user-fee based funding strategies for stormwater management, to have fees collected by the County.

BACKGROUND

As an integral component of DuPage County's feasibility study of user fee based funding for stormwater management, the Municipal Engineers Group was asked to provide input on key issues that might affect how a multi-entity user fee program might be structured. A subcommittee, or Work Group, was constituted that includes six representatives from the Municipal Engineers Group, three County staff members, and a representative from the DuPage Mayors and Managers Conference. The Work Group met five times over a period of twelve weeks to discuss a variety of issues in six topical areas: multi-entity funding program concepts, rate structure, credits, cost of service, rate modeling, and billing. The recommendations of the Work Group members for each of the topical areas are described in the following sections. Each section begins with a paragraph that identifies the key recommendations of the Group, followed by a short synopsis of all of the issues discussed under that topic.

MULTI-ENTITY FUNDING PROGRAM CONCEPTS

The Work Group discussed the characteristics of successful multi-entity funding programs from the region and around the country. Each example program had at least one feature that would be desired in a local program. The program for Charlotte-Mecklenburg County (North Carolina) was seen as the overall best model of such a program. The Work Group also discussed the issue of community acceptance of any user fee based funding program, including the multi-entity concept, the need for a strong public information program, and a pledge of policy-makers to retire the County stormwater tax levy.

Favorable features of multi-entity user fee programs. The Work Group was provided detailed information concerning the structure of successful multi-entity user fee programs from around the country. The communities that were discussed in detail included Charlotte/Mecklenburg (North Carolina) County, Louisville (Kentucky) Metropolitan Sewer District, Denver (Colorado) Urban Flood Control District, and Hamilton County, Ohio. The following characteristics of the multi-entity funding program concept were identified as being most desirable by members of the Work Group:

- Property owners receive a single stormwater management bill for fees charged by both the County and the participating municipalities, if any
- The regional entity provides a menu of services that can be procured on a contract basis by the other participating entities
- The basis for the stormwater rate structure is based on intensity of development as measured / estimated by the imperviousness of the parcel
- Credit programs are part of the rate structure as an equity-builder

Essential support concepts for a multi-entity user fee program. The Work Group believed that if a multi-entity user fee concept were to be developed, the following guiding concepts would be essential to its success:

- Set up a stormwater management enterprise fund, utilizing only user fees as a revenue source. If the County adopts a user fee program to fund stormwater management, the user fee funding should be tied to the enterprise by ordinance in order to insure that the funds received are used for stormwater management purposes;

- The tax levy authorized under Public Act 85-905 should be retired;
- If the County adopts a user fee program to fund stormwater management, the fee should be sufficient to migrate the entire cost of the stormwater program away from the General Fund, and;
- Public outreach is crucial. The potential rate payers need to know what the local stormwater management issues are, how the issues are to be addressed, why this method of funding makes more sense than paying for the program through taxes, and the mechanics of how their particular bill was determined;
- In order to keep the master account file current, there is a need to address data collection and maintenance issues up front; and
- Keep the structure of the fee program as simple as possible, at least initially, so that it can be explained to the rate payers in simple, understandable terms.

Programs facilitated by multi-entity user fee programs. The Work Group felt that the multi-entity user fee concept could be used to provide a more comprehensive approach to local stormwater management by facilitating the following activities:

- Providing dedicated funding for countywide National Pollutant Discharge Elimination System (NPDES) Phase II related activities that would otherwise be funded separately by each entity;
- Provide basic/expanded funding for stream maintenance functions across the county; and
- Provide basic funding for inter-jurisdictional / watershed based issues, such as floodplain mapping and the implementation of programs required to comply with Water Quality initiatives such as Total Maximum Daily Loads (TMDLs).

RATE STRUCTURE

In this discussion area, the Work Group talked through several issues, ranging from the recommendation that imperviousness be the best base measurement to provide equity in applying the rate. It was also recommended that since all properties place a demand for service on the stormwater programs of the County and local municipalities by generating runoff, all properties should be charged a fee.

Rate base. The Work Group discussed the four most common bases of distributing the cost of service across developed properties; 1) imperviousness, 2) imperviousness plus gross area of the parcel, 3) the effective hydraulic area method (similar to curve numbers), and 4) intensity of development. After extensive discussion about the attractiveness of including runoff considerations from pervious areas, it was decided that the group's recommendation would be that the rate be based solely upon imperviousness, for three (primary) reasons.

First, imperviousness alone is the basis for more than 60% of the 550± stormwater user fee programs around the country. Secondly, one of the guiding principals agreed upon by the Work group was an attempt to keep the rate structure simple, so the inclusion of gross area, or adoption of the effective hydraulic area method, would inject uncertainty as to how costs would be allocated to impervious versus pervious areas or why the runoff factors for impervious versus pervious areas were chosen. Thirdly, this method is defensible and has been upheld in numerous court cases.

Graduated or “block” rates. Once the decision was made to base the rate on imperviousness, the Work Group tackled the issue of whether to employ a flat rate for single family residential properties. In most impervious area based user fee programs, the imperviousness of single family residential properties is represented by a statistically significant average amount of imperviousness as determined by measuring the imperviousness of a random sample of residential properties. This average value is termed the “Equivalent Residential Unit”, or “ERU”, and all single family residential properties would be billed based upon an established flat rate that is tied to the ERU. This method saves the community from having to digitize or otherwise measure the imperviousness of every single family residential property in the community, and eliminates the need for a data maintenance program for the single family residential areas.

Instead of ERUs, the Work Group decided that the best approach for DuPage County would be to base the rate on “blocks” of imperviousness. By establishing a rate structure based on the number of blocks of 500 or 1,000 square feet of impervious area, a much higher degree of equity can be built into the rate structure thereby the rate will more fairly representing the range of imperviousness found on single family residential properties across the County. Since DuPage County has already undertaken an effort to digitize impervious surfaces on all properties in the County; therefore, the issues related to the building the master account file are moot. Readily available satellite imagery and change detection software can be used to cost effectively manage the maintenance of the user database.

What constitutes impervious surface. The Work Group discussed what surface materials should be considered to be impervious for the purposes of calculating a user fee. The consensus opinion was to base imperviousness on the same criteria chosen for hydrologic computations by the full Municipal Engineers Committee, that being any surface with a runoff curve number of 98 or above.

The following lists of impervious and pervious surfaces are recommended:

- Impervious surfaces (to be included in the calculation)
 - Asphalt or concrete drives, parking, patios, streets, sidewalks
 - Shingled or other solid building rooftops
 - Metal surfaces such as storage tanks
 - Porous pavers

- Pervious surfaces (to be excluded from the calculation)
 - Gravel drives and parking lots
 - Wood surfaces such as decks
 - Compacted dirt or grassed roadways
 - Water bodies
 - Green roofs

It was pointed out that several surfaces, such as gravel surfaces and wood decks, may be difficult to differentiate during digitizing of impervious surfaces from aerial photography. It was determined that these surfaces would be included in the digitized impervious coverage calculation, but if property owners contest the inclusion of these surfaces, adjustments can be made.

Rate modifiers / equity builders. The Work Group discussed the advantage of keeping special fees currently “on the books”, such as plan review and inspection fees or cash-in-lieu-of detention fees, in the rate structure. These fees are fees charged for services that are typically associated with new development. By maintaining these fees as a means of completely or partially funding services associated with new development, equity is built into the new rate structure because those properties not utilizing these services will not pay for them. The Work Group recommended keeping these fees in place and also, where need be, reviewing the special fee structures to make them self supporting (if practicable). The Work Group also recommended the inclusion of a credit program for the purposes of equity building. Credit programs provide a reduction in applicable fees when on-site stormwater management practices lessen the demands on the County or municipality. (Discussion of specific recommendations related to a credit program are provided in a later section of this document)

What properties should be billed. The Work Group discussed at some length the issue of which properties should be billed under both the County’s stormwater user fee and user fees that may be developed by the municipalities. A large portion of the countywide stormwater management program is floodplain management, stream maintenance, and in-stream issues such as water quality. All agreed that, in order to justify the concept of a fee system based on the demand that a property places for service, that all properties generate runoff and therefore a demand for service; therefore all properties should be charged the fee, except for public rights-of-way controlled by the Federal, State and local governments. More discussion of this issue will occur later in the report.

COST OF SERVICE

The Work Group discussed the process of building a five year operational and capital expenditure plan that defines the level of service that will be provided by the County and/or municipalities in the stormwater management program. The discussion included some specific items to be included in the operational capital expenditure plan, the level of detail necessary to back up the plan, and how the Charlotte-Mecklenburg County “menu of services” model could be emulated locally.

Cost centers. The County, and each municipality that elects to implement a local stormwater management user fee, will identify all costs associated with their respective stormwater management programs, including administration, engineering and planning, operations and maintenance, capital improvements, enforcement, water quality, and special programs.

Level of detail. Each entity that elects to participate in the multi-entity user fee program will determine the level of detail in its cost of service analysis that is appropriate for its community.

Third party services. The County will be billing for services to be provided countywide. Other services to be purchased from the County by any entity should be included in the local community’s business plan and cost of service. The County will not staff up and procure equipment to facilitate providing these services without a multi-year contract with the buying entity.

Bond debt service. A track record for revenue generation is required before user fees can be obligated for revenue bond debt service. If bonding for capital improvements is part of the five year business plan for an entity, debt service will need to be assumed (initially) to come from the General Fund of the entity with user fees being available to abate the General Fund debt service obligation.

CREDITS

The Work Group discussed stormwater funding program credit programs, whether they are really successful, and the steps required to develop a credit program. Credits are a reduction in a property's user fees in recognition of the on-site stormwater controls that have been implemented by the property owner. The significant recommendations that came from the group include;

- **All properties should be eligible to apply for a credit**
- **Credit should be focused on exceeding local standards**
- **A minimal amount of credit should be provided for meeting standards**
- **Confirmation of on-site maintenance will be on a five year cycle**

What to give credits for. There should be a menu of stormwater management practices that are eligible for credit that would be cumulative when multiple controls treat runoff from the same drainage area.

How to qualify for credits. Credit programs can be based on meeting local standards, exceeding local standards, or a combination of the two. It is recommended that the County's credit program provide a minimal level of credit for having a detention pond on-site and a larger amount of credit for exceeding the standards by some threshold amount.

Who could be eligible for credits. After much discussion, it was decided that all properties could be eligible for credits if a level of equity in the program that property owners will expect is to be provided. The credit program would not be the same for all properties however:

- Single family residential properties will be eligible to qualify for a small (10% or less) credit by implementing some simple stormwater management techniques from a short menu list of items. These would be approved with minimal review and proof of installation.
- All properties other than single family residential properties will be eligible to receive more substantive credits, reflecting the greater impact these properties have on sizing and maintenance.

Review fees for credit applications. There should be a review fee for applying for credit for all properties other than single family residential properties, which would be assess no review fee.

Preparation of credit applications. A registered professional engineer should be required to sign the credit applications for all properties other than single family residential properties. There should not be a professional engineer signature requirement for credit applications for single family residential property because the qualifying credits will be such that such certification will cost prohibitive and technically be unwarranted.

Proof of maintenance. Proof of maintenance will be required for all properties other than single family residential properties. On an annual basis, the property owner would be required to self-certify that the property has been inspected and has maintained the stormwater control. Every five years, all property owners other than single family residential property owners, will be required to retain a registered professional engineer to certify that the stormwater control is in good working condition and that the control is still credit-eligible. Single family residential properties will not be required to submit proof of maintenance but will be required to reapply for credit every five years.

Proof of compliance – NPDES. Proof of compliance will be required for all properties other than single family residential properties that hold NPDES stormwater permits for discharges associated with industrial activity. On an annual basis, the property owner would be required to self-certify that the property is in compliance with the NPDES permit. Every fifth year, the property owner would be required to re-apply for this credit.

Single countywide credit policy. Each entity within the County would have the option of having its own credit policy as each would be providing its own service charge rate and rate modifiers to the billing entity.

RATE MODELING

Rate modeling requires numerous assumptions that will impact the adequacy of the rate. The Work Group provided input on some of the key parameters, but most notably on the rate base growth index. This index estimates the growth in revenue resulting from continued development within the footprint of the stormwater program. Due to the virtual “built-out” nature of DuPage County, the Work Group took a conservative approach to this parameter, recommending a zero growth estimate. This approach will keep the County from over-estimating its rate base over the duration of the financial plan.

Multi-entity participation. Each entity that elects to have a fee added to the County fee will develop a rate for the level and cost of service of the local stormwater management program.

Rate base growth. When developing the rate model(s), an assumption must be made relative to the potential for growth in the number of total billing units (impervious blocks) annually throughout the planning period. Due to the development density already existing in DuPage County and the trend toward “green” or low impact development, it was determined that an annual impervious coverage growth rate of zero should be assumed.

Year end fund balances. It was determined that each community should be able to decide on year end fund balance requirements in the rate modeling for their incremental fees (where applicable).

Revenue modifiers. The rate models should include modifiers that insure that revenue generation will not be underestimated; therefore, assumptions related to the amount of credit given and the amount of delinquencies and bad debt should be included in rate models.

BILLING

The Work Group discussed several issues related to billing, probably the most significant of which is the advantage of having a consolidated billing program. Other recommendations included the establishment of a minimum charge for all properties, designation of the property owner as the responsible party for the bill, and rounding the billing blocks to the nearest whole integer.

Consolidated billing. The Work Group discussed a number of issues related to the most effective way to manage the billing of a multi-entity user fee program. As mentioned previously, one of the characteristics of the successful multi-entity user fee programs reviewed that was very desirable was that a property owner of the County would receive only one bill in a billing cycle that would include a line item for stormwater management. Because the County will have a master billing account file that includes every property in DuPage County, it was determined that the County's stormwater utility would possess an advantageous economy of scale in billing all stormwater charges due from any property in the County, whether the charges come from the County alone or from a municipality and the County.

The Work Group recommends that any local municipality be given the option to "opt-in" to the multi-entity user fee program and billing that would be administered by the County, but that any municipality would retain the right to bill their own fee independent of the County program.

Minimum charge to properties. The Work Group believes that each property, whether intensely developed or predominantly pervious area, generates runoff and therefore, all properties should be included in the fee program. All properties should be charged a minimum fee to cover administrative costs. The administrative costs (e.g. billing, collection and program management, etc.) should be applied uniformly to each property. Additionally, the Work Group found that all properties benefit from the public rights-of-way and found that the costs of services associated with public rights-of-way are best divided amongst all parcels rather than to the roadway authorities directly.

Rounding. All properties are billed based upon whole blocks of impervious area. For those properties with fractional amounts will be billed based on rounding to the nearest integer multiple of an impervious block.

Delivery of the bill. Including the fee on or within property tax bills for taxable properties, but on a separate invoice for all other properties being billed is the most appealing billing approach due to the elimination of the need to print and mail every property in the County a new type of bill. Property tax lockbox and cash management services for receiving payments already exist. It is unclear at this point that the Illinois Tax Codes allow the inclusion of any type of non-tax / non-assessed fees to be included on the property tax bill. The issue is being researched by the County. If the fee cannot be placed on the property tax bill, then all of the accounts would go on a separate invoice. The Work Group recommended that a separate invoicing system for all accounts be implemented to avoid any appearance of a tax funded utility.

Billing/Responsible Payer. In most stormwater management user fee programs, the property owner is the recipient of the stormwater bill. In other programs, the occupant of the property is

billed with the owner being ultimately responsible for the bill. The Work Group recommends that the property owner be billed in all cases.

Billing detail. The Work Group discussed how the stormwater charge should appear on the bill. The recommendation is that detailed billing information appear on the invoice to be paid by the property owner. This information should include the Parcel Identification Number, street address, total impervious area, number of impervious blocks (rounded) billed, approved credits, and both the gross and net charges for the county's portion of the bill and the local municipality's portion of the bill (where applicable).

Collections. Although collection procedures are not part of the planning phase of the stormwater user fee feasibility study, collection procedures were discussed briefly, with agreement that this important issue be developed during the early stages of user fee implementation after the adoption of a rate ordinance by the County.

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