

RESIDENTIAL: ERU Billing

Storm water fees are calculated based on the number of Equivalent Residential Units (ERU)s on a property. One ERU equals 1,708 square feet of impervious surface. 1,708 square feet is the average impervious surface area in Duluth for a single family home. All residential buildings are billed 1 ERU per living unit.

Single Family dwellings are billed 1 ERU of \$6.75

ERU- Multi-Family buildings that have 1 floor are billed 1 ERU per unit. The first ERU is billed at \$6.75. A credit of \$.75 per unit is given for additional units. Each additional ERU is billed at \$6.00.
R

ERU- Residential buildings that have 1-4 floors receive a credit of \$.75 and a 40% discount. The first ERU is billed at \$4.35. Each additional ERU is billed at \$3.60.
A

ERU- Residential buildings that have 5-9 floors receive a credit of \$.75 and a 45% discount. The first ERU is billed at \$4.05. Each additional ERU is billed at \$3.30.
B

ERU- Residential buildings that have more than 10 floors receive a credit of \$.75 and a 50% discount. The first ERU is billed at \$3.75. Each additional ERU is billed at \$3.00.
C

The discount applies to multi-family buildings with a single utility account with a single owner or landlord.

Report

City of Duluth,
Minnesota

Storm Water Utility
Development Plan

Final Report

November 10, 1997

TABLE 6-4

CITY OF DULUTH

STORM WATER MANAGEMENT PROGRAM
FUNCTIONAL COST - ADJUSTMENT POLICIES
ALTERNATIVE 5 @ 1,000,000 CAPITAL IMPROVEMENTS

FUNCTIONAL AREA	Budgeted Activities PERCENT	ADJUSTMENT CATEGORY 1			ADJUSTMENT CATEGORY 2		
		City Criteria Level 1, in Compliance and Does Not Drain Into City Maintained System		ALLOCATION FOR LOCAL SYSTEM COST/IMPACTS	City Criteria Level 2, in Compliance, or Developed Under Article XXIII, or in the Shoreland Management Zone, and Drains to City Maintained System		ALLOCATION FOR LOCAL SYSTEM COST/IMPACTS
		ALLOCATION FOR SYSTEM WIDE COST/IMPACTS	ALLOCATION FOR LOCAL SYSTEM COST/IMPACTS		ALLOCATION FOR SYSTEM WIDE COST/IMPACTS	ALLOCATION FOR LOCAL SYSTEM COST/IMPACTS	
ADMINISTRATION	2.61%	0.81%	1.80%		1.77%	0.83%	
ENGINEERING/PLANNING	3.07%	1.07%	2.00%		2.14%	0.94%	
OPERATIONS & MAINTENANCE	48.14%	9.74%	38.40%		35.84%	12.18%	
CAPITAL	46.18%	9.28%	36.90%		23.09%	23.09%	
TOTAL (STORM WATER NEEDS FROM IMPERVIOUS CHARGE	100.00%	20.90%	79.10%		62.83%	37.04%	

FUNCTIONAL AREA	Budgeted Activities PERCENT	ADJUSTMENT CATEGORY 3			ADJUSTMENT CATEGORY 4		
		Developed On-Site Water Quantity and Quality Best Management Practices and Drains Into City Maintained System		ALLOCATION FOR LOCAL SYSTEM COST/IMPACTS	Established Facilities Providing Only a Water Quality Component and Drains into City Maintained System		ALLOCATION FOR LOCAL SYSTEM COST/IMPACTS
		ALLOCATION FOR SYSTEM WIDE COST/IMPACTS	ALLOCATION FOR LOCAL SYSTEM COST/IMPACTS		ALLOCATION FOR SYSTEM WIDE COST/IMPACTS	ALLOCATION FOR LOCAL SYSTEM COST/IMPACTS	
ADMINISTRATION	2.61%	2.05%	0.56%		2.33%	0.28%	
ENGINEERING/PLANNING	3.07%	2.45%	0.62%		2.76%	0.31%	
OPERATIONS & MAINTENANCE	48.14%	40.02%	8.12%		44.08%	4.06%	
CAPITAL	46.18%	30.78%	15.40%		38.48%	7.70%	
TOTAL (STORM WATER NEEDS FROM IMPERVIOUS CHARGE	100.00%	75.30%	24.70%		87.65%	12.35%	

5.7.1 Approach to Establishing the Adjustment Policy

To have a firm technical basis, the user-fee reduction for Duluth's storm water utility program must be related to the benefits achieved by the private storm water control facility that is the basis for the reduction.

The City's Storm Water Management Program costs can be subdivided into two general categories:

- Program costs which have localized or "local" benefits; and
- Program costs which have "system wide" benefits.

Typically, storm water management facilities for urban development projects provide primarily localized benefits. For example, because storm water detention basins for development projects control a relatively small percentage of major City watersheds, the peak flow control benefits are typically limited to stream systems immediately downstream of the development site. Since it is unlikely that privately maintained storm water control facilities significantly reduce the City's system wide costs, it is appropriate to express the benefits of these facilities in terms of potential reductions in the City's "local" program costs.

Therefore, the recommended approach to establishing a technical basis for the City's adjustment policy is to base the "maximum total adjustment" (i.e., maximum user fee reduction) on the total percentage of City program costs which provides "local" benefits. Likewise, the breakdown of the maximum total adjustment percentage between "peak flow control" and "water quality control" can be based upon the percentage of City program costs allocated to each of those functions.

5.7.2 Adjustment Policy Categories

As developed for a \$1,000,000 funding option, Table 5-4 displays the adjustment categories for the functional areas of the respective expenditures in the pay-as-you-go option. CDM attempted

to identify accurate allocations of the adjustment process. Based upon these analysis, CDM has developed 4 adjustment categories:

CATEGORY 1: City Criteria Level 1, In Compliance, and Does Not Discharge Into City Maintained System

Based upon the unique characteristics of properties that fall into the Level 1 criteria, CDM re-evaluated certain properties based upon the functional budgeted activities that the City would need to provide. CDM then applied specific percent allocations for system wide and local system costs/impacts. These allocations relate to the quantity and quality of the properties on-site storm water management practices. The criteria are as follows:

- Property does not discharge into a City maintained system; and,
- Must develop, implement, manage, and certify a storm water pollution prevention plan; and,
- Disclose known contamination of storm water and corrective action taken to prevent future spills; and,
- Description of inspections to storm water facilities, including date, findings, and/or corrective actions taken. Inspections should be performed once every six months; and,
- Identify and describe storm water management practices (BMPs) that minimize, or eliminate, the impact of potential pollutants in storm water; and,
- Document the methodology on how specific BMPs were selected and conform to good engineering practices.

CATEGORY 2: City Criteria Level 2, In Compliance, OR Developed Under Article XXIII, OR in the Shoreland Management Zone

Utilizing the methodology in Category 1, CDM re-evaluated properties which fall into Criteria Level 2, based upon the functional budgeted activities that the City would need to provide. CDM then applied specific percent allocations for system wide and local system costs/impacts

(See Table 5-4). These allocations relate to the quantity and quality of the properties on-site storm water management practices. The criteria are as follows:

- Satisfies the provisions of the budgeted activities provided by the City for local system costs/impacts; or,
- Developed under Article XXIII, (C5) Planned Commercial District; or,
- Satisfies the provisions under Chapter 51, Water Resource Management; and,
- Discharges into City maintained systems.

CATEGORY 3: Developed On-Site Water Quantity and Quality Best Management Practices and Discharges Into City Maintained System (2/3 reduction of Category 2)

CATEGORY 4: Established Facilities Providing Only A Water Quality Component and Discharges Into City Maintained System (1/3 reduction of Category 2)

Expanding the methodology in Category 2, CDM recommends splitting this category into Categories 3 and 4. Properties identified in Category 3 would be eligible for a two-thirds reduction in ERUs and properties identified in Category 4 would be eligible for a one-third reduction in ERUs. Based upon the functional budgeted activities that the City would need to provide specific percent allocations for system wide and local system of costs/impacts were developed for these two categories (See Table 5-4).

If the City adopts a procedure of granting adjustments, it is recommended that the adjustment criteria and procedures illustrated above be followed.

Current BMP credits from CDM Study 1998 (not sure what discounts currently in place for non-residential customers)

- 79.1% Waterfront non-residential (More too this than just waterfront – needs swppp....)
- 37.16% WQ/RC for Commercial District or Shoreland Zone – old development code,
- 24.70% WQ/RC All other areas
- 12.35% WQ All other areas

New BMP credit scenarios for retrofits to existing non-residential properties

Water Quality and/or Rate Control possibilities –

All would have minimum requirements that would need to be met, i.e. structure dimensions, filtration media depths, maintenance agreements, annual inspections,...

- 20% Water Quality Only - Sump Manhole Structure with floatables weir/skimmer
- 25% Water Quality Green Infrastructure – i.e. filtration basin/swale – 1" rainfall depth
- 30% WQ/Rate-Flood Control – rate control for 10 year storm event (Redev – Retro only)
- 40% WQ/Rate-Flood Control – rate control for 25 year storm event (Redev – Retro only)
- 50% WQ/Rate-Flood Control – rate control for 100 year storm event (Redev – Retro only)
- 80% Water Front Parcel with WQ BMP and SWPPP – no connection to City system

New development and redevelopment projects

All new development and redevelopment projects must follow the UDC (Unified Development Chapter) and will receive credits similar to above depending on the project and existing site conditions. A new development in a currently undeveloped site would receive the 50% credit, to meet water quality and rate-flood control requirements. Redevelopment projects are complicated in that there is existing site improvements that may remain or be completely removed and new improvements (buildings, parking lots,...) will constructed. Stormwater requirements are determined on a project by project and site by site basis.