

Medina Stormwater Utility

Neighborhood Meeting
May 1, 2008

Bob Barth, Bonestroo Inc.

Purpose of Stormwater Utility

- Provides a dedicated funding source for stormwater management
- Funds municipal activities in two general categories
 - Stormwater system maintenance, replacement, NPDES compliance, etc.
 - TMDL Implementation

Why Now?

- Unfunded mandates from state and federal governments
 - National Pollution Discharge Elimination System (NPDES) municipal stormwater permit
 - Total Maximum Daily Load (TMDL) for Lake Independence
 - Phosphorus reduction strategy for Lake Minnetonka and Long Lake through Minnehaha Creek Watershed District

Why Now?

- Considered a more equitable funding mechanism than taxes based on market value
- City has only partially funded its requirements through tax dollars
- TMDL Implementation Plan for Lake Independence completed in 2007.

What is a Stormwater Utility?

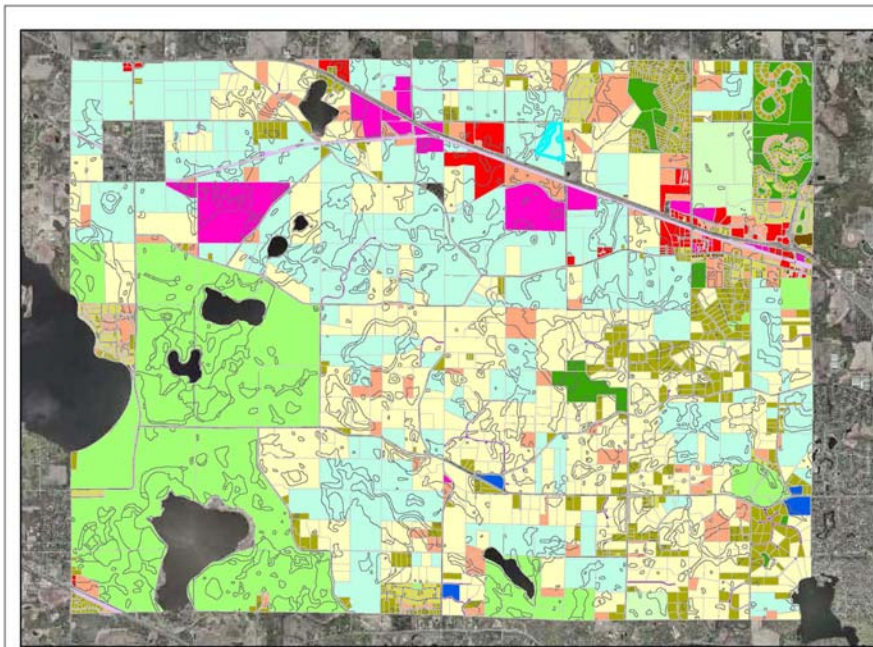
- User charge
- Users are charged according to the amount of runoff generated by their property – not market value
- The unit charge is called an Residential Equivalency Factor or REF.
- The charge is based on existing land use



Existing Land Use

-June 2007 data

-2006 aerial photo



SWU Existing Land Use

-  Agriculture
-  Commercial
-  Industrial
-  Institutional
-  Multi-Family Res
-  Open Space
-  Parks and Recreation
-  Private Recreation
-  ROW
-  Railroad
-  Rural Residential
-  Single Family - Low Dens*
-  Single Family Small Lot
-  Undeveloped Land

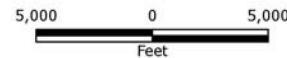


* The existing land use designations are based on those identified in the City parcel information from October 2006 with some revisions due to updated land use identified on the 2006 aerial.

Storm Water Utility

Figure 1

Existing Land Use Map*



Bonestroo

April 2008

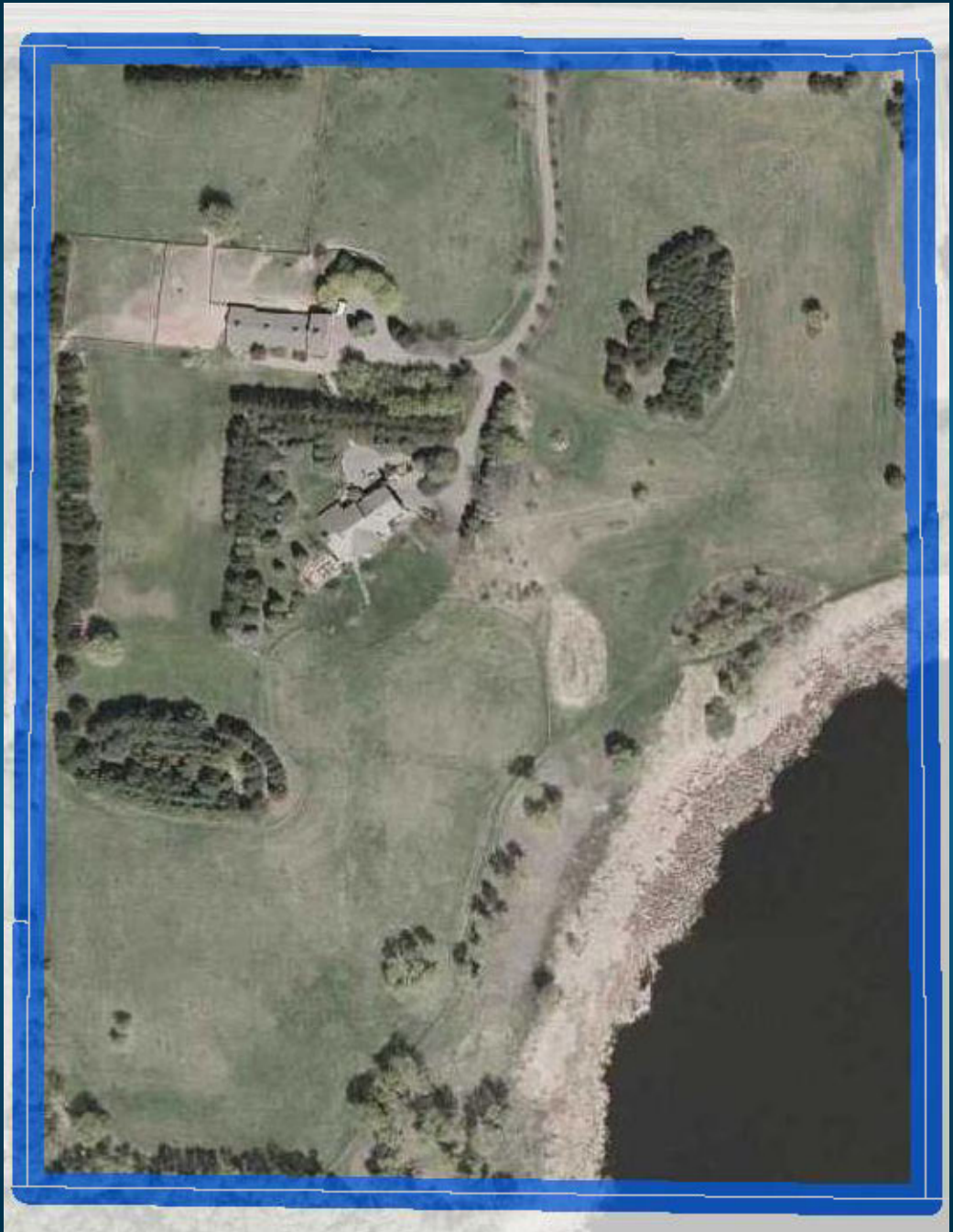
I:\190\19007022\Cad\GIS\working_map.mxd

Stormwater Utility Budget

Activity	Current	2010	2015	2020
Items 1-6b (from Implementation Program)	\$97,200	\$105,100	\$130,100	\$155,200
TMDL Implementation	\$60,000	\$60,000	\$70,000	\$80,000
Total	\$157,200	\$165,100	\$200,100	\$235,200

Example Parcel

- Existing Land Use
 - Rural Residential
- Parcel Area
 - 30 acres



Example Parcel

- Existing Land Use
 - Rural Residential
- Parcel Area
 - 30 acres
- Wetland Area
 - 6 acres
- SWU Billing Area
 - Parcel Area Less Wetland Area
 - 24 acres



REF Calculation

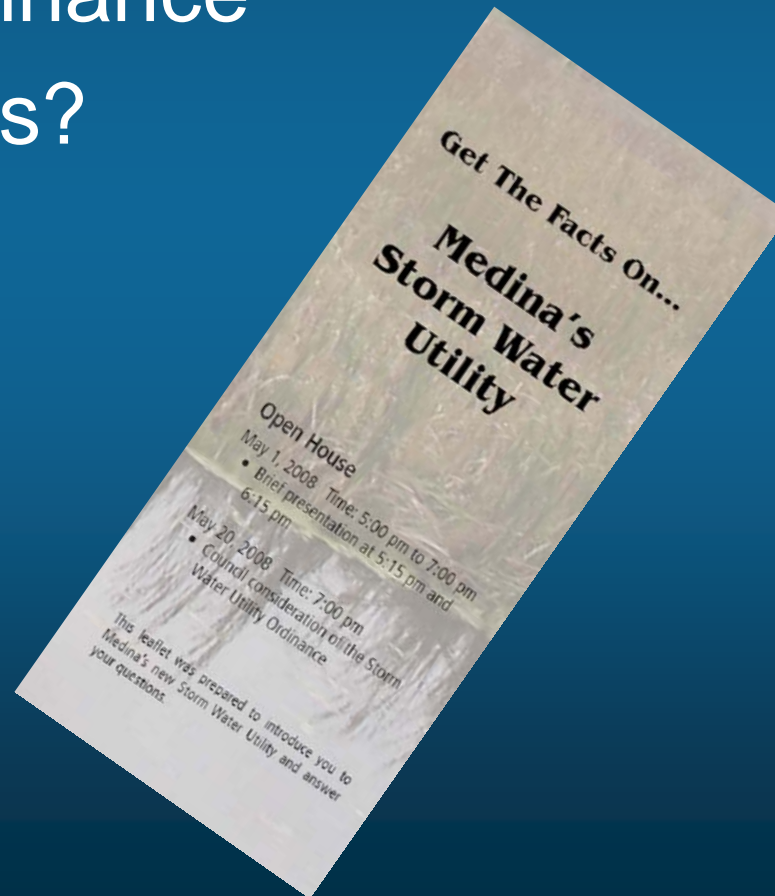
- All agricultural, rural residential, single family residential, and undeveloped properties are assigned 1 REF per 10 acres (rounded down to the nearest whole REF), with a minimum of 1 REF per parcel.
- For the example parcel
 - SWU Billing Area = 24 acres
 - $24 \text{ acres} / (10 \text{ acres per REF}) = 2.4 \text{ REFs}$
 - Round down to 2 REFs

Determination of Individual Charge

- 6,495 REFs calculated for entire City
- Budget is \$157,200 per year
- $\text{Budget} \div 6,495 \text{ REFs} = \24.20 per year per REF
- Example parcel
 - 2 REFs
 - \$48.40 per year

Medina Stormwater Utility

- Next step is adoption of a stormwater utility ordinance
- Questions?



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City of Medina

City of Medina

Existing Land Use	Typical Curve Number Value	Typical % Impervious	REFs/parcel ³	REFs/acre ³	Total REFs
Agriculture	64	0%	1.0 ⁴	--	318
Commercial	90	78%	--	6.4	1,198
Industrial	90	78%	--	6.4	2,138
Institutional	80	38%	--	4.3	177
Multi-Family Residential	85	65%	--	5.3	88
Open Space ¹	50	0%	1.0	--	40
Parks and Recreation ¹	50	0%	1.0	--	8
Private Recreation	65	12%	--	2.0	511
Railroad	80	52%	--	4.3 ⁵	67
ROW ²	80	52%	--	--	0
Rural Residential	65	12%	1.0 ⁴	--	412
Single Family - Low Density	72	30%	1.0	--	693
Single Family Small Lot	72	30%	1.0	--	593
Undeveloped Land	61	0%	1.0 ⁴	--	253
Total					6,495

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