

Info Item 1: Regional Wastewater System Flow & 2012 MWC

Metropolitan Council Environment Committee

June 14, 2011

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Presentation Outline

- 1. General Wastewater Flow Metering System**
- 2. 2005-2011 Regional Wastewater Flow Volumes**
- 3. Projected 2012 Municipal Wastewater Charge Volumes**
- 4. Cost Allocation Process & Potential Cost Increases to Communities**
- 5. Regional I/I Program**
- 6. Volumetric Flow Allocation vs. I/I Program Mitigation Costs**



Regional Wastewater Service Summary

■ General Flow Measurement Overview

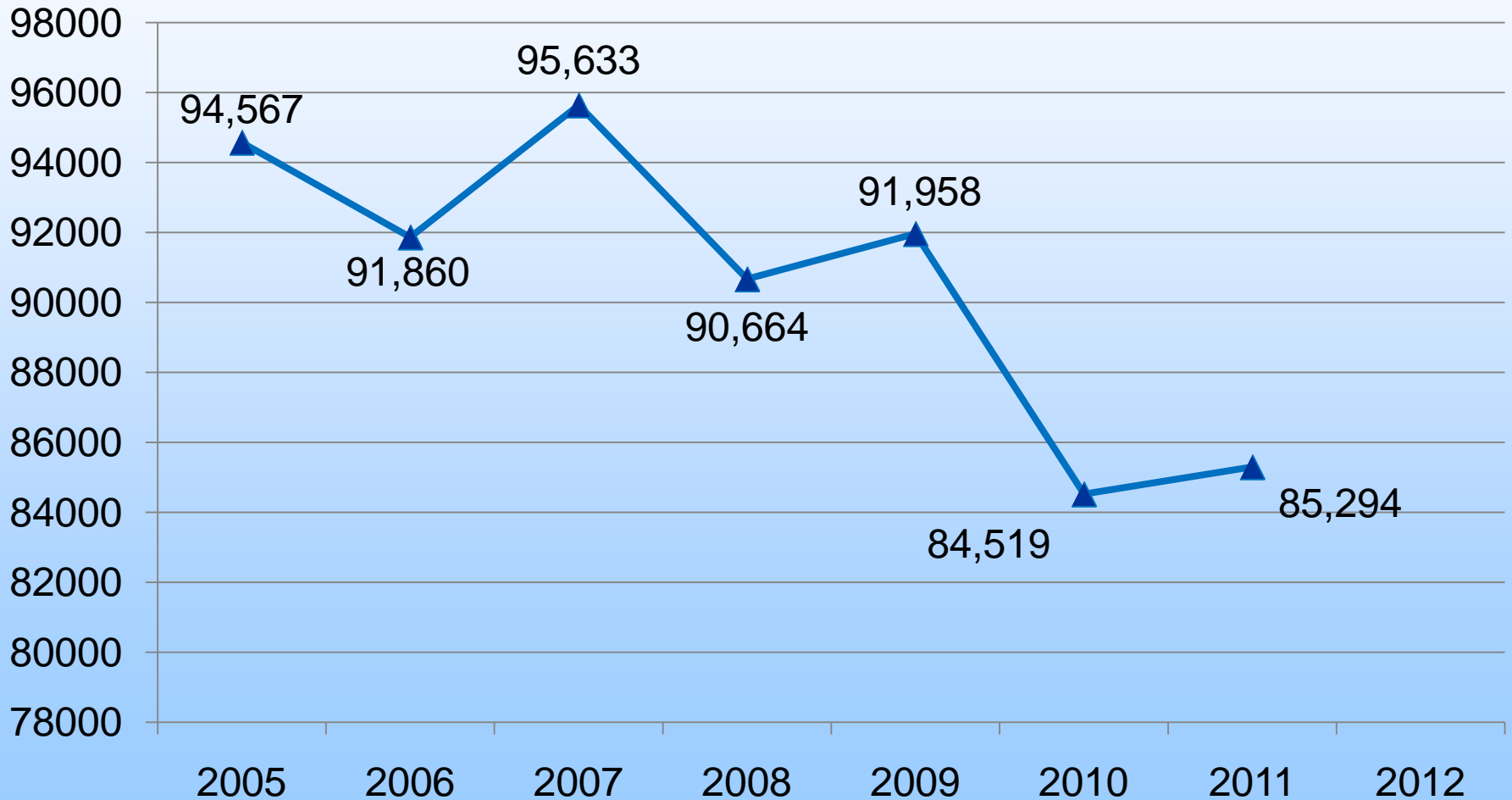
- 105 Communities provided regional wastewater service
- Approximately 190 wastewater flow meters in system
- Municipal Wastewater Charges (MWC) based on:
 - Measured flow
 - Estimated flow
 - Combination of Measured and Estimated

■ 2012 MWC flow period between July 1, 2010 and June 30, 2011



Regional Flow Summary

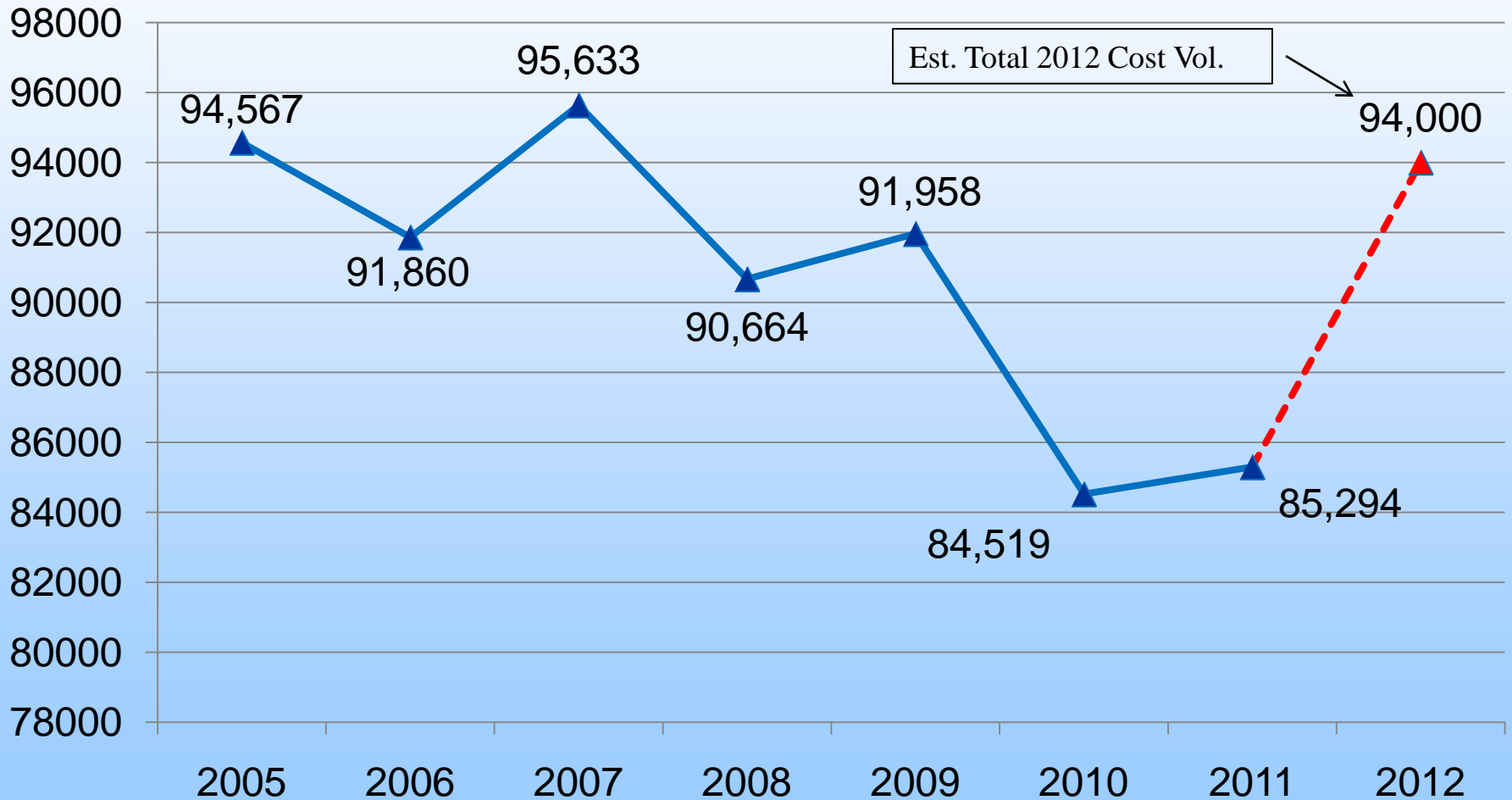
Allocated Volume (MG)





Regional Flow Summary

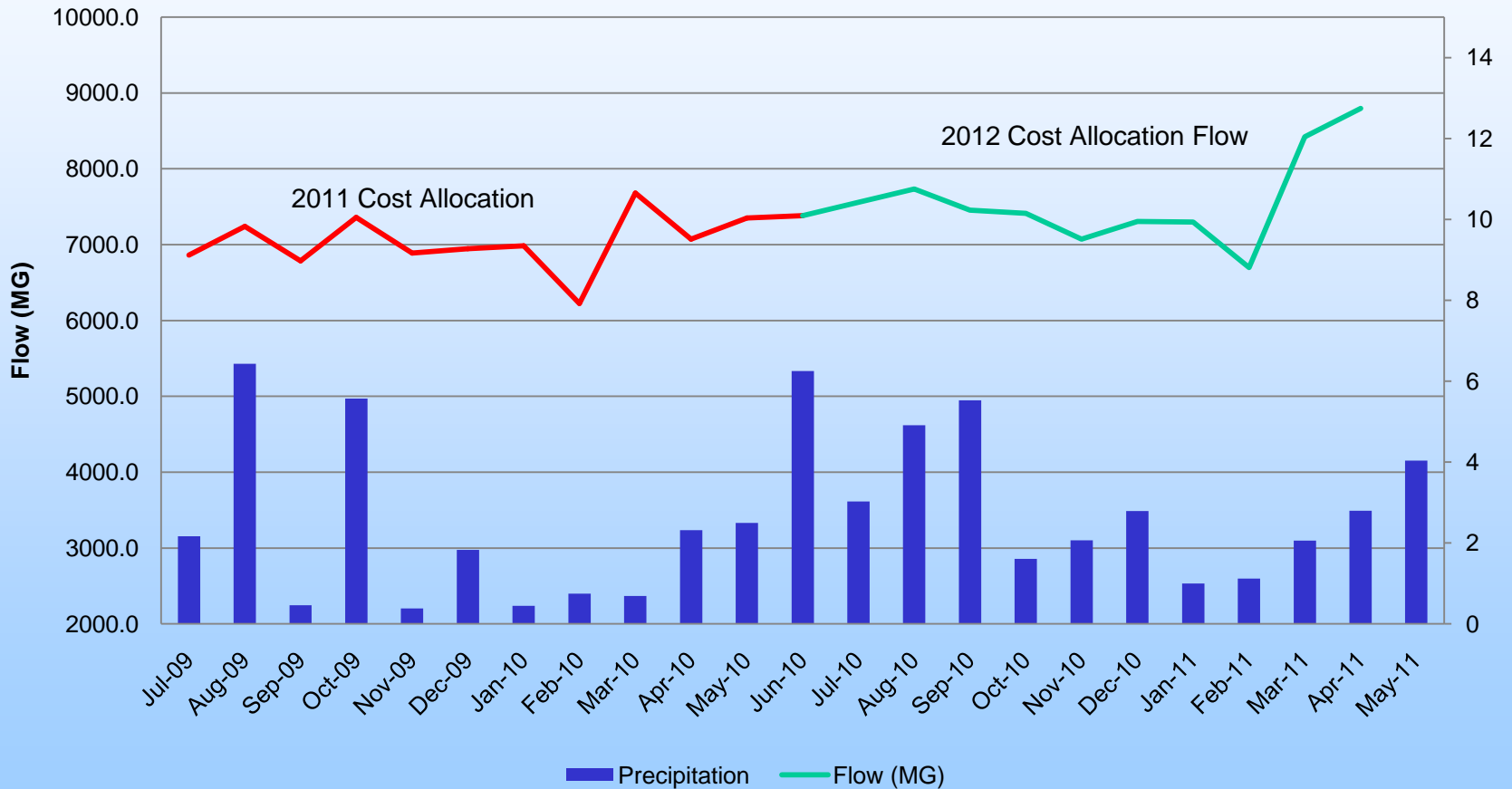
Allocated Volume (MG)





Regional Flow Summary

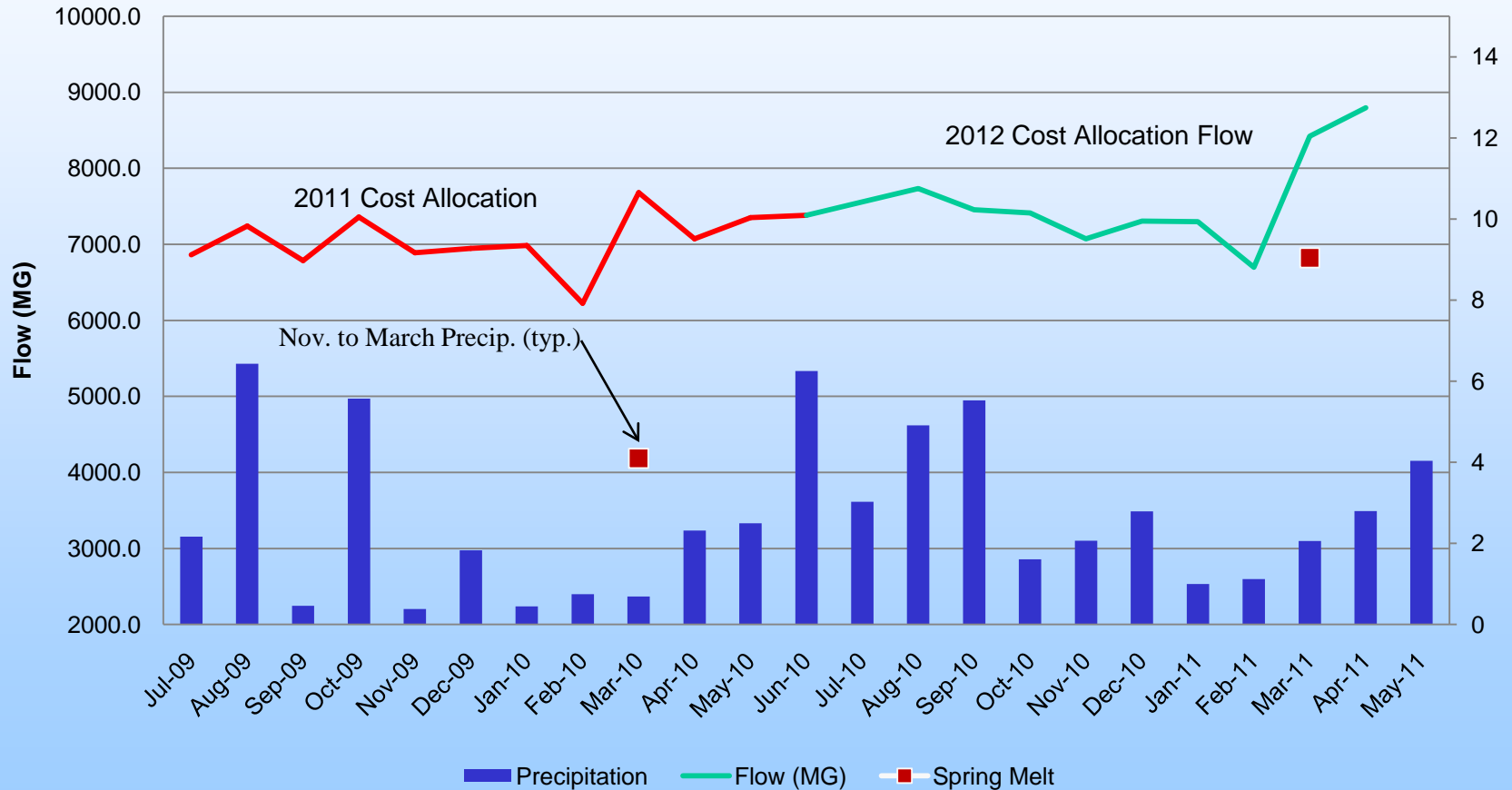
Monthly Wastewater Flow & Precipitation





Regional Flow Summary

Monthly Wastewater Flow & Precipitation





MWC "Firm Flow Method"

Individual City Illustration

2011	flow (mg)	% of system flow	MWC
City ABC	10,000	11.72	\$ 20,257,600
City XYZ	500	0.59	\$ 1,012,900
All others	74,794	87.69	\$151,514,500
System Flow	85,294		\$172,785,000

2012	flow (mg)	% of system flow	MWC	%
Increase				
City ABC	10,000	10.64	\$ 18,743,300	(8.8)
City XYZ	600	0.64	\$ 1,108,400	9.4
All others	83,400	88.72	\$154,067,300	1.7
System Flow	94,000		\$173,649,000	0.5%



Projected MWC Increases: Flow through April 2011

<u>Community</u>	<u>2012 Flow (MG)</u>	<u>2012 Est. MWC</u>	<u>2012 vs. 2011</u>	<u>2011 vs. 2010</u>
Farmington	463.14	\$1,054,568	+15.70%	-0.16%
Lilydale	23.30	\$53,054	+8.67%	-2.43%
Little Canada	383.59	\$873,433	+11.19%	+6.85%
Long Lake	89.01	\$202,676	+17.00%	+8.24%
Maple Plain	100.60	\$229,066	+27.63%	+16.58%
Minnetonka Beach	17.46	\$39,756	+8.07%	-1.63%
Mound	309.89	\$705,619	+8.14%	+12.66%
New Hope	647.60	\$1,474,583	+10.06%	+1.38%
Newport	78.08	\$177,788	+12.12%	+4.68%
Roseville	1,136.11	\$25,86,919	+10.35%	-2.02%
St. Paul	7,436.09	\$16,931,955	+8.77%	+4.59%
Tonka Bay	76.00	\$173,052	+8.68%	+13.09%
West St. Paul	706.05	\$1,607,674	+12.35%	+4.30%



Projected MWC Increases: I/I Communities

<u>Community</u>	<u>2012 Flow (MG)</u>	<u>2012 Est. MWC</u>	<u>2012 vs. 2011</u>	<u>2011 vs. 2010</u>
Farmington	463.14	\$1,054,568	+15.70%	-0.16%
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Projected MWC Increases: I/I Community Work Plan Expenditures

<u>Community</u>	<u>I/I Mitigation Expenses 2007-2011</u>
Farmington	\$280,000
Lilydale*	\$126,000
Long Lake	\$168,000
Maple Plain	\$102,100
Minnetonka Beach*	\$133,000
Mound	\$56,000
New Hope	\$759,500
Newport	\$101,790
Roseville	\$330,150
St. Paul*	\$29,750,000
Tonka Bay	\$45,500
West St. Paul	<u>\$972,450</u>
Total:	\$32,824,490

* *Extended work plan completion deadline*



Regional I/I Program

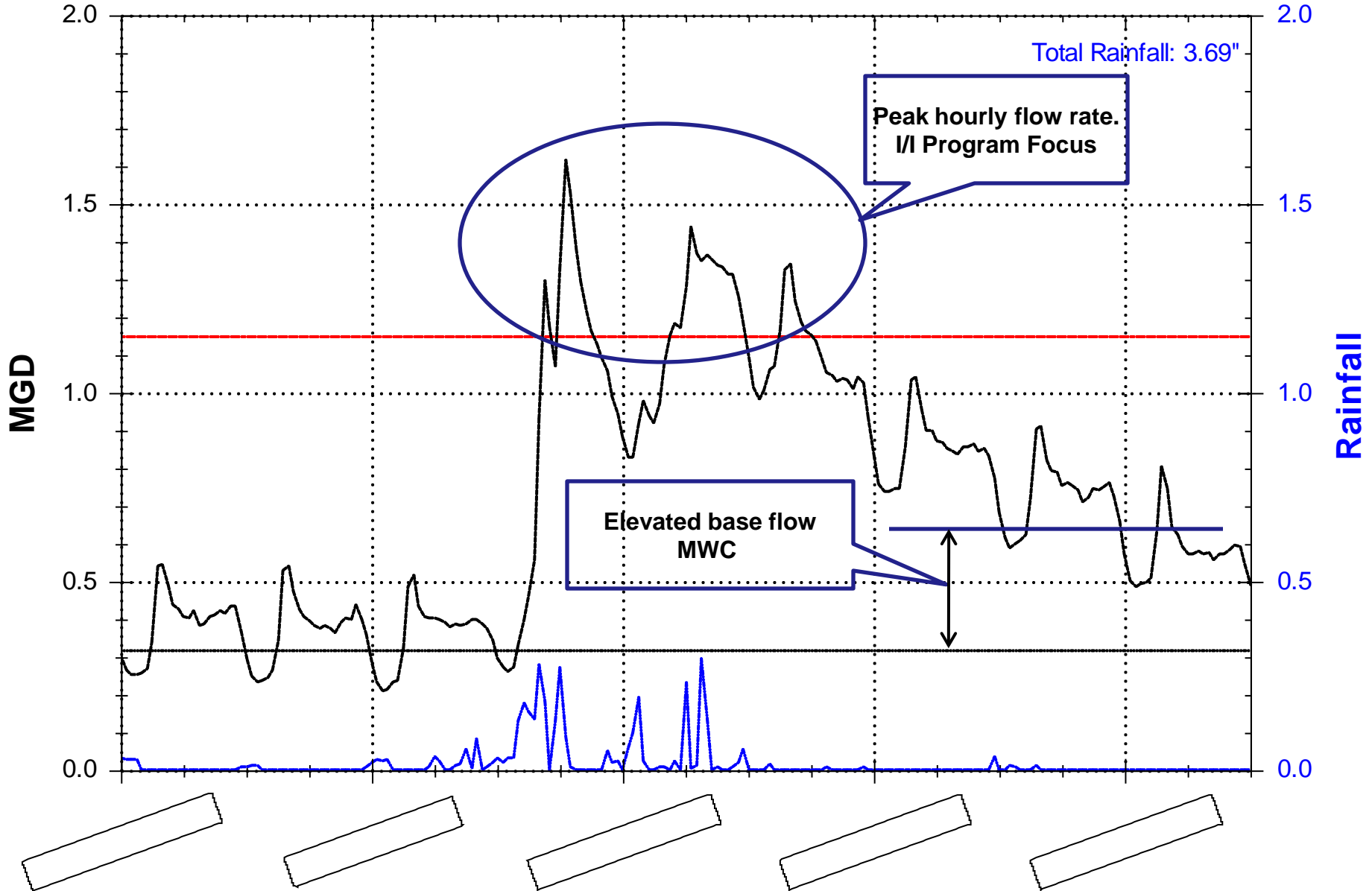
- **Goal: Efficient use of regional wastewater system**
- **Objective: Reduce short-term, wet weather peak wastewater flow rate, i.e. Inflow**
- **Typical sources of inflow:**
 - **Rain leader connections**
 - **Sump pump connections**
 - **Foundation drain connections**
 - **Broken service lines**
 - **Vented manhole covers**
 - **Damaged manholes**
 - **Storm/sanitary sewer cross-connections**



Regional I/I Program

- **Regional approach to community I/I mitigation**
- **Cost estimate based on mid-range costs to mitigate inflow sources**
- **Actual cost for some communities is higher**
- **Relationship to Wastewater Service Charges**
- **Inflow mitigation has limited impact on wastewater volume charges**

II Report for STANTHONY104





Regional Wastewater Summary

Questions?