



**City of Rochester Hills
AGENDA SUMMARY
NON-FINANCIAL ITEMS**

**1000 Rochester Hills Dr.
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Legislative File No: 2009-0570

TO: Mayor and City Council Members
FROM: Roger Rouse, Director; Department of Public Services
DATE: January 11, 2010
SUBJECT: Presentation of Water Reservoir Feasibility Study

REQUEST:

Tetra Tech Inc. was selected to complete a Water Reservoir Feasibility Study to determine whether or not the construction of water reservoirs would benefit the City by purchasing water from the Detroit Water and Sewerage Department (DWSD) during off-peak hours. Tetra Tech Inc. will present their findings to Council.

BACKGROUND:

Rochester Hills continues to receive annual increases from DWSD for treated water purchases. An overview of yearly rate increases shows:

<u>DWSD Fiscal Year</u>	<u>Percentage Increase by DWSD to Rochester Hills over Prior Fiscal Year</u>
2001-2002	12.84
2002-2003	14.97
2003-2004	5.01
2004-2005	5.05
2005-2006	6.79
2006-2007	3.12
2007-2008	17.23
2008-2009	11.92
2009-2010	4.40

The DWSD water rate structure uses factors such as the distance away from treatment plants, elevation difference of the community compared to the treatment plant elevations, and the peak hour water demand from a community. Communities that have high ratios of peak hourly water rate demand compared to an average daily demand can expect higher water rates. Unfortunately, Rochester Hills has peaked approximately five times higher than its average daily flows. Providing water storage facilities is an option for a community to control future rate increases by DWSD while also increasing their distribution system service reliability during peak demands and emergencies.

The purpose of the feasibility study reviewed the concept of the City buying water from DWSD during off-peak periods, at reduced rates, and then releasing the water into the City's system during peak periods thus reducing the cost of purchased water. There may be an opportunity to save on the purchased water costs from DWSD and pass those savings onto the City's water customers.

The feasibility study was needed to address all the issues related to this concept such as conservative estimates of: cost savings on water purchased from DWSD, cost to construct the structure including any land purchases that may be needed, any system improvements/upgrades needed to support water reservoirs, annual maintenance costs related to the storage structure, and other items that may be needed to make a sound decision related to the use of a water reservoir structure.

Attachment: Rochester Hills Water Storage Reservoirs Feasibility Study, Tetra Tech Inc.

APPROVALS:	SIGNATURE	DATE
Department Review		
Department Director		
Mayor		
City Council Liaison		

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