

City Council Agenda Summary Sheet (Non Purchases)

Agenda No: 2005-0039
Date: January 21, 2005
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City File No: E01-007 Water Reservoir

Meeting Date: January 26, 2005

Water System Study Points for the Financial Services Committee Meeting on January 13, 2005

(Outline used by Paul Davis for the Financial Services Committee presentation)

Study was started for two reasons: Try to address the pressure problems in the NW corner of the community and to review whether system improvements could be made to counteract the proposed DWSD increases. In Dec. 2000 we were notified that our next rate increase would be 12.9%. We were also told to expect continuing double-digit rate increases.

Initial contract signed with DWSD on January 26, 1970 and commits us to 40 years as a customer. Per contract, estimate of annual water is about 3.4 million gallons per day (MGD). Currently, we are using almost 9 MGD on an average day. Rochester Hills entered into a contract with Oakland Township around 1989 to provide water to the Hills of Oakland for 116 home sites, Musson Elementary and the King's Pointe Subdivision with 100 home sites. Also around this time, the water booster station at Tienken and Adams was constructed.

DWSD has a very large system. Copy of the DWSD 5 year-plan shows a proposed \$1.4 billion in system costs for on-going and new projects between fiscal years 2001 and 2005. Prior to coming to the City, I had attended a professional program where it was stated that DWSD planned to invest approximately \$4 billion over 10 years in system upgrades, replacements and expansion.

Original study for FPS was completed around September 2002. The amended report was essentially completed around November 2004. Report currently is based on peaking factors of 3 and 5 per DWSD suggestion. However, based on recent SCADA data from the DWSD system we probably are closer to 2.4 and 3.3.

It was felt that construction of a water storage reservoir in the NW would improve service to our customers. It could also give us an added option by reducing our reliance on the necessary input pressure being provided by DWSD.

Watering restrictions will not work to solve the problem. It would require a great deal of enforcement follow-up and also may be dependent on the cooperation of other communities to also enforce restrictions.

Project approval may hinder the City's ability to move forward in passing a local road millage or reconstructing the DPS facility because of resident perception of the City having plenty of cash reserves.

Can DWSD be trusted not to change the rate structure? DWSD will need to recoup their costs for their various expansion, replacement and maintenance projects. Changing the rate structure could result in lower cost savings than predicted by the report.

The City of Detroit will also have to deal with their recent financial trouble of being in millions of dollars in debt and needing to lay-off approximately 900 workers. Will the City of Detroit's situation affect the DWSD system? There is risk associated with counting on DWSD to continue charging the premium for peak water. The cost effective analysis and project payback estimate is based on today's known DWSD rate charges to Rochester Hills.

Water Consumption (Per DWSD)

Consumption in MCF
(1,000 cubic feet)

April, 2003	27,279.8
May, 2003	34,455.3
June, 2003	43,957.3
July, 2003	73,637.5
August, 2003	58,196.4
September, 2003	46,365.2
October, 2003	26,871.8
November, 2003	23,079.3
December, 2003	26,406.3
January, 2004	27,402.6
February, 2004	24,557.4
March, 2004	<u>24,837.9</u>
TOTAL	437,046.8

Average Daily Flow (MGD) = 8.956

April 2003 to Dec 2003
comparison 360,248.9

Water Consumption (Per City)

Consumption in MCF
(1,000 cubic feet)

January, 2003	26,438.0
February, 2003	26,384.3
March, 2003	25,498.1
April, 2003	23,784.4
May, 2003	32,331.1
June, 2003	39,575.8
July, 2003	59,257.9
August, 2003	58,875.7
September, 2003	52,411.8
October, 2003	25,541.5
November, 2003	24,434.9
December, 2003	<u>24,058.8</u>
	418,592.3

8.578

331,354.4

Consumption in CF
(1,000 cubic feet)

January, 2002	24,788.4
February, 2002	24,605.3
March, 2002	23,855.4
April, 2002	24,481.3
May, 2002	27,408.2
June, 2002	38,268.7
July, 2002	70,305.0
August, 2002	66,897.5
September, 2002	42,169.2
October, 2002	43,345.8
November, 2002	26,285.0
December, 2002	<u>25,129.7</u>

437,539.5

8.967