
2007 Water & Sewer Technical Rate Review Committee Recommendation

Introduction

■ Committee Members

Jim Duistermars, City Councilman

Greg Hooper, City Councilman

Ravi Yalamanchi, City Councilman

Donald Atkinson, Citizen Rep

Cynthia J. Billings, Citizen Rep

Frank Cosenza, Citizen Rep

George Karas, Citizen Rep

Richard R. Rowe, Citizen Rep

Jennifer Stein, Citizen Rep

Gerard Verschueren, Citizen Rep

Paras Patel, Student Rep

Richard Yoon, Student Rep

Julie Jenuwine, Finance Director

Purpose of Presentation

- Objective

To conduct a general overview of relevant factors effecting rates

Significant Components Effecting Rates

- City Charter and ordinance
- W&S financial policies
- System's financial condition and trends
- Detroit Water & Sewerage Department (DWSD) water rates
- DWSD/Oakland County Drain Commission (OCDC) sewage disposal rates
- Rochester Hills W&S rate mark-up (operating and capital revenues and expenses)

City Ordinance

Section 102.62

- ***Rate revisions authorized***

The rates fixed in this section shall be reviewed annually and are estimated to be sufficient to provided for the payment of the expenses of administration and operation, such expenses for maintenance of the water and sewage disposal system that are necessary to preserve the system in good repair and working order and to provide for such other expenditures and funds for the system as this article may require.

W&S Financial Policies

(Operating Fund and Capital Fund)

- System revenues support the full (direct and indirect) cost of the water and sewage disposal services
- Two separate Funds - Operating Fund and a Capital Fund
 - ◆ The Capital Fund was created in 2005
 - ★ to provide for a means of keeping the operating and capital monies separate

W&S Financial Policies *continued*

- W&S OPERATING FUND
 - ◆ 90 days operating costs + annual depreciation = target balance Currently \$8.7 million
 - ★ \$6 million was swept from the Operating Fund to the Capital Fund
 - ◆ the Capital & Lateral (non-operating) revenue is transferred to the W&S Capital Fund
 - ★ Currently \$1 million and projected to decline and ultimately end
 - ◆ annual depreciation is transferred to the W&S Capital Fund
 - ★ Currently \$3.1 million

W&S Financial Policies *continued*

■ W&S CAPITAL FUND

- ◆ annual depreciation is transferred out of the W&S Operating Fund to the Capital Fund to help finance future infrastructure/capital
- ◆ the Capital & Lateral revenue is transferred to the Capital Fund to fund future infrastructure/capital
- ◆ There currently is no policy on the usage or build-up of the monies

W&S system – significant financial trends

Pendulum swing

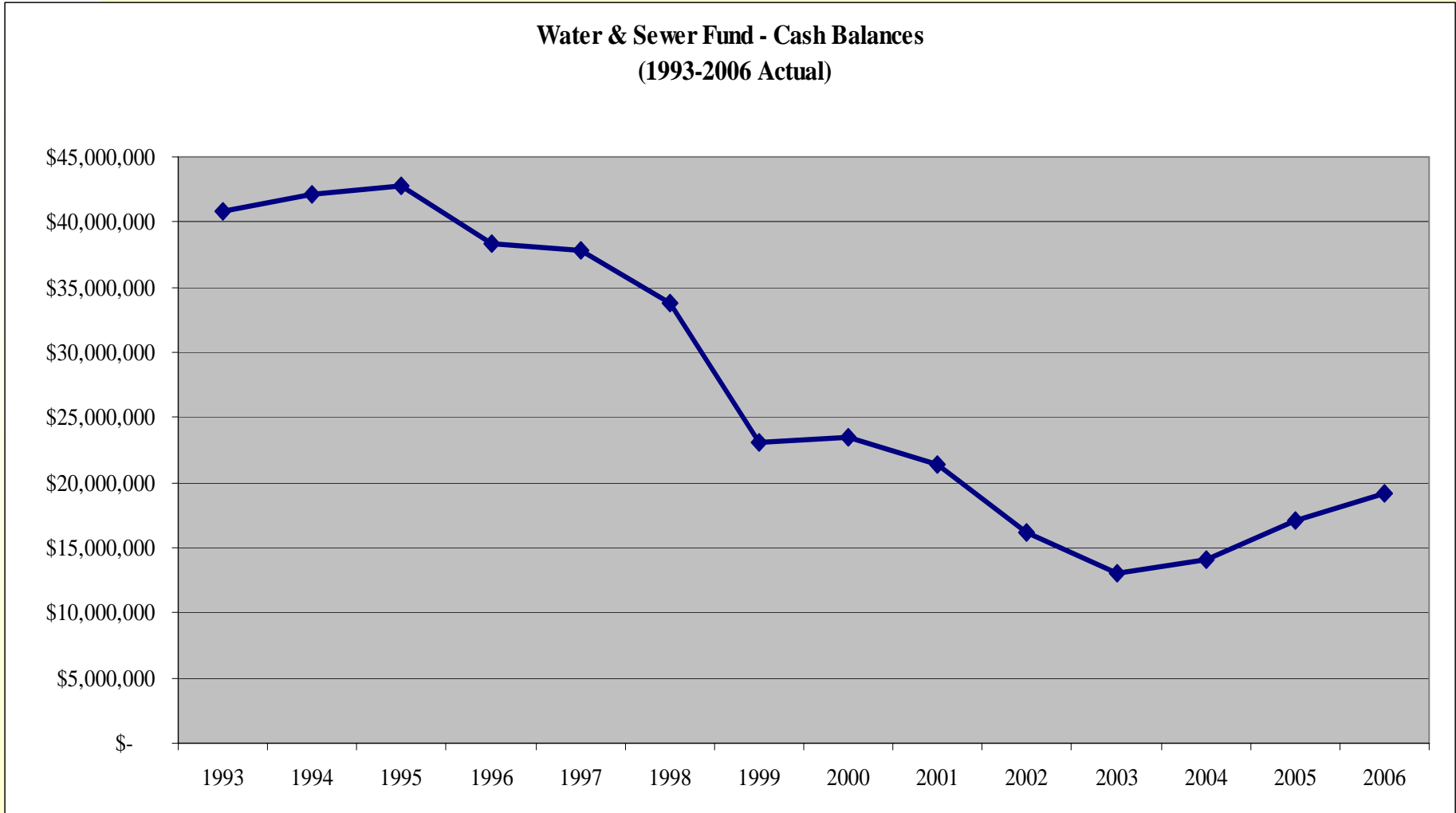
- cash balances

1993 = \$44 million

2006 = \$19 million

see graph on next slide

Water & Sewer Fund – Cash balances



W&S system – significant financial trends *continued*

Pendulum Swing

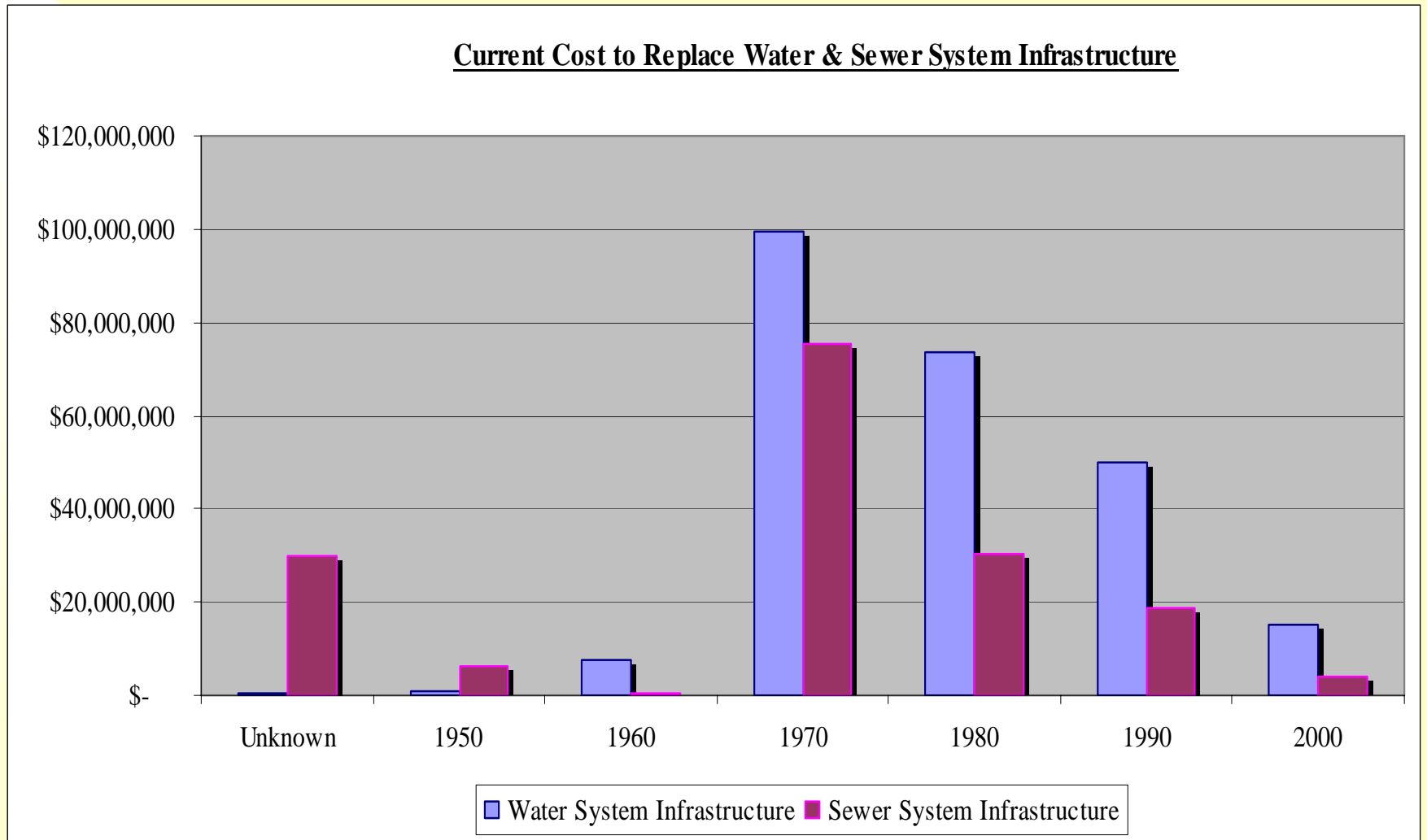
- Infrastructure replacement costs (today)

watermain = \$247 million

sewer = \$165 million**

**lining of sewer is occurring as opposed to complete replacement

Water & Sewer Fund – Capital Replacement Costs



W&S system – significant financial trends *continued*

Pendulum Swing

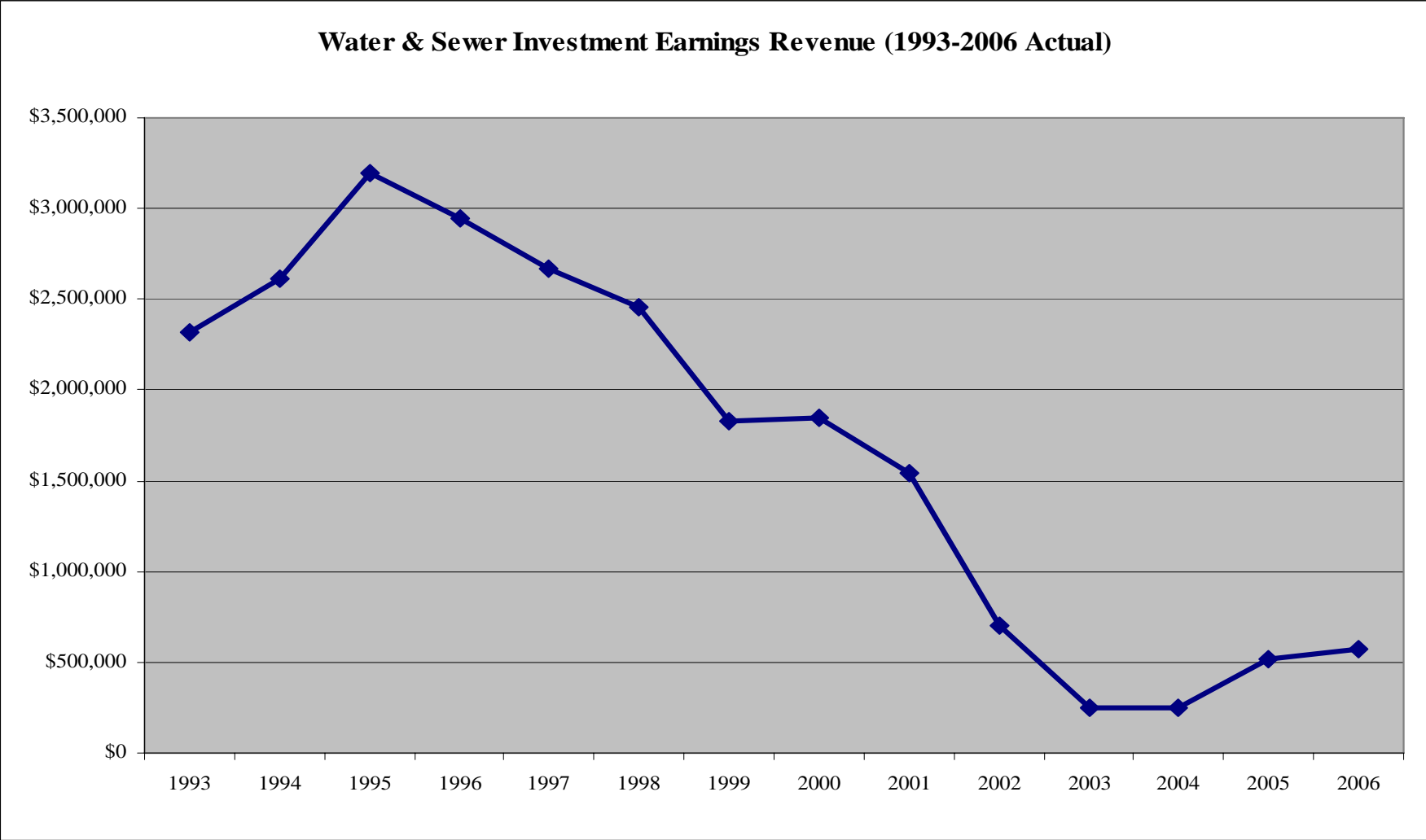
- annual interest income *historically used to offset expenditures*

1995 = \$3.2 million 2006 = \$575,000*

* *Operating Fund only*

see graph on next slide

Water & Sewer Fund – Investment Earnings Revenue



W&S system – significant financial trends *continued*

Pendulum Swing

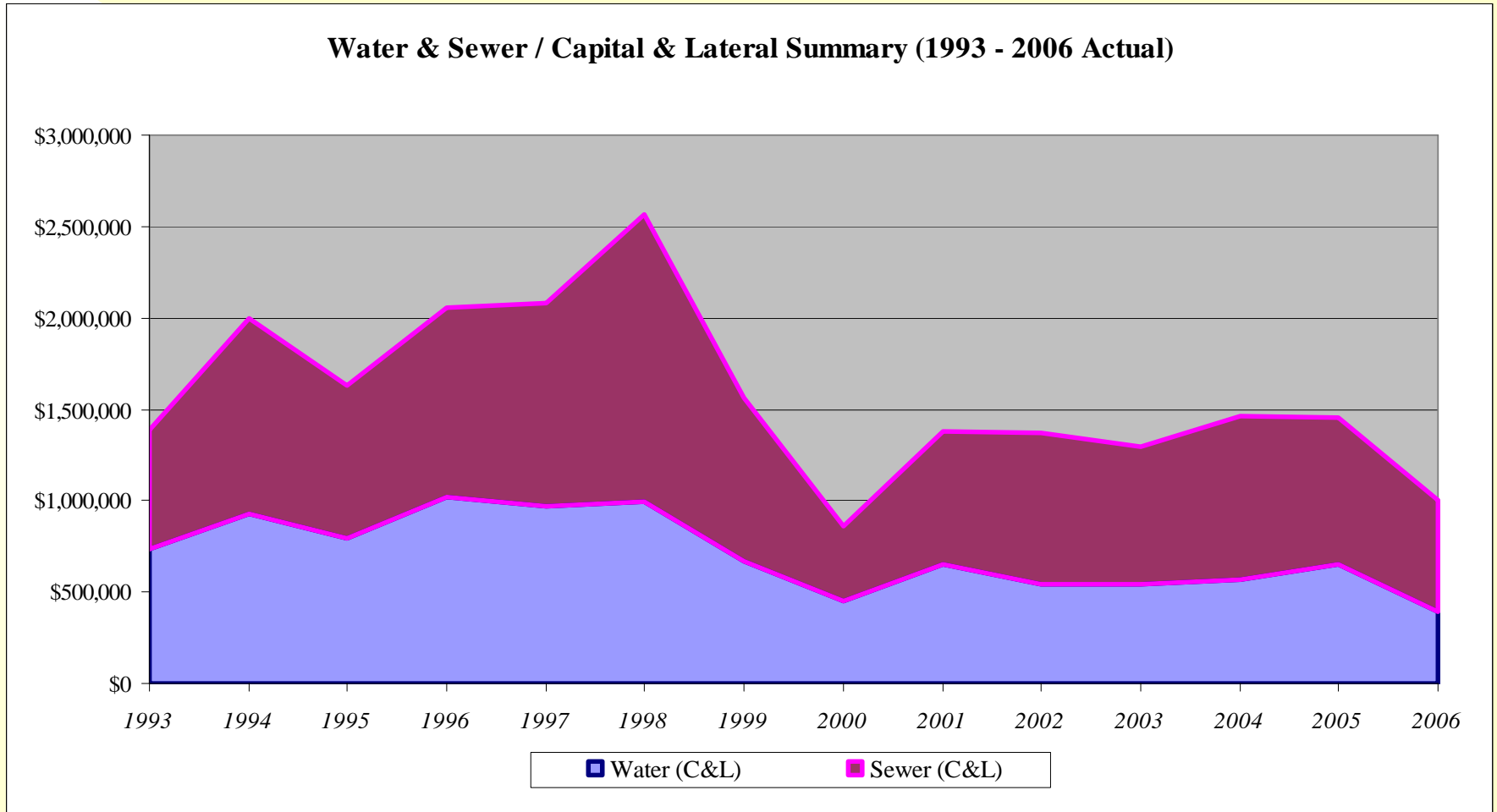
- Capital & Lateral (non-operating) revenue *historically used to offset rates*

1998 = \$2.5 million

2006 = \$1 million

see graph on next slide

Water & Sewer Fund – Capital & Lateral Revenue



W&S system – significant financial trends *continued*

Pendulum Swing

In summary

- The City is nearly developed - receiving declining capital and lateral revenue, which was once subsidizing operations. Now C&L revenue is funding a portion of the capital costs. This revenue source will dry-up once City is built out.
- The City's infrastructure is aging but cash balances are now much lower than in prior years (less cash for future replacement of capital)
- Some of the infrastructure was donated by developers, but it's the City's responsibility/cost to replace
- Historically the City used a significant amount of interest income to help offset operating expenses rather than through rates

Water & Sewage Commodity

- DWSD (RH is a first tier customer) provides the city's water
- DWSD and OCDC (RH is a second tier customer) provide the city's sewage disposal

DWSD's Water Rates

- Use the “Base-Extra Capacity” rate methodology - currently
- This method recognizes that not only base service is provided, but extra capacity is provided to meet peak demands

DWSD's Water Rates continued

- DWSD estimates annual system costs, calculates Units of Service for each customer, then identifies the costs for the Units of Service
- 11 cost functions make up the rate
Base, Maximum Day Increment, Peak Hour Increment, Base Distance, Maximum Day Distance, Peak Hour Distance, Base Distance Elevation, Max Distance – Elevation, Peak Hour Distance Elevation, Customer A and Customer B
- A community's Distance, Elevation and Peak demand currently set its rate apart from other DWDS customer rates

DWSD's Water Rates

continued

In general terms

- *Distance* - the miles from the customers connection(s) to the DWSD system
- *Elevation* - the measured elevation difference between the customer connection(s) and the average elevation of each of the five water treatment plants
- *Peak* - the factor assigned by measuring the customers demand when DWSD is at its highest supply (coincidental)

***definitions under current rate methodology**

DWSD's Water Rates continued 2007/2008

- System-wide increase is approx. 6%
- Rochester Hills increase is approx. 17%
 - ◆ From \$17.18 per MCF to \$20.14
 - ★ Treatment = \$5.42
 - ★ Pipes & meters = \$2.60
 - ★ Storage & pumping = \$12.12
 - ◆ RH increase over the system increase is mostly due to the peak factor

Note: MCF = 1000 cubic feet

DWSD's Water Rate

continued

- This years (2006/2007) peak factor calculation

1980s=3.4

2003 = 3.0

2004 = 3.0

2005 = 2.9

Avg. 3.0

- Next years (2007/2008) peak factor calculation

2003 = 3.0

2004 = 3.0

2005 = 2.9

2006 = 4.3 Coincidental peak hour occurred on June 17, 2006

Avg. 3.3 between 7 am – 8 am

DWSD's Water Rates

continued

- In 2003, a Technical Advisory Committee (TAC) was established to improve collaboration between the DWSD and its customers
 - ◆ A 'model contract group' was created to work on a new model contract/ agreement between DWSD and its customers
 - ◆ A 'water rates group' was established by the TAC to explore the current rate methodology (peak, distance and elevation factors). One main objective was to reduce rate volatility.

DWSD's Water Rates

continued

- A new water model contract roll-out in 2007 to all customers
- DWDS hopes to have communities signed for the 2008/2009 rate season.
- Preliminary new(2008/2009) rate impact roll-out this year (**possible** changes may be: City negotiates its volume and pressure, reallocation of costs). Rate methodology is unknown at this time.

OCDC Sewage Disposal Rates

2007/2008 OCDC Rate

■ DWSD	Rate Charge	\$10.79
	Fixed Monthly	\$.76
OCDC	O&M Charge	<u>\$ 1.82</u>
		\$13.37 MCF
		up 3%

(current rate \$12.98)

Note: MCF = 1000 cubic feet

OCDC Sewage Disposal Rates

continued

- Currently the sewage disposal is billed by OCDC based on an assumed consumption amount (3200 mcf per quarter), meaning actual sewage is not metered for billing purposes, as water is metered
- Starting July 2007, the City flow will be measured by OCDC and the City will be billed accordingly

Sewage Disposal continued

Does the change in billing have any effects?

- Yes – OCDC estimates that the City's billed consumption by OCDC will increase based on the new billing method yet consumption billed by RH to its customers will remain relatively constant.
(OCDC is projecting a 20% increase in billable consumption mostly due to Inflow & Infiltration)

Sewage Disposal continued

- The sewage consumption the City bills to its customers will need to cover the sewage consumption the OCDC bills the City. This will cause the City sewage rate to increase substantially, to cover the cost to treat the Inflow & Infiltration.

Committee Recommendation

Water & Sewage Customer Charge – no change

Water Commodity Charge – 17% increase

Sewage Commodity Charge – 13% increase

Capacity Charge – 3% increase

Flat Rate Sewage Charge – 13% increase