



POINT ROBERTS WATER DISTRICT NO. 4 2011 WATER RATE UPDATE

Presented By:
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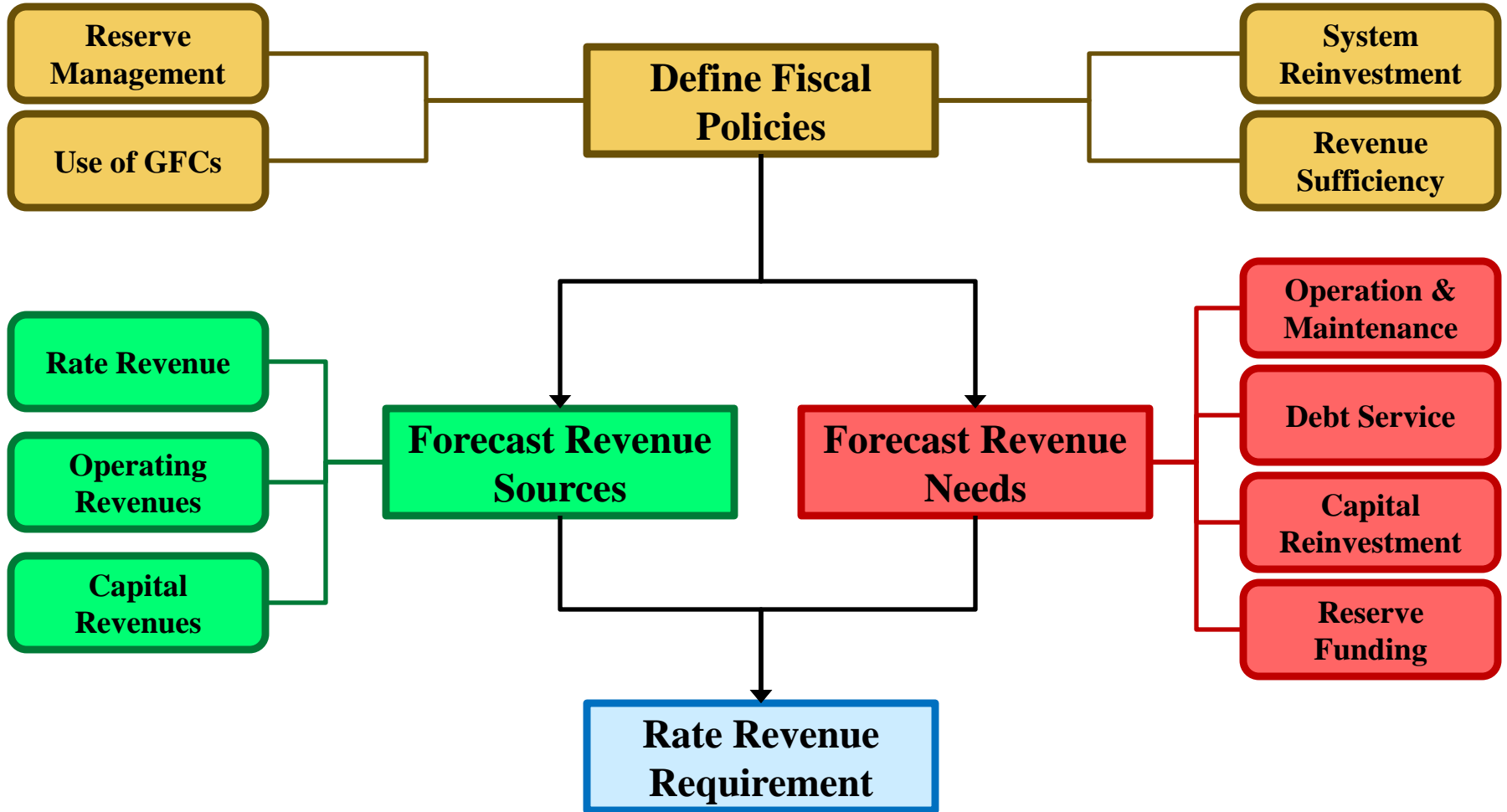
Revenue Requirement Analysis

- Purpose: Evaluate the amount of revenue needed to cover the utility's costs
 - Operation and maintenance
 - Capital investment
 - Compliance with financial policies

- General Process:
 - Estimate costs and revenues
 - Determine rate revenue adjustment needed to cover costs

- Key Output: Near-Term (2012) Rate Revenue Strategy
 - Capital program under development; District is considering supply alternatives
 - Current effort focuses on 2012 rates; future-year impacts are considered
 - Rates and general facilities charges (GFCs) can be updated when CIP is complete

Elements of Revenue Requirement Analysis



Defining Fiscal Policies



Fiscal policies:

- Guide the District's financial management through a set of rules/guidelines
- Intend to facilitate stable and affordable water and sewer rates long-term
- May need to either be phased in or relaxed in certain circumstances (e.g. periods of major capital investment)

Defining Fiscal Policies: Reserve Management



Reserve policies address reserve structure, balance targets, and management.

Reserve	Operating Reserve	Construction Reserve	Bond Reserve
Purpose	Accommodate differing revenue / expense cycles; manage rate levels	Maintain segregation of resources restricted for capital purposes	Comply with bond/loan agreement requirements
Target Balance	75 days (\approx 21%) of operating expenses	None (assuming costs & funding can be managed)	Defined by bond/loan agreements
2011 Benchmark	\$212,466	(N/A)	\$0 (No revenue bonds outstanding)
2011 Beginning Balance	\$870,595	\$26,023	\$23,589

Defining Fiscal Policies: Use of GFCs



- Revenue from general facilities charges (GFCs) can be used to pay for capital projects or debt service.
 - Debt service on facilities that serve growth
 - Offsets direct rate impacts of debt service
 - Increases sensitivity of rate forecast to fluctuations in growth
 - Direct investment in capital projects (*assumed in this analysis*)
 - May reduce future debt issuance
 - Increases flexibility of District response to shortfalls in GFC revenue

Defining Fiscal Policies: Revenue Sufficiency



- Revenue sufficiency policy defines how much revenue is needed.
- Sufficiency tests for evaluating revenue sufficiency:
 - Cash Flow Test
 - Revenues \geq cash flow needs (operating expenses, debt service, reserve funding, system reinvestment, etc.)
 - Coverage Test
 - Eligible revenues \geq operating expenses and a multiple of debt service
 - Specific requirements defined in revenue bond covenants
- The District does not have any outstanding revenue bonds (it has a loan); cash flow needs define the near-term revenue requirement.

Defining Fiscal Policies: System Reinvestment



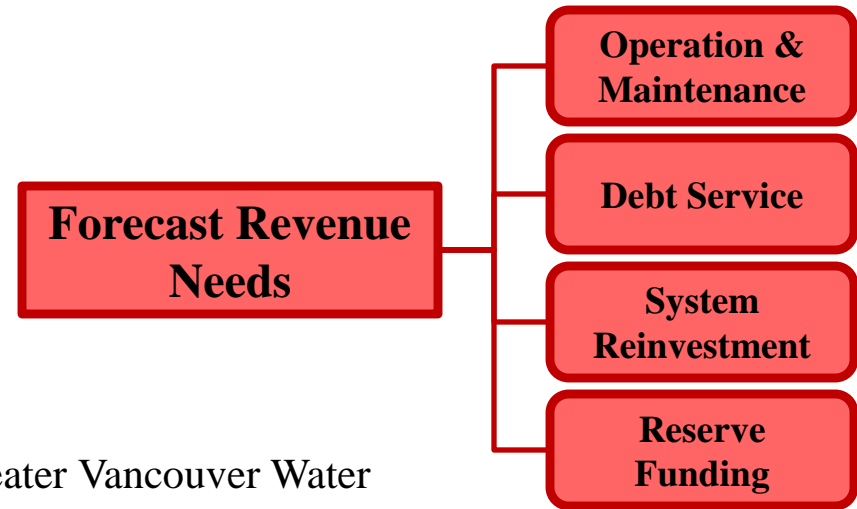
- Prior rate reviews have assumed that the District funds system reinvestment through rates to provide a source of cash funding for capital improvements.
- Elements of this policy include:
 1. Annual funding initially based on depreciation as a measure of annual decline in asset value
 - The District's 2010 depreciation expense was \$215,295
 2. Annual funding provision nets debt principal payments against depreciation
 - Intends to avoid double charging customers for assets and their replacement
 - 2010 principal payment of \$5,455 on District's PWTF loan

Forecasting Revenue Needs

- The revenue requirement analysis considers revenue needs over a multi-year period.

- The forecast considers data from a variety of sources, including:

1. 2011 Budget
2. Debt repayment schedules
3. Forecast of wholesale water rates from Greater Vancouver Water District (GVWD):

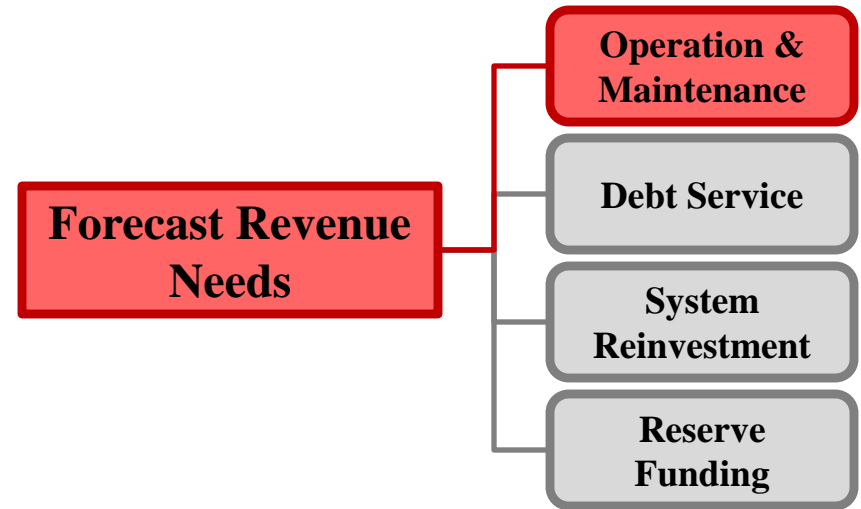


	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Projected Wholesale Rate Increases	5.9%	10.7%	6.5%	6.0%	5.5%

4. Assumed inflation rates
 - General cost inflation: 2.7% – 3.0% per year
 - Capital cost inflation: 3.3% per year
5. Assumed customer growth rates for variable operating costs (e.g. power, chemicals, postage)

Forecasting Revenue Needs: O&M

- The forecast of operation and maintenance (O&M) costs incorporates:
 1. 2011 Budget (Initial Basis)
 2. Planned increases in the cost of purchasing water from GVWD
 - Incorporates GVWD rate increases
 - Assumes an exchange rate of \$1.04 USD per \$1.00 CAD for 2012; assumes par in subsequent years

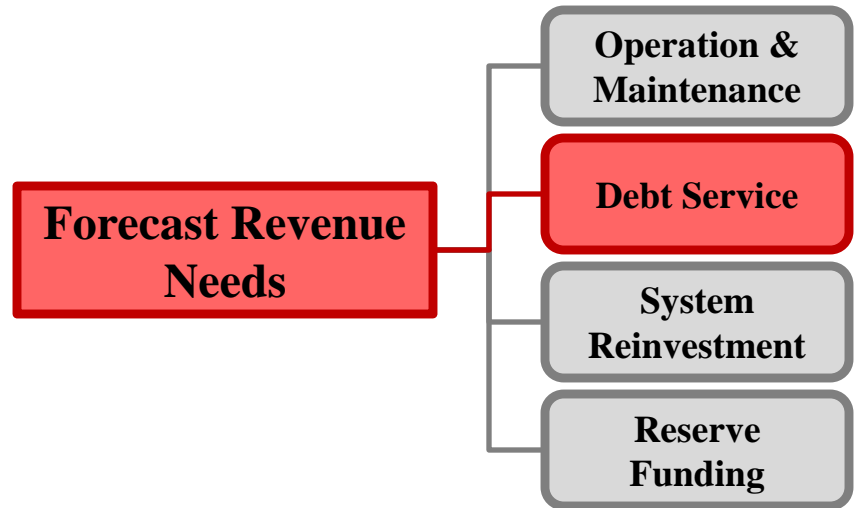


Projected Operating Expenses	2011 Budget	2012 Projected
GVWD Water Purchases	\$ 647,920	\$ 713,450
Other Operation & Maintenance Costs	162,388	166,822
General & Administrative Costs	155,692	159,920
State Excise Taxes	52,000	53,624
Non-CIP Capital Costs	16,000	16,198
Total	\$1,034,000	\$1,110,014

Forecasting Revenue Needs: Debt Service

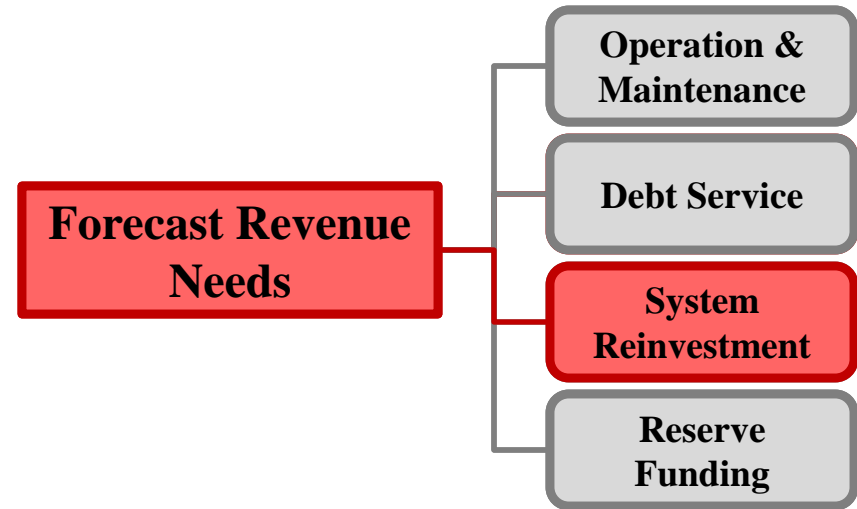
■ The forecast of debt service incorporates:

1. Existing debt repayment schedules
 - Includes existing Public Works Trust Fund (PWTF) loan
2. Projected 2012 PWTF loan
 - Loan of up to \$567,000 approved by Public Works Board for “2010 Water Main Replacement” project
 - Main replacement construction bid: \$429,093
 - 10% local match → ≈ \$386,000 of loan proceeds used
 - 1.0% interest rate → ≈ \$24,000 in additional annual debt service
3. Projected future debt issuance
 - Needed when capital costs exceed available cash resources
 - Assumed to be 20-year revenue bonds
 - *Capital funding strategy to be revisited when CIP update is complete*



Forecasting Revenue Needs: System Reinvestment

- The forecast of system reinvestment transfers incorporates:
 1. Depreciation on existing assets (per District asset schedule)
 2. Projected depreciation on asset additions from future capital projects
 - Projected (inflated) future costs
 - Useful life based on type of asset
 3. Phased implementation strategy:



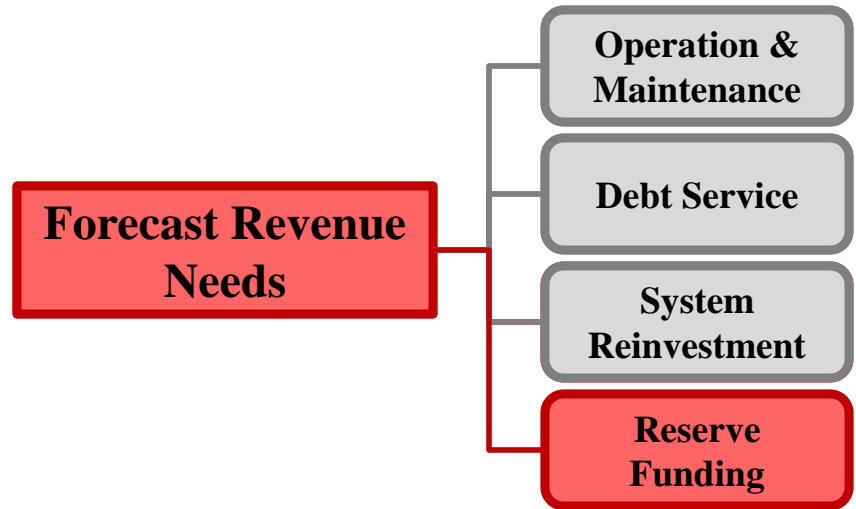
	2012	2013	2014	2015	2016
Projected Depreciation Expense	\$233,630	\$232,979	\$208,282	\$202,580	\$201,382
Less: Projected Debt Principal Payments	(5,455)	(25,781)	(25,781)	(25,781)	(25,781)
Net Depreciation Expense	\$228,175	\$207,198	\$182,502	\$176,800	\$175,602
Percent Funded Through Rates	40%	50%	60%	70%	80%
Annual System Reinvestment Transfers	\$91,270	\$103,599	\$109,501	\$123,760	\$140,481

Near-term reduction in funding recognizes that the District is funding a main replacement project in CIP

Forecasting Revenue Needs: Reserve Funding

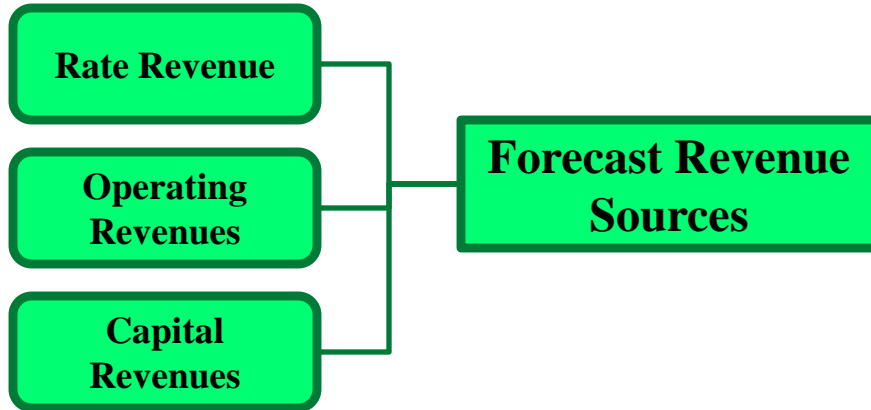
■ Forecast of reserve funding requirements:

1. Based on projected fund balances and minimum balance requirements
 - Operating Funds: 75 days of operating expenses
 - Bond Reserve: One year's debt service (for new revenue bond issues, assumed to be funded through bond proceeds)



2. Policy goal is to comply with minimum targets on an annual basis
 - Revenue levels are set to generate additional funding as needed to meet requirements
 - Policy may be relaxed temporarily if it would adversely impact revenue needs

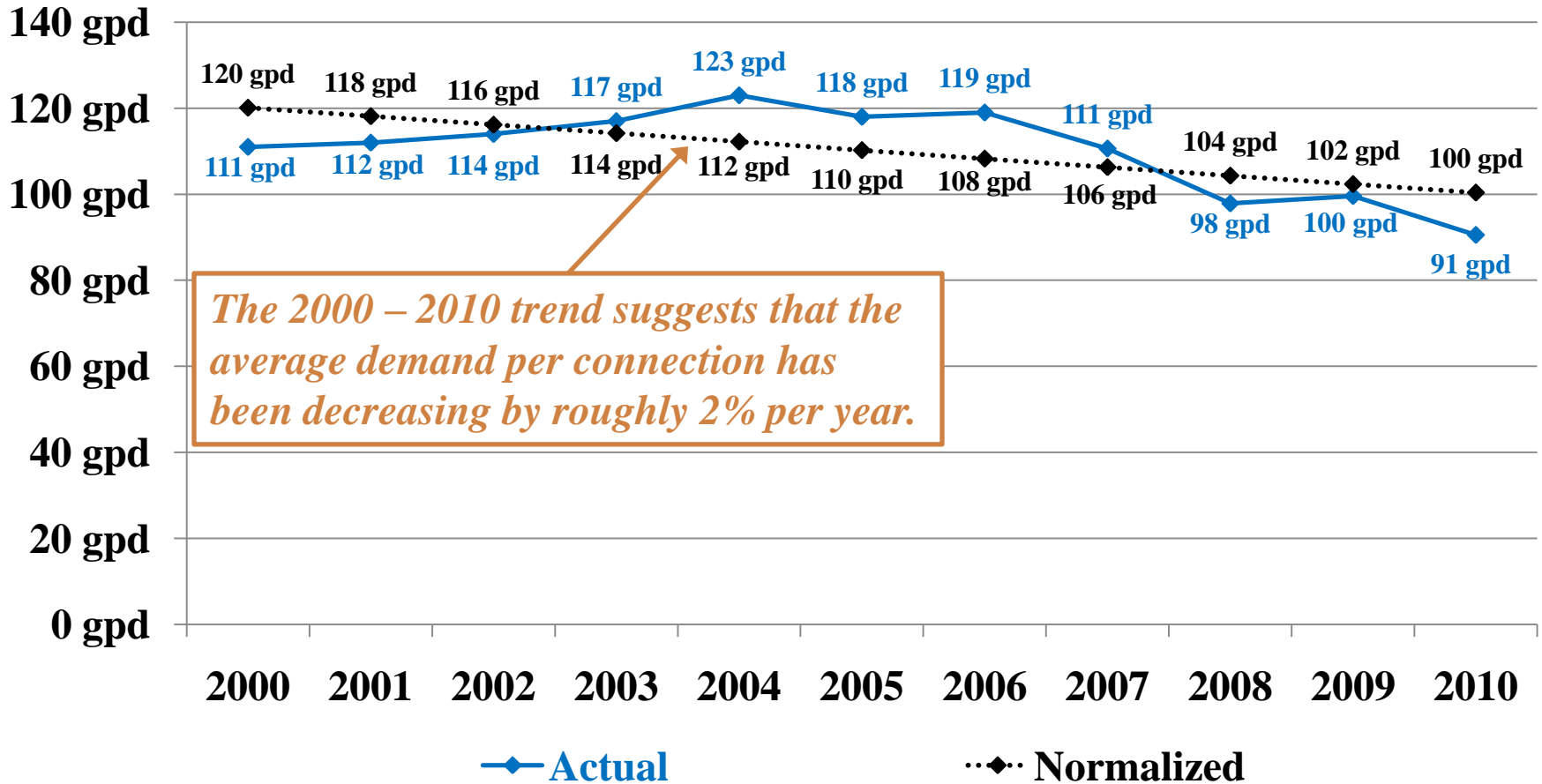
Forecasting Revenue Sources



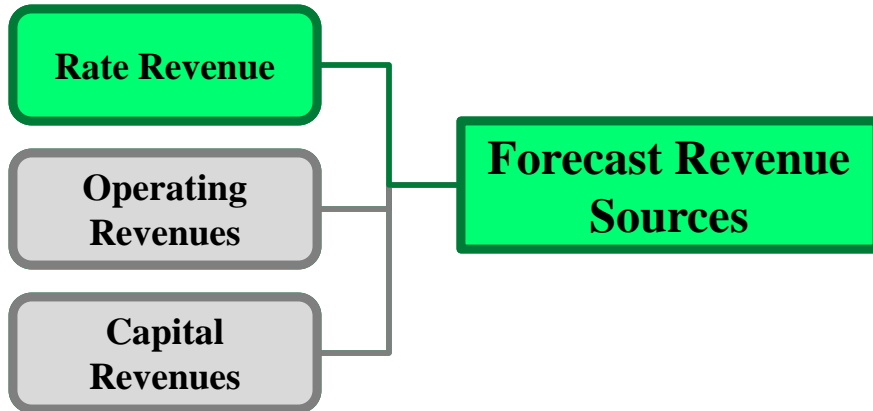
- To determine rate revenue adjustments, the revenue requirement analysis considers revenues over a multi-year period.
- The forecast considers data from a variety of sources, including:
 1. 2011 Budget
 2. 2010 actual revenues and customer billing records
 3. Analysis of recent demand trends
 4. Assumed ERU growth rates
 5. Calculated GFCs per equivalent residential unit (ERU):
 - Current Charge: \$5,500 per ERU

Demand Trend Analysis

Average Daily Demand per Connection – All Customers



Forecasting Revenue Sources: Rate Revenue



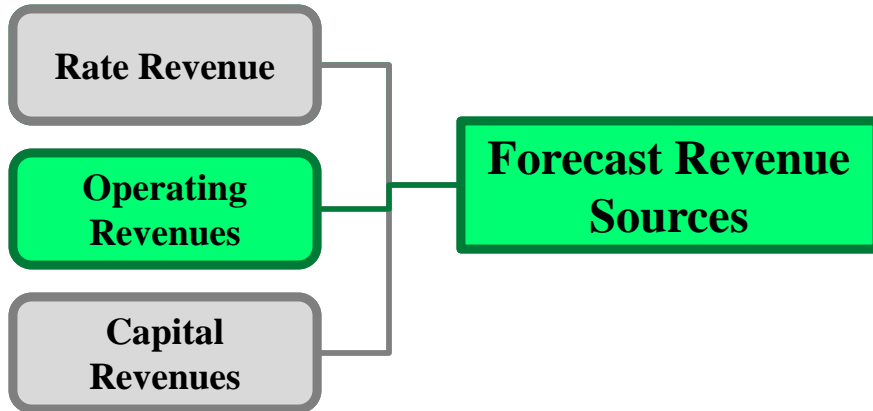
Rate Revenue @ Existing Rates	2011 Est.
2010 Actual	\$1,037,330
2011 Estimated	\$1,098,384
2012 Projected	\$1,100,556

Reflects rate increase effective January 1, 2011

■ The forecast of rate revenue incorporates:

1. 2010 Statistics by Customer Class
 - Customer counts
 - Water demand
 - 2011 rate structure
2. Projected growth in connections:
 - Single-family: 15 – 25 (0.7% – 1.1%) per year, based on recent experience
 - Other customers: no growth
3. Projected growth in water demand:
 - Single-family: \approx -1.0% per year, based on demand trend/growth in connections
 - Other customers: \approx -2.0% per year, based on demand trend

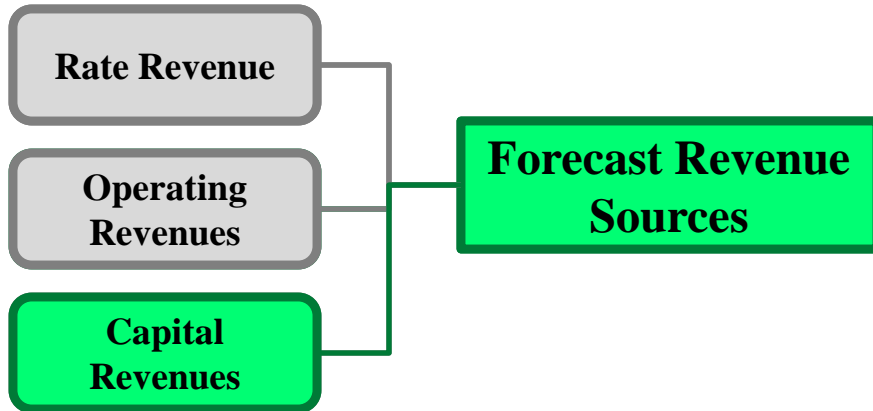
Forecasting Revenue Sources: Other Operating Revenue



- The forecast of other operating revenue incorporates:

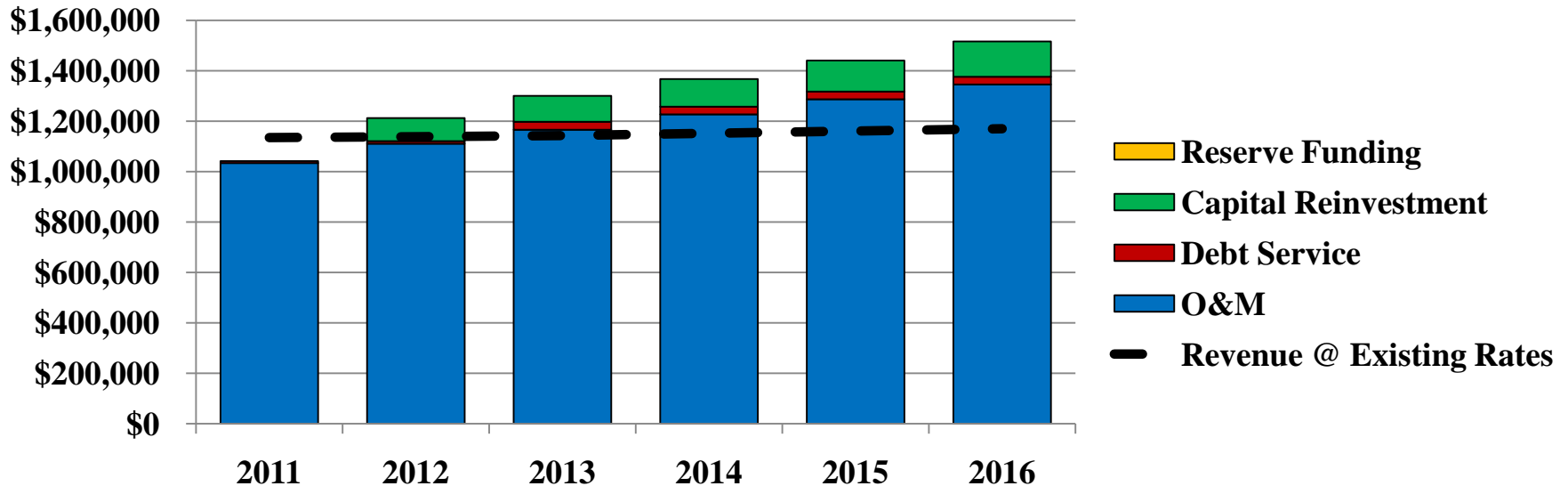
1. 2010 Actual Revenues
 - \approx \$32,000 in operating revenues
 - Late fees
 - Unmetered sewer revenue
 - Miscellaneous revenues
2. Projected growth for customer-related revenues (e.g. late fees)
3. Calculated interest earnings on projected fund balances

Forecasting Revenue Sources: Capital Revenues



- The forecast of capital revenue incorporates:
 1. GFC revenue projections
 - Current GFC: \$5,500 per ERU
 - Growth: 15 – 25 ERUs per year
 2. Loan proceeds for 90% of the cost of the “2010 Water Main Replacement” project (10% local match)
 3. Bond proceeds based on projected debt issuance for future CIP projects

Revenue Requirement Analysis: Summary of Key Findings

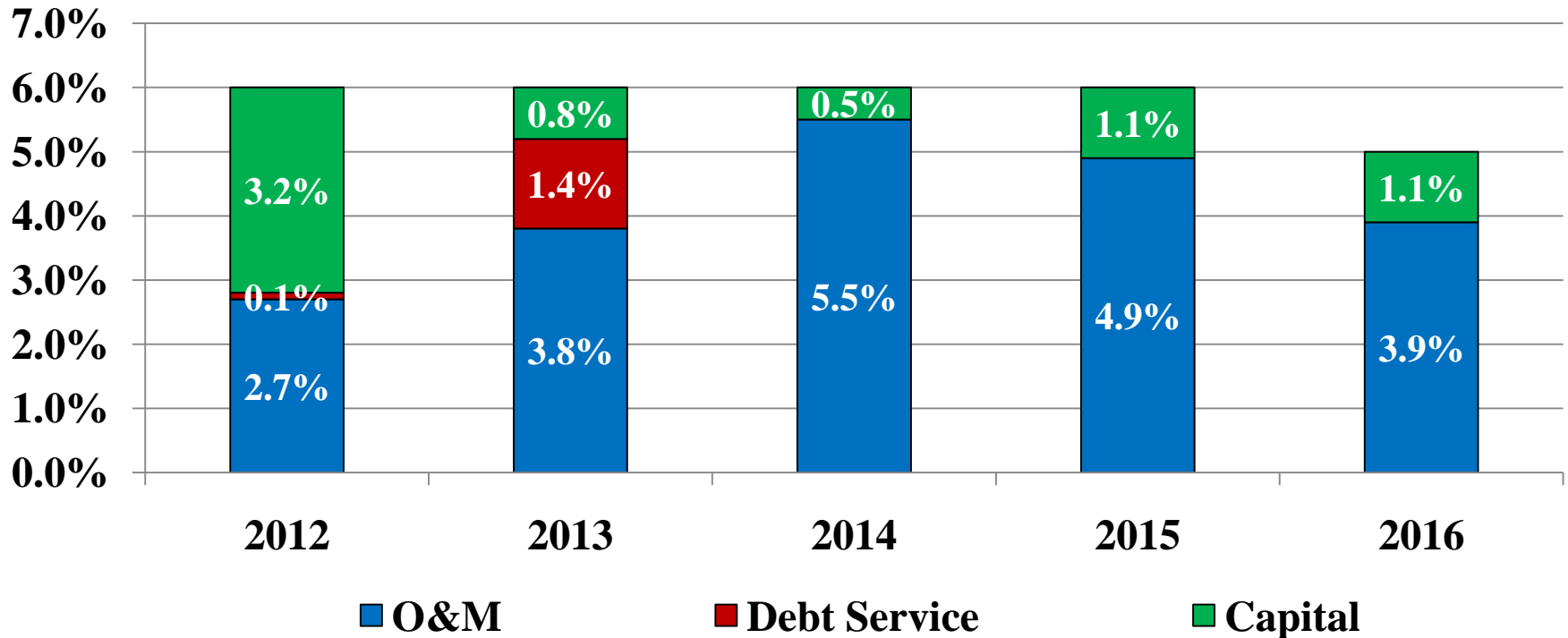


- The most significant cost increases are for GVWD water purchases; however other costs are increasing as well.
- Given declining demand growth and relatively low near-term growth in connections, revenues are expected to remain relatively flat.
 - Revenue growth is not expected to keep up with inflation

Water Revenue Requirement Analysis: Summary of Key Findings

Near-Term Water Rate Revenue Strategy	2012	2013	2014	2015	2016
Annual Water Rate Revenue Adjustment	6.0%	6.0%	6.0%	6.0%	5.0%

Planned Water Rate Revenue Adjustments



Water Rate Structure Summary

Bimonthly Fixed Charge

3/4" Meter

1" Meter

1-1/2" Meter

2" Meter

3" Meter

4" Meter

Volume Charge per ccf

Block One

Block Two

Block Three

Block Four

Single-Family & Multi-Family 2-4 Units	
Existing	Proposed
\$65.90	\$69.85
\$88.63	\$93.95
\$111.36	\$118.04
\$124.43	\$131.90
\$230.71	\$244.55
\$634.21	\$672.26
\$ -	\$ -
\$1.86	\$1.97
\$2.50	\$2.65
\$4.45	\$4.72

Commercial & Multi-Family 5+ Units	
Existing	Proposed
\$75.89	\$80.44
\$102.70	\$108.86
\$129.51	\$137.28
\$144.92	\$153.62
\$270.26	\$286.48
\$746.14	\$790.91
\$3.61	\$3.83
\$7.37	\$7.81

Industrial (Golf Course)	
Existing	Proposed
\$1,233.05	\$1,307.03
\$4.64	\$4.92

The proposed rates reflect a 6% increase to all existing rates.

Sample Bill Impacts

Single-Family Residence – 3/4” Meter

Low Use (3 ccf Bimonthly)
 Average Use (6 ccf Bimonthly)
 High Use (12 ccf Bimonthly)

Commercial – 3/4” Meter

Low Use (4 ccf Bimonthly)
 Average Use (14 ccf Bimonthly)
 High Use (24 ccf Bimonthly)

Golf Course

Low Use (0 ccf Bimonthly)
 Average Use (3,000 ccf Bimonthly)
 High Use (14,000 ccf Bimonthly)

Existing Rates	
Bimonthly Bill	
	\$65.90
	\$67.76
	\$78.92
	\$90.33
	\$156.51
	\$230.21
	\$1,233.05
	\$15,153.05
	\$66,193.05

Proposed Rates	
Bimonthly Bill	% Change From Existing
\$69.85	+6.0%
\$71.83	+6.0%
\$83.66	+6.0%
\$95.75	+6.0%
\$165.90	+6.0%
\$244.02	+6.0%
\$1,307.03	+6.0%
\$16,062.23	+6.0%
\$70,164.63	+6.0%

Next Steps

- **Adopt 2012 Water Rates – Across-The-Board Increase**
 - Reflects 6% increase to existing rate structure
 - Increasing costs
 - Slowed revenue growth (delayed development, decreasing demands)

- **Update Analysis When Updated CIP Becomes Available**
 - Update General Facilities Charge (GFC)
 - Update Capital Funding Strategy
 - Update Rate Forecast
 - Revisit allocation of costs between customer classes