Performance Audit: Department of Watershed Management Strategic Financial Planning Model

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Audit Objectives and Scope

- Are the data and formulas used in the model accurate?
- Are the assumptions in the model reasonable?

- We used a version of the model developed in FY2011, the most recent version provided to us.

Reasons for the audit

- Atlanta had the highest water-sewer rates in the country for a major metropolitan area as of FY 2011.
- Rate stability is a priority for the Mayor and City Council, as shown by adoption of current rates through 2016.
- Voters can extend the MOST, which is about one-fifth of the department's revenue, one more time in 2016.
- 2009 performance review of watershed management questioned some of the assumptions in the model and suggested additional review of the model by stakeholders outside of the department.

Components of the model

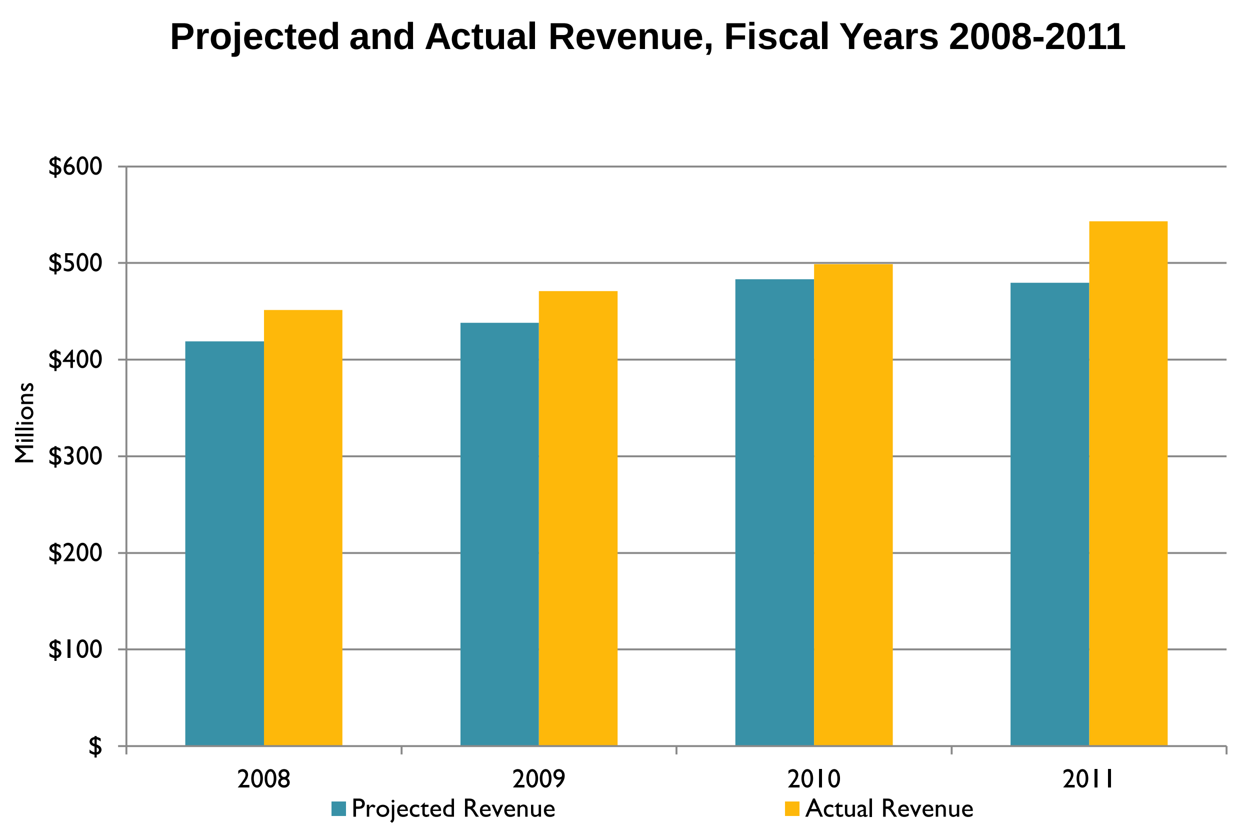
Spreadsheet Name	Description
Assumptions	Major system financing assumptions
5051 – Op	DWM Operating Budget and multi-year forecast
5052 – R&E	DWM Renewal & Extension Budget and multi-year forecast
Revenues	Input of base service revenues (without rate increases) and projections of other operating and non-operating revenues
Rate Increase	Projections of revenues resulting from rate increases (net of price elasticity adjustments)
Existing Debt	Schedules of existing debt service requirements for revenue bonds and GEFA loan payments
New Debt	Projections of debt service requirements on new senior lien or subordinate debt issues
System Fund	Projected sources and uses of funds, on a cash basis, for the integrated DWM system (including Operating, R&E Funds, and intergovernmental fund transfers)
Financial Plan	Capital financing plan and required rate increase determination based on key financial performance metrics – including calculations of debt service coverage ratios and minimum fund balance targets

Source: 2010 Consent Decree Extension Request

Data Inputs and Formulas Are Accurate

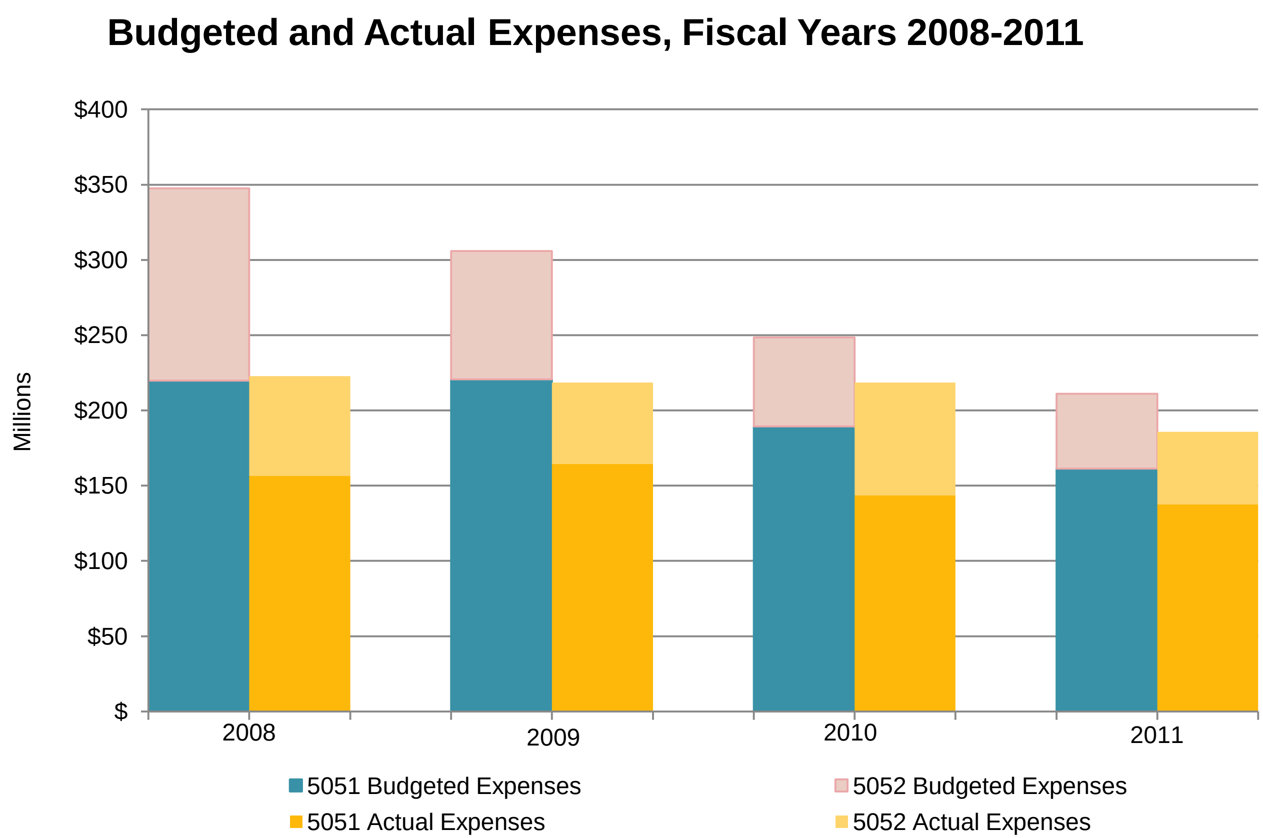
- Revenue, operating expenses, and debt service requirements are consistent with available financial data.
- Formulas used in the model calculate accurately what they are intended to measure.

Revenue Projections Are Lower than Actual



Source: Oracle financial data fiscal years 2008-2011

Expenses Lower than Budgeted in Each Year from 2008 through 2011



Source: Oracle financial data and budget tool data fiscal years 2008-2011

Several Assumptions Used in the Model Differ from Historical Experience

Assumption	Model Value	Alternative Value
Actual Expenditures : Budgeted Expenditures	95%	88% (highest actual, 2008-2011)
Bad Debt : Rate Revenue	1.5% (assumes 98.5% collection rate)	2.5% (97.5% actual collection rate, 2007-2011)
Elasticity of Demand (Impact of rate increases on collections)	-.15%	-.3% (based on review of studies by AWWA)
System-wide Growth	1%	2% (based on increase in water & sewer connections, 2007-2011)

Cumulative Effect of Changed Assumptions

	O&M = 95%	**O&M = 88%**
	Bad Debt = 1.5%	**Bad Debt = 2.5%**
	Elasticity = -0.15	**Elasticity = -0.3**
	System Growth = 1.0%	**System Growth = 1.5%**
Debt Service Coverage		
Minimum	1.307	1.385
Maximum	2.004	2.188
Average	1.589	1.705
Ending Cash Balance 2031	164,312,109	676,641,202
Minimum Ending Cash Balance	51,944,317	247,373,065
Minimum > 60 days O&M?	TRUE	TRUE

Uncertainties might affect long-term funding needs

- Bond refinancing would reduce the funds needed for debt service.
- Drought conditions or water conservation efforts that typically lower water use would reduce collections.
- If residents vote against reauthorizing the MOST in 2016, revenue would drop by more than $100 million per year.

Conclusions

- The department will likely generate sufficient revenue to maintain current water and sewer rates for the next four years as planned, and possibly longer.
- Changing certain assumptions for consistency with historical data results in higher than needed debt service coverage and a larger fund balance.
- While the current model projects annual rate increases of between 2% and 4% after 2016, smaller rate increases, or maintaining current rates longer, could be justified.