



**Water Rate Analysis and
Long-Term Financial Plan**

Council Presentation

May 2006

economists.com



Presentation Format



- ◆ Current Rates and Rate Comparison
- ◆ Historical and Forecast Volumes and Revenue Requirements
- ◆ Blue Ridge Project – Financial Assumptions
- ◆ Proposed Long Term Rate Plan
- ◆ Impact Fees as a Financing Alternative

Why are Water Rates Increasing?



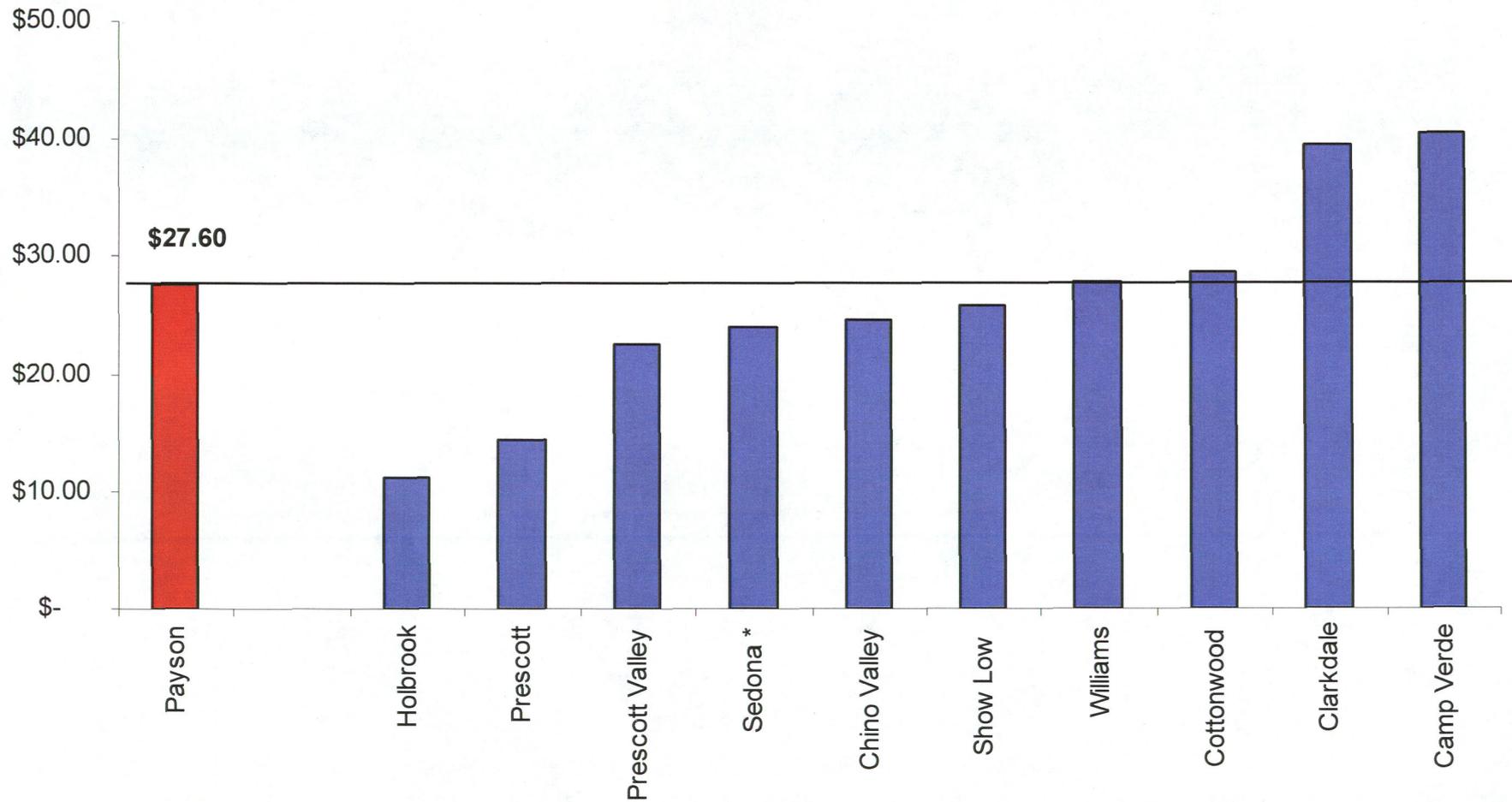
- ◆ Inflation
- ◆ General increases in the cost of doing business
- ◆ Need to rebuild/replace aging systems
- ◆ Environmental and other regulations
- ◆ Water supply constraints
- ◆ ARSENIC!



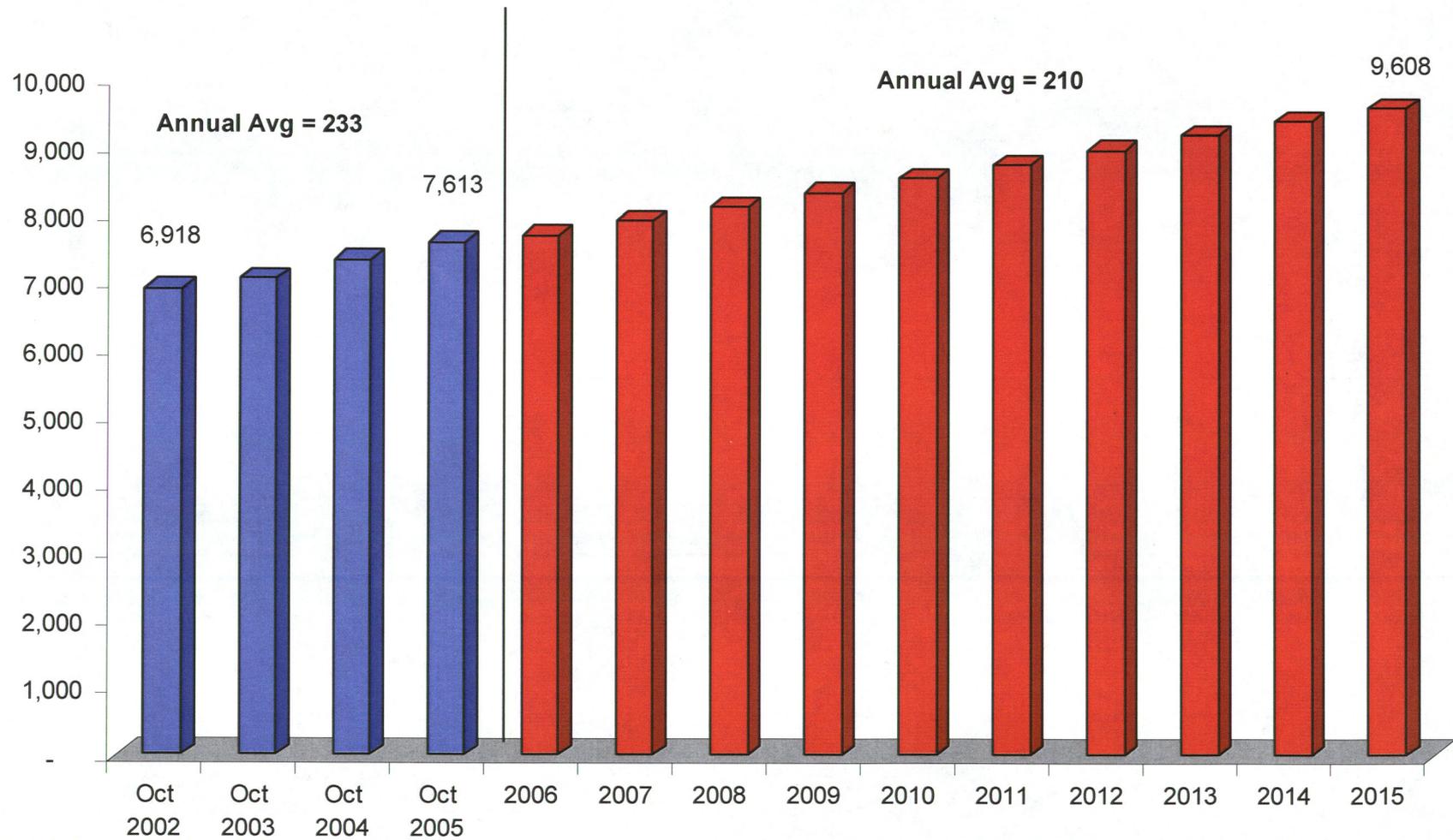
Monthly Cost of Water Service 5,000 Gallons



FY 2005 Residential Usage Per Account/Month = 4,910 Gal



Historical and Forecast Accounts



FY 2006 Revenues and Revenue Requirement



FY 2006 Fcst Revenues:

Rates	\$	3,277,695
Non-Rates		<u>243,140</u>
Total Revenues		3,520,835
Less Rev Rqmt		<u>4,211,532</u>
Net Revenues		(690,697)

Blue Ridge Project Capital and Operating Costs



Blue Ridge Costs

Water Main Construction	\$	17,211,037
WTP		6,253,750
Legal/Environmental/Plant Site		2,500,000

Total

25,964,787

Annual Operating Expenses

FY 2012

168,433

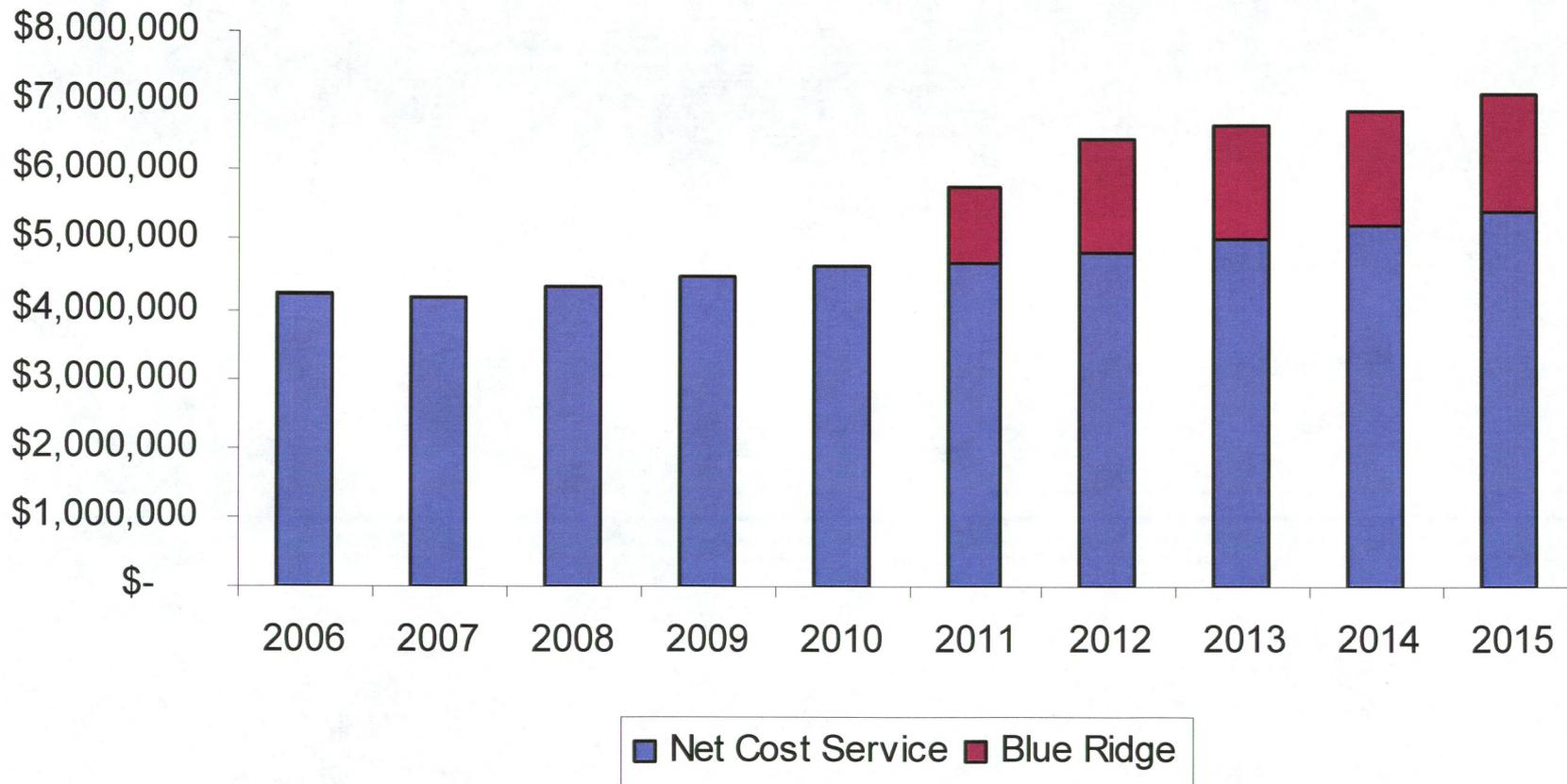
Blue Ridge Project Financing Assumptions



	Blue Ridge Total	Term (Years)	Interest Rate	Annual Prin & Int
Series 2010 Debt	\$ 16,000,000	30	5.5%	\$ 1,100,000
Series 2011 Debt	5,000,000	30	5.5%	350,000
Internal Funding*	<u>4,964,787</u>	na	na	<u>na</u>
Total	25,964,787			1,450,000

* Combination of impact fees, reserves, trust fund proceeds

Forecast Cost of Service 2006 -- 2015



Notes on Proposed Long-Term Rate Plan



- ◆ 2 primary reasons why rate adjustments are required:
 - ❖ 2006, 2007 – to eliminate water department operating deficit
 - ❖ 2008, 2009, 2010, 2011 – to fund operating cost increases and Blue Ridge project

- ◆ Rate plan is presented as a series of gradual annual adjustments in order to minimize impact on ratepayers

Proposed Long-Term Rate Plan



	Current	Effective Oct-06	Effective Oct-07	Effective Oct-08	Effective Oct-09	Effective Oct-10	Effective Oct-11
Minimum Charge	\$ 19.65	\$ 21.52	\$ 23.56	\$ 25.80	\$ 28.25	\$ 30.93	\$ 33.87
Volume Rate Per 1,000 Gal:							
2,001 -- 5,000	2.65	2.90	3.18	3.48	3.81	4.17	4.57
5,001 -- 10,000	3.50	3.83	4.20	4.60	5.03	5.51	6.03
10,001 -- 20,000	4.00	4.38	4.80	5.25	5.75	6.30	6.90
20,001 -- Above	5.00	5.48	6.00	6.56	7.19	7.87	8.62

Proposed Long-Term Rate Plan Monthly Charges at 5,000 Gallons



	Monthly Charges	Monthly Increase
Current	\$ 27.60	
Oct-06	30.22	2.62
Oct-07	33.09	2.87
Oct-08	36.24	3.14
Oct-09	39.68	3.44
Oct-10	43.45	3.77
Oct-11	47.58	4.13

Notes on Proposed Rate Plan



- ◆ Rate plan will require revision if any of the following events occur:
 - ❖ Significant changes in account and consumption growth (lower or higher than forecast)
 - ❖ Recession or unexpected economic event
 - ❖ Unexpected increases in Water Utility Budget
 - ❖ Cost increases in Blue Ridge project
 - ❖ Increase in water impact fee to offset cost of Blue Ridge

Impact Fees as a Financing Alternative



- ◆ Portion of Blue Ridge cost may be rolled into an Impact Fee
- ◆ Definition of an Impact Fee: “one time charge paid by new development to finance the construction of public facilities needed to serve it”
- ◆ Bottom line: the more Blue Ridge costs that can be recovered through an impact fee, the less that must be recovered through water rates!

Effect of Increase in Impact Fees on User Rates

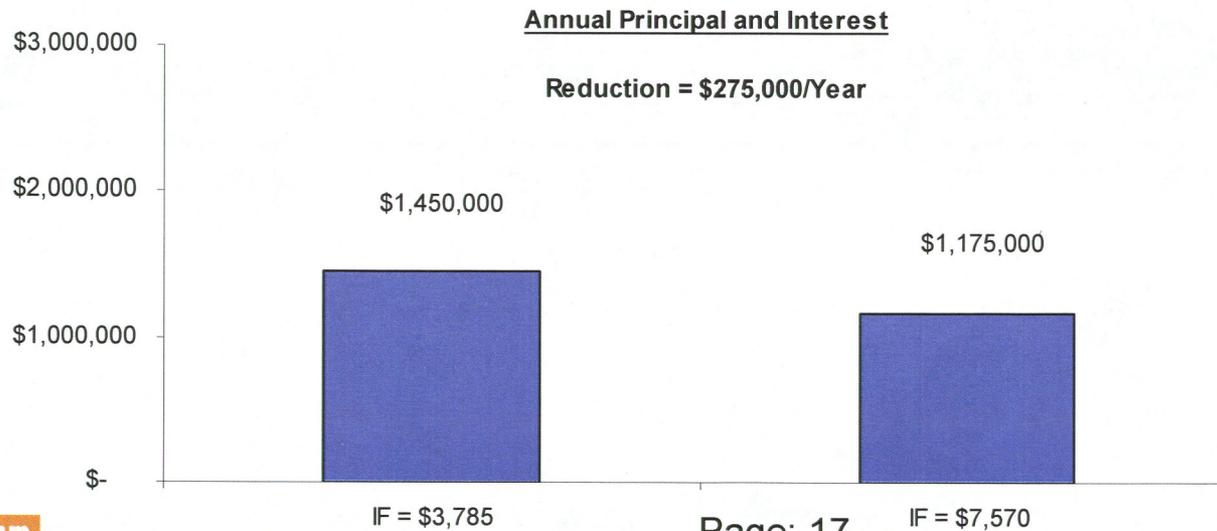
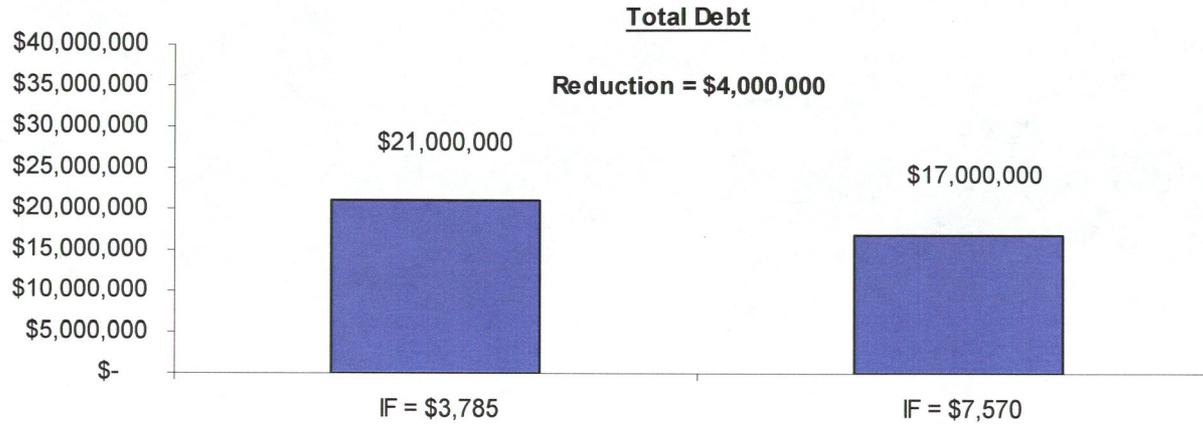


- ◆ Alternative scenario is presented which measures effect on monthly water rates and charges of doubling City's impact fee

- ◆ Two primary results of this scenario:
 - ❖ Town is able to lower amount it borrows to fund Blue Ridge by \$4.0 million

 - ❖ user rates must still be increased, but will eventually result in most monthly bills being 5-10% lower than proposed rate plan

Effect of Impact Fee Increase on Debt Requirements



Effect on Monthly Charges of Increase in Impact Fees – 5,000 Gallons



	IF =		Difference	
	\$3,785	\$7,570	Dollars	Dollars
Current	\$ 27.60	\$ 27.60	-	0.0%
Oct-06	30.22	30.22	-	0.0%
Oct-07	33.09	33.09	-	0.0%
Oct-08	36.24	35.74	(0.50)	-1.4%
Oct-09	39.68	38.60	(1.08)	-2.7%
Oct-10	43.45	41.69	(1.76)	-4.1%
Oct-11	47.58	45.02	(2.55)	-5.4%

Presentation Summary



- ◆ **Rate adjustments are required to eliminate operating fund deficit independent of Blue Ridge Project**
- ◆ Average water and wastewater utility across USA expected to increase rates 5.0% per year over the next decade
- ◆ Other utilities in Arizona have implemented significant rate increases to fund water acquisition and treatment costs
- ◆ Increase in impact fees will lessen the total rate increases
- ◆ Securing water resources will be essential to the survival of communities in Arizona and the USA in the 21st Century