

History of the Water Treatment Plant and Costs

September 3, 2008

Information Only

- The City has a responsibility to provide the citizens with accurate and factual information

Outline

- Part I Executive Summary
- Part II Overview
- Part III Enterprise Funds and Bonds
- Part IV Project Budgets versus Actual Expenditures
- Part V Summary

Part I – Executive Summary

- Public Processes Occurred (City Council actions and Public Meetings)
- Grants were examined
- Rates are comparable to surrounding communities
- Enterprise Funds are able to repay debt
- Expenditures are within budget
- Bond Financing Sound
- Technology decisions logical

Part II Overview

- Why?
- How and What?
- When?
- Where?

Water Treatment Plant. Why?

- Clean Water Act (Treatment of Groundwater for Arsenic)
- Use of Surface Water Rights
- Alternative Water Systems (Lower Cost water for "Purple Pipe", Construction, etc.)

Clean Water Act (Arsenic)

- Maximum Contaminant Level (MCL) of 10 parts per billion (ppb) for Arsenic instead of the old standard of 50 ppb
- Fernley groundwater contains more than 10 ppb
- Treatment required to continue serving customers
- Health and safety of customers #1 priority
- Failure to comply could result in civil and criminal penalties, for the City and individuals

Clean Water Act (Arsenic)

- UNFUNDED MANDATE
- EPA requires compliance but does not provide funding for compliance
- Applies to all water systems

Surface Water Rights

- Current service is 100% from groundwater rights
- Additional groundwater rights are not available
- Future treatment of surface water rights for potable and non-potable water is essential for the future growth of Fernley

Surface Water Rights

- The WTP is designed to initially treat groundwater
- Raw water delivery systems can be “tapped” to provide non-potable water to the “Purple Pipe” system and for lower cost landscape water, construction water, or other non-potable uses
- Foresight of these possibilities provides for future growth of our community

How and What?

- The WTP will use flocculation/sedimentation with microfiltration to remove the arsenic from the water
- Best alternative for both ground and surface water
- Water lines will be constructed to get raw water to the plant
- Water lines will be constructed to deliver treated water to customer

When?

- Per Bilateral Compliance Agreement with the Nevada Department of Environmental Protection
July 23, 2009
- City delayed compliance as long as possible to investigate and implement the proper technology
- Long series of milestones to get to this point

Major Milestones 2003

- Green Sand Filtration Pilot Plant (similar to Fallon)
- NV Board for Financing Water Projects Presentation (\$19M on Priority List)
- 3-year extension of compliance date from 2006 to 2009

Major Milestones 2004

- City Council Water Workshop
- Continued Pilot Plant Operations
- Need for Water Master Plan Update identified
- Kurt Kramer, Public Works Director, retires
- Lowell Patton begins as Public Works Director
12/1/2004

Major Milestones 2005

- City Council Water Workshop
- Diatomaceous Earth Filtration pilot testing
- CDM hired to prepare Preliminary Engineering Report
- WTP stakeholders group formed
- PW shop on Cottonwood-Site Constraints
- Water Master Plan Update adopted

Major Milestones 2006

- CDM recommends single treatment site versus multiple regional plants. Preferred alternative of flocculation/sedimentation with microfiltration selected
- Final Preliminary Engineering Report Completed
- Johnson Property identified
- CDM begins design

Major Milestones 2006 (con't)

- Contract for Water and Sewer Rate Analysis issued to FCS Group
- Grant and loan financing investigated (CIP)
- Bond process started WTP and Sewer projects
- Water Workshop
- CDM plans 30% complete
- Regulatory agencies conceptually approve plans
- Grants (AB198, EDA, USDA, CDBG, EPA)
- Senator Ensign visit

Major Milestones 2007

- 75%, 90%, and Final Design complete
- Regulatory agencies review and approve
- \$50M bond authorization and issuance (4.36%) for WTP and sewer projects (favorable bond rating)
- Design of water conveyance facilities begun
- Water and Sewer Rate study completed, business impact statement and new rates approved by City Council
- 7/2/2007 City Council presentation

Major Milestones 2007 (con't)

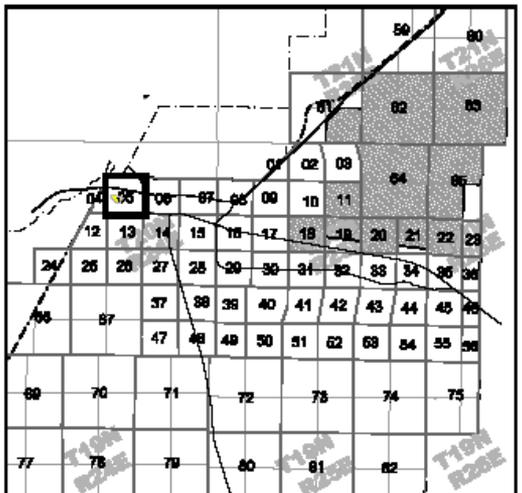
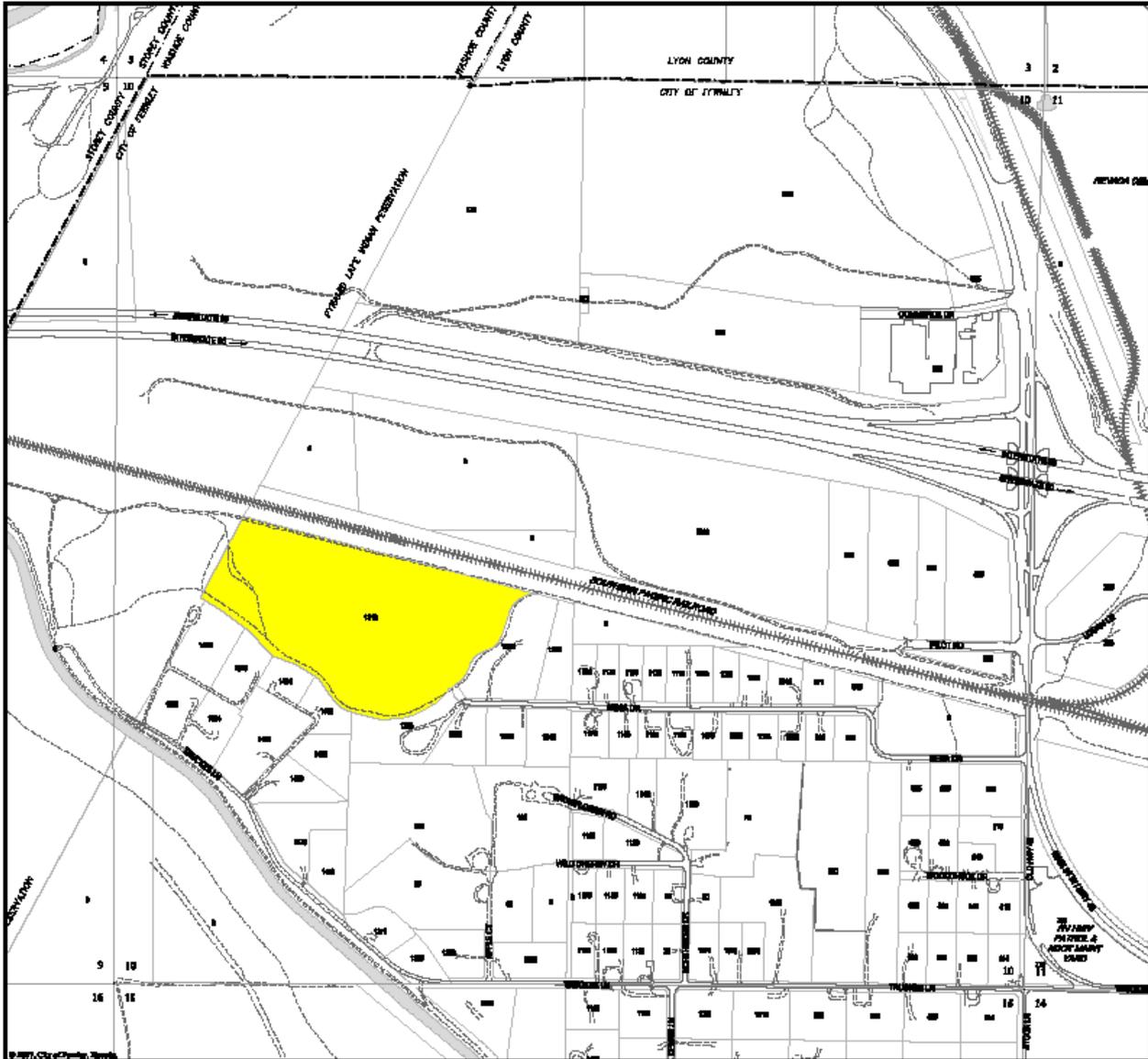
- Bilateral compliance agreement extended to July 23, 2009
- WTP test well award to Humboldt Drilling
- WTP construction award to K G Walters
- Microfiltration award to Pall Corporation
- Construction Management award to CDM
- Design for change order for solids handling facility authorized by City Council (change of scope)
- Notice to Proceed delayed from 9-7-07 to 10-4-07

Major Milestones 2008

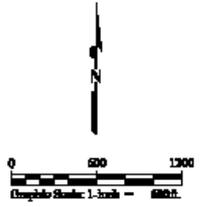
- Authorization of second \$50 M in bonds, issuance of \$32.6M (4.97%) (favorable bond rating)
- Conveyance system final design completed and contracts awarded (some still pending)
- Construction
- Operation and Maintenance Planning

Where?

- The treatment plant is located at the west end of Mesa Drive
- Associated piping projects at various locations



MAP PAGE LOCATOR
 (Grid numbers reference detailed map pages.)



DISCLAIMER: This map was created with the most accurate information available to its compiler. The data presented on this map is subject to change and its accuracy cannot be guaranteed. The City of Fernley makes no claims as to the accuracy or completeness of the data presented on this map. The City of Fernley disclaims all responsibility for errors and/or omissions in the information presented on this map.

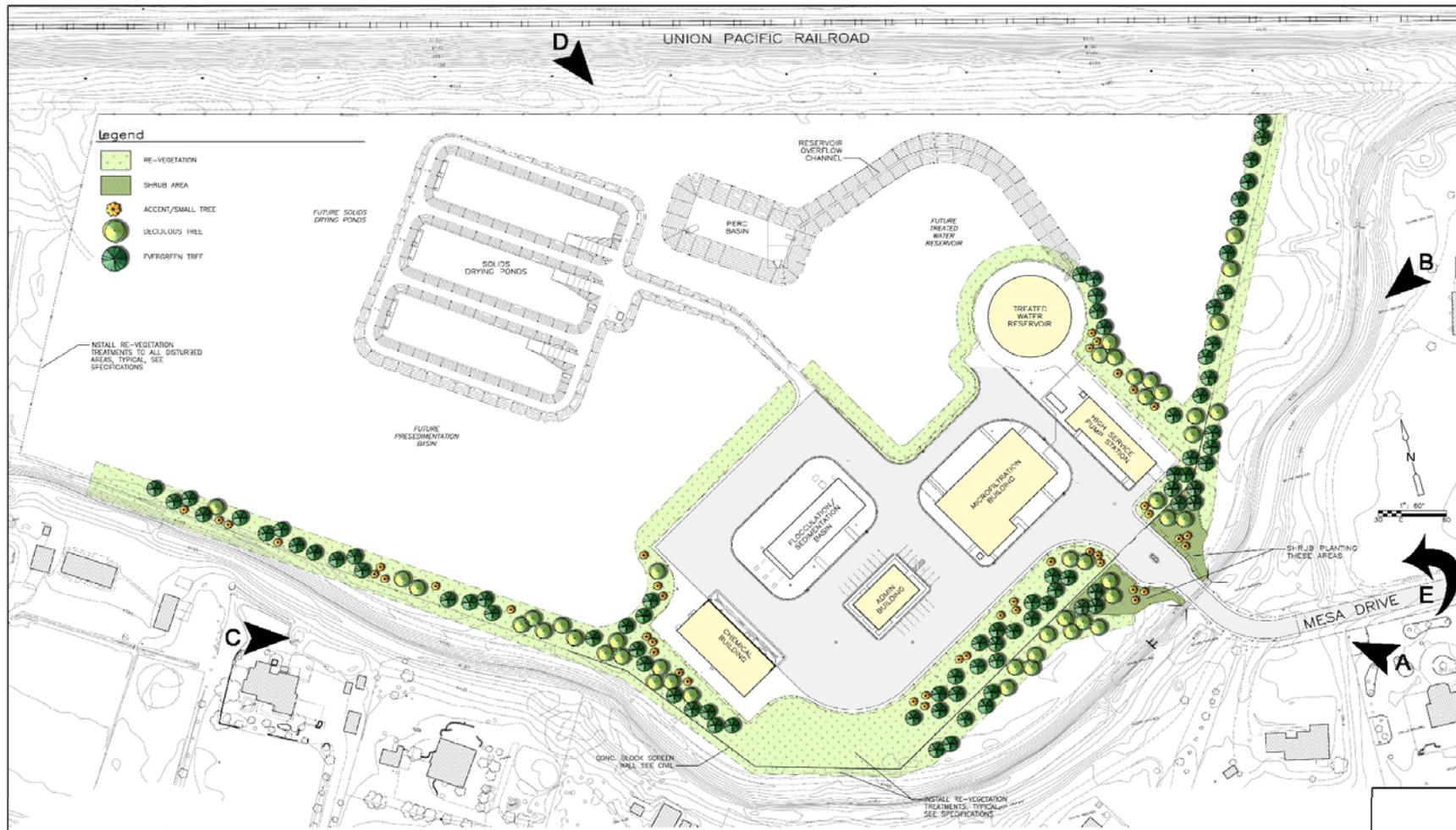


**CITY OF FERNLEY
 MUNICIPAL GUIDE**

595 Silverlace Blvd. • Fernley, NV 89408

Location: T20N, R24 E
 Section: 10

Revised: April 2017
 Page: **5**



- Legend**
- RE-VEGETATION
 - SHRUB AREA
 - ACCENT/SMALL TREE
 - DECIDUOUS TREE
 - EVERGREEN TREE

INSTALL RE-VEGETATION TREATMENTS TO ALL DISTURBED AREAS. TYPICAL SEE SPECIFICATIONS



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: D. KOVACH
 DRAWN BY: J. JOSE
 CHECKED BY: B. JOHNSON
 APPROVED BY: M. JOHNSON
 DATE: MAY 31, 2007

CDM Camp Dresser & McKee Inc.
 100 TRINACRE AVENUE, SUITE 300
 WALNUT CREEK, CA 94596
 Tel: (925) 933-7000 Fax: (925) 933-4174

VERIFY SCALE
 THIS BAR IS ONE INCH LONG AT FULL SCALE



WATER TREATMENT FACILITY
 HEADQUARTERS NOT YET BIDDING ASSIGNED
 (925) 823-0810 (424) 823-0810 (424)

OVERALL LANDSCAPE PLAN

PROJECT NO: 37537-0410
 FILE NAME: L-SP221.dwg
 DRAWING NO:
COLOR PLAN



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: B. KOVACH
 DRAWN BY: J. JOSE
 CHECKED BY: B. KOVACH
 APPROVED BY: M. O'DONNELL
 DATE: MAY 31, 2007

CDM CONCEPT DESIGN MANAGEMENT
Camp Dresser & McKee Inc.
 100 TRIANGLE AVENUE, SUITE 300
 WALNUT CREEK, CA 94596
 Tel (925) 933-7000
 Fax (925) 933-4174

VERIFY SCALE

 THIS BAR IS
 ONE INCH LONG
 AT FULL SCALE



WATER TREATMENT FACILITY
 HUNTERS VALLEY WEST TREATMENT PLANT
 (APR 2003-061-041)

VIEW TO MAIN ENTRY

PROJECT NO. 37537-04010
 FILE NAME: L-01E21.dwg
 DRAWING NO.
VIEW - A



REV. NO.	DATE	BY	CHKD.	REMARKS

DESIGNED BY: D. KOVACH
 DRAWN BY: J. JOHNS
 CHECKED BY: M. O'DONNELL
 APPROVED BY: _____
 DATE: MAY 31, 2007

CDM Camp Dresser & McKee Inc.
 100 TRIANGLE AVENUE, SUITE 300
 WALNUT CREEK, CA 94596
 Tel (925) 933-7000
 Fax (925) 933-4174

VERIFY SCALE

 THIS BAR IS
 ONE INCH LONG
 AT FULL SCALE


WATER TREATMENT FACILITY
 550 SILVER LAKE BLVD
 SILVER LAKE, CA 95138
 Tel (925) 784-9616

VIEW FROM NORTHEAST

PROJECT NO. 37537-54010
 FILE NAME: L-SHEET.dwg
 DRAWING NO.
VIEW - B



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: D. KOVACH
 DRAWN BY: J. JOHNS
 CHECKED BY: M. STORRELL
 APPROVED BY: _____
 DATE: MAY 31, 2007

CDM CONCEPT DESIGN MANAGEMENT
 Camp Dresser & McKee Inc.
 100 TRINACLE AVENUE, SUITE 300
 WALNUT CREEK, CA 94596
 Tel (925) 933-7000
 Fax (925) 933-4174

VERIFY SCALE

 THIS BAR IS ONE INCH LONG AT FULL SCALE



WATER TREATMENT FACILITY
 550 SILVER LAKE BLVD
 SILVER LAKE, CALIF
 TEL (925) 784-9616

VIEW FROM SOUTHWEST

PROJECT NO. 37537-04010
 FILE NAME: L-SITE1.dwg
 DRAWING NO.
VIEW - C



REV. NO.	DATE	BY	CHKD.	REMARKS

DESIGNED BY: D. KOVACH
 DRAWN BY: J. JOSE
 CHECKED BY: M. STORRELL
 APPROVED BY: _____
 DATE: MAY 31, 2007

CDM Camp Dresser & McKee Inc.
 100 TRIANGLE AVENUE, SUITE 300
 WALNUT CREEK, CA 94596
 Tel (925) 933-7000
 Fax (925) 933-4174

VERIFY SCALE

 THIS BAR IS
 ONE INCH LONG
 AT FULL SCALE



300 SILVER LAKE BLVD
 SILVER LAKE, CALIF
 Tel (775) 784-9616

WATER TREATMENT FACILITY
 REVISIONS AND NOT YES BOLD APPROVED
 (DATE: 02/21/06) (041)

VIEW FROM US I-80

PROJECT NO. 37537-04010
 FILE NAME: L-SHEET.dwg
 DRAWING NO.
VIEW - D



REV. NO.	DATE	DRWN	CHKD	REMARKS

DRAWING BY: S. KOVACH
 CHECKED BY: J. JOSE
 DESIGNER: S. KOVACH
 APPROVED BY: R. STORRELL
 DATE: MAY 31, 2007

CDM Camp Dresser & McKee Inc.
 100 TRIANGLE AVENUE, SUITE 300
 WALNUT CREEK, CA 94596
 Tel (925) 933-7000 Fax (925) 933-4174

VERIFY SCALE

 THIS BAR IS ONE INCH LONG AT FULL SCALE

350 SILVER LAKE BLVD
 SILVER LAKE, CA 95138
 Tel (925) 784-9616

WATER TREATMENT FACILITY
 REVISIONS AND NOT YES BOOK ASSIGNED
 (DATE: 02-1-04)

AERIAL VIEW

PROJECT NO. 37537-54010
 FILE NAME: L-10121.dwg
 DRAWING NO.
VIEW - E

Part III – Enterprise Funds & Bonds

- Rates and Fees
- Bond Issues
- Grants and other Financing Sources
- Cash Flow Projections
- Financial Condition

Rates

- The Rate Resolution passed on June 20, 2007 contains four user fee increases effective July 1, 2007, 2008, 2009, and 2010
- Staff indicated that a rate analysis (for both user fees and connection fees) will occur annually during the budget process with either a formal study by outside consultants or through in-house estimates

Excerpt from Rate Study

- Major cost drivers
 - Additional treatment O&M costs
 - System reinvestment funding
 - Debt service not funded with connection charges

REVENUE REQUIREMENTS SUMMARY	FYE	2007	2008	2009	2010	2011
Revenues						
Rate Revenue (w/ existing rates)		\$ 2,088,722	\$ 2,297,594	\$ 2,527,353	\$ 2,780,088	\$ 3,058,097
Other Revenues		704,651	752,250	803,924	860,058	921,078
Use of Connection Charges for Debt Service		180,925	3,045,722	3,480,641	3,318,212	2,807,717
Interest Earnings		10,350	31,501	29,868	33,204	29,534
Total Revenues		\$ 2,984,647	\$ 6,127,067	\$ 6,841,786	\$ 6,991,562	\$ 6,816,427
Expenses						
Operating & Maintenance Expenses		\$ 2,098,700	\$ 2,215,915	\$ 3,237,474	\$ 4,270,112	\$ 4,482,936
Existing Debt Service		180,925	178,050	179,800	187,775	-
New Debt Service		-	4,366,330	4,366,330	4,366,330	5,610,985
Rate-Funded System Reinvestment		-	569,996	1,158,400	2,025,435	1,996,242
Total Expenses		\$ 2,279,625	\$ 7,330,291	\$ 8,942,004	\$ 10,849,653	\$ 12,090,163
Annual Surplus/(Deficiency)		\$ 705,022	\$ (1,203,224)	\$ (2,100,218)	\$ (3,858,090)	\$ (5,273,736)
Annual Rate Adjustment		0.00%	50.00%	25.00%	25.00%	20.00%
Cumulative Rate Adjustment		0.00%	50.00%	87.50%	134.38%	181.25%
Ending Fund Balance		\$ 1,050,022	\$ 995,595	\$ 1,106,811	\$ 984,465	\$ 1,105,381
	<i>Actual Days of O&M:</i>	183	164	125	84	90
	<i>Minimum Target Balance [60 days]:</i>	\$ 344,992	\$ 363,265	\$ 532,188	\$ 701,936	\$ 736,921

Water CIP used for Rate Study

- The Water CIP used to formulate the rate study contains the Water Treatment Plant as well as the associated conveyance projects
- These projects have been in the CIP since 2006

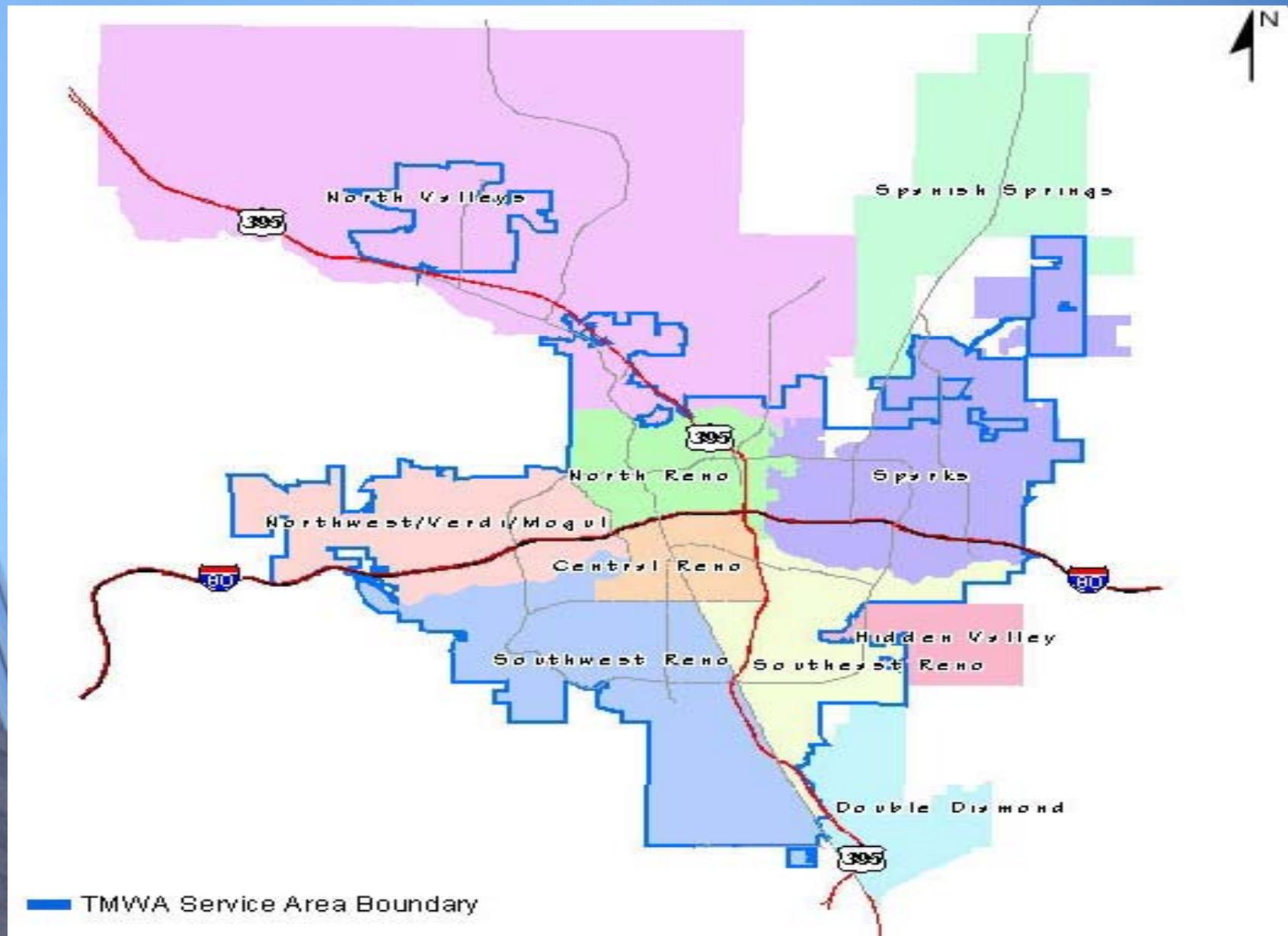
Excerpt from CIP Rate Study

Description	Current Cost	FYE	% Upgrade / Expansion	% R&R
Ground/Surface Water Treatment Plant	\$ 600,000	2007	45%	55%
Ground/Surface Water Treatment Plant	42,000,000	2008	45%	55%
Piping Conveyance	23,000,000	2008	45%	55%

Comparison of Rates

- Updated rate information comparing the City of Fernley to Dayton, Fallon, Churchill County and Truckee Meadows Water Authority (TMWA)
- Results show that the City of Fernley rates generally are still less than these entities

TMWA Service Area



Fallon Service Area

- Fallon provides service within the City limits and the Fallon Naval Air Station
- Fallon area is 3.05 square miles
- Fallon population is approximately 8,473 as of July 2007
- Churchill County provides water and sewer services in the unincorporated areas

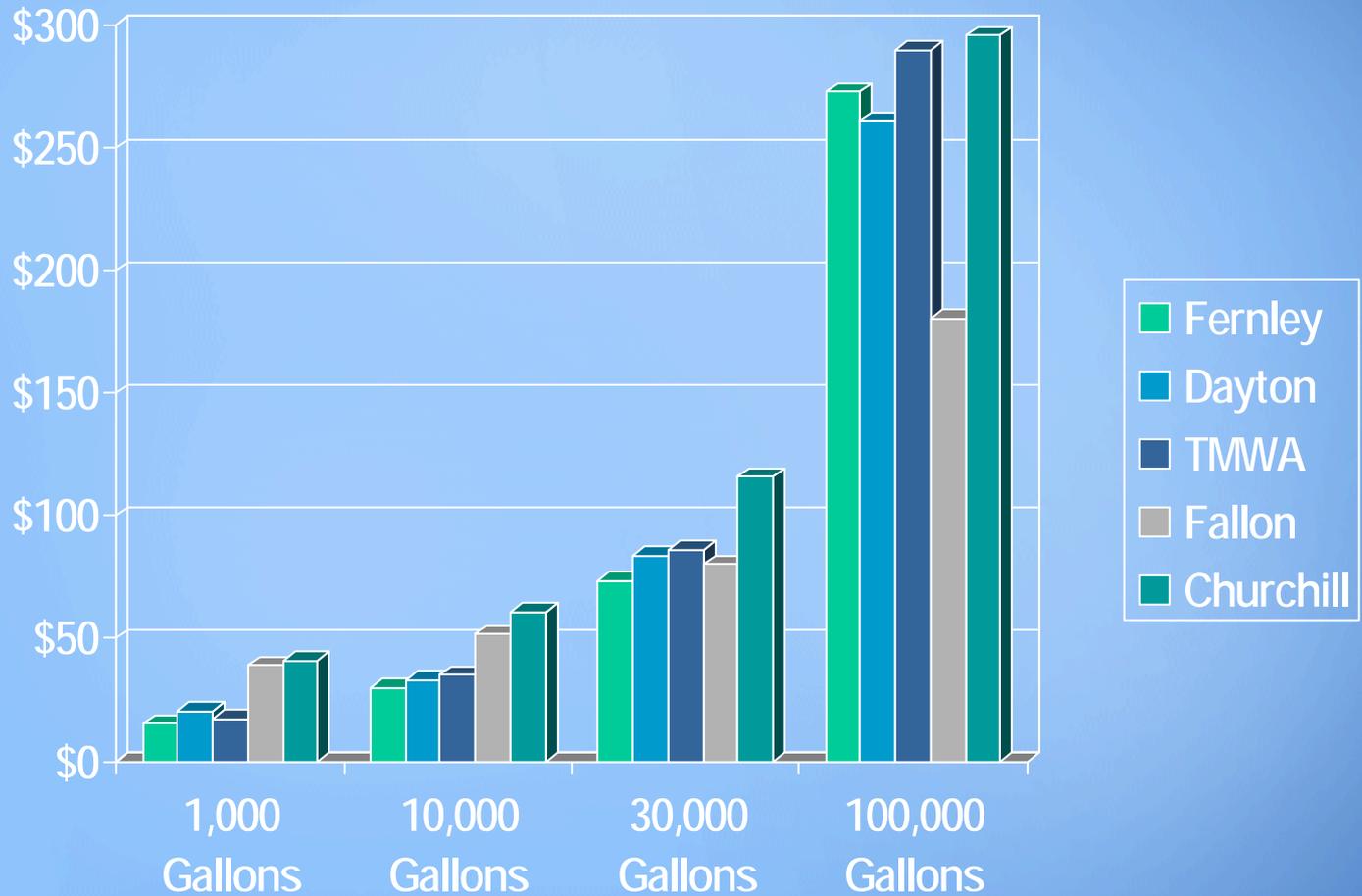
Dayton Service Area

- Lyon County Utilities provides services to Dayton, Mound House and other areas.
- Dayton area is 31.7 square miles
- Dayton population was 5,907 for the 2000 census

City of Fernley Service Area

- Fernley provides service within the City limits and to certain unincorporated areas within the City limits
- Fernley area is 160 square miles
- Fernley population is approximately 20,000 as of July 2007

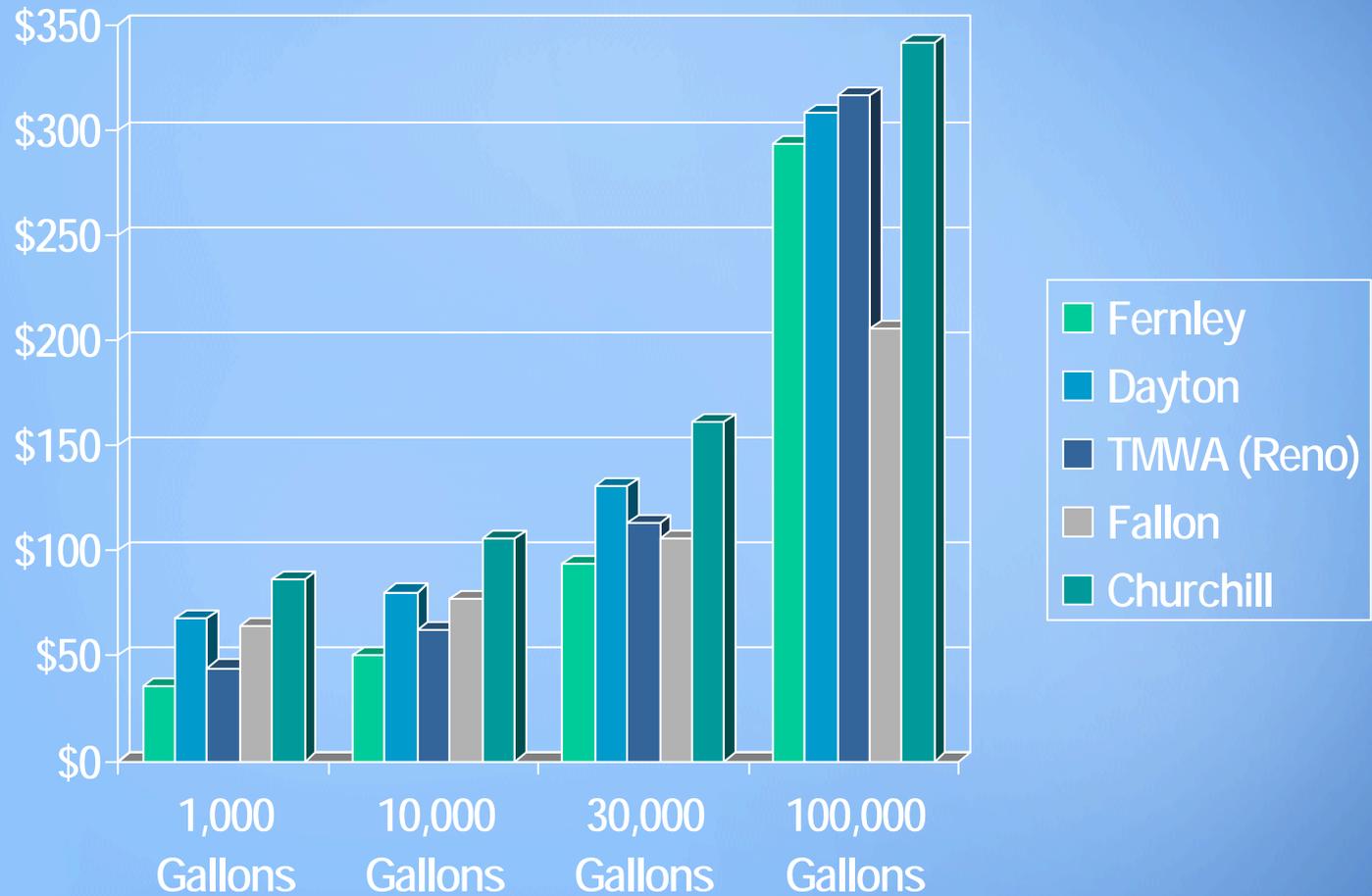
3/4" Residential Monthly Water Bill



3/4" Residential Monthly Water Bill

Gallons	Fernley	Dayton	Churchill	Fallon	TMWA
1,000	\$ 15.09	\$ 20.54	\$ 41.00	\$ 38.91	\$ 17.28
10,000	\$ 29.93	\$ 33.19	\$ 61.00	\$ 51.78	\$ 35.18
30,000	\$ 73.33	\$ 83.79	\$ 116.00	\$ 80.38	\$ 86.00
100,000	\$ 272.83	\$ 260.89	\$ 296.00	\$ 180.48	\$ 289.70

3/4" Residential Water+Sewer Bill

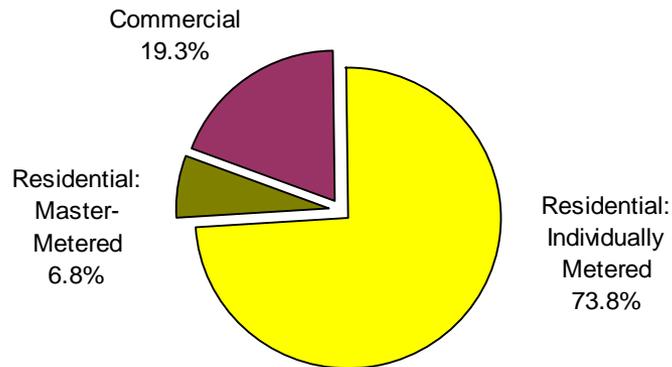


3/4" Residential Water+Sewer Bill

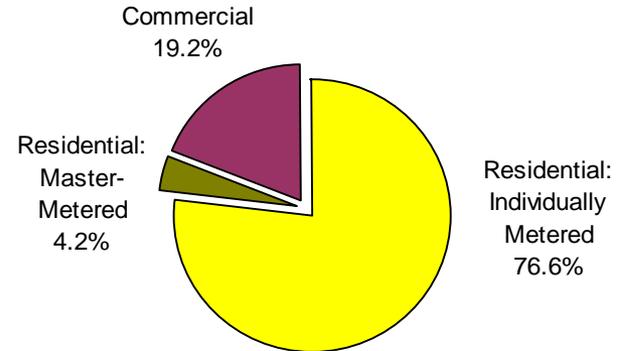
Gallons	Fernley	Dayton	Churchill	Fallon	TMWA
1,000	\$ 35.43	\$ 67.73	\$ 86.00	\$ 63.91	\$ 44.31
10,000	\$ 50.27	\$ 80.38	\$ 106.00	\$ 76.78	\$ 62.21
30,000	\$ 93.67	\$ 130.98	\$ 161.00	\$ 105.38	\$ 113.03
100,000	\$ 293.17	\$ 308.08	\$ 341.00	\$ 205.48	\$ 316.73

From Rate Study

Existing Revenue Distribution

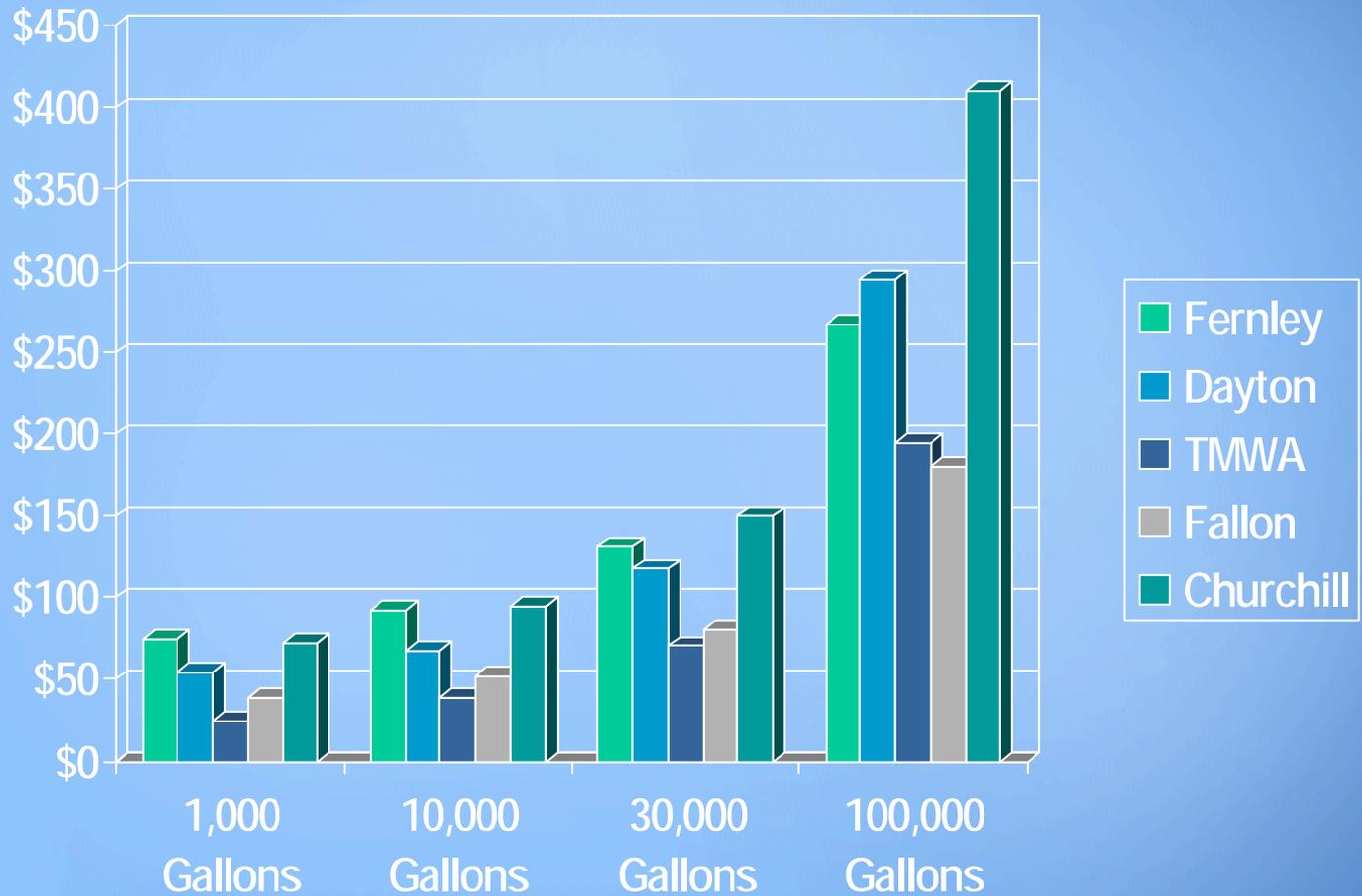


Cost of Service Revenue Distribution



Customer Classes	FYE 2008 Revenue Under Existing Rates	FYE 2008 Revenues with Across-the-Board Increase	FYE 2008 Across the Board Increase/ (Decrease)	FYE 2008 Cost of Service	FYE 2008 Cost of Service Increase/ (Decrease)
Residential: Individually Metered	\$ 1,696,717	\$ 2,545,075	50.00%	\$ 2,639,691	55.58%
Residential: Master-Metered	157,231	235,847	50.00%	143,856	-8.51%
Commercial	443,646	665,469	50.00%	662,844	49.41%
TOTAL	\$ 2,297,594	\$ 3,446,391	50.00%	\$ 3,446,391	50.00%

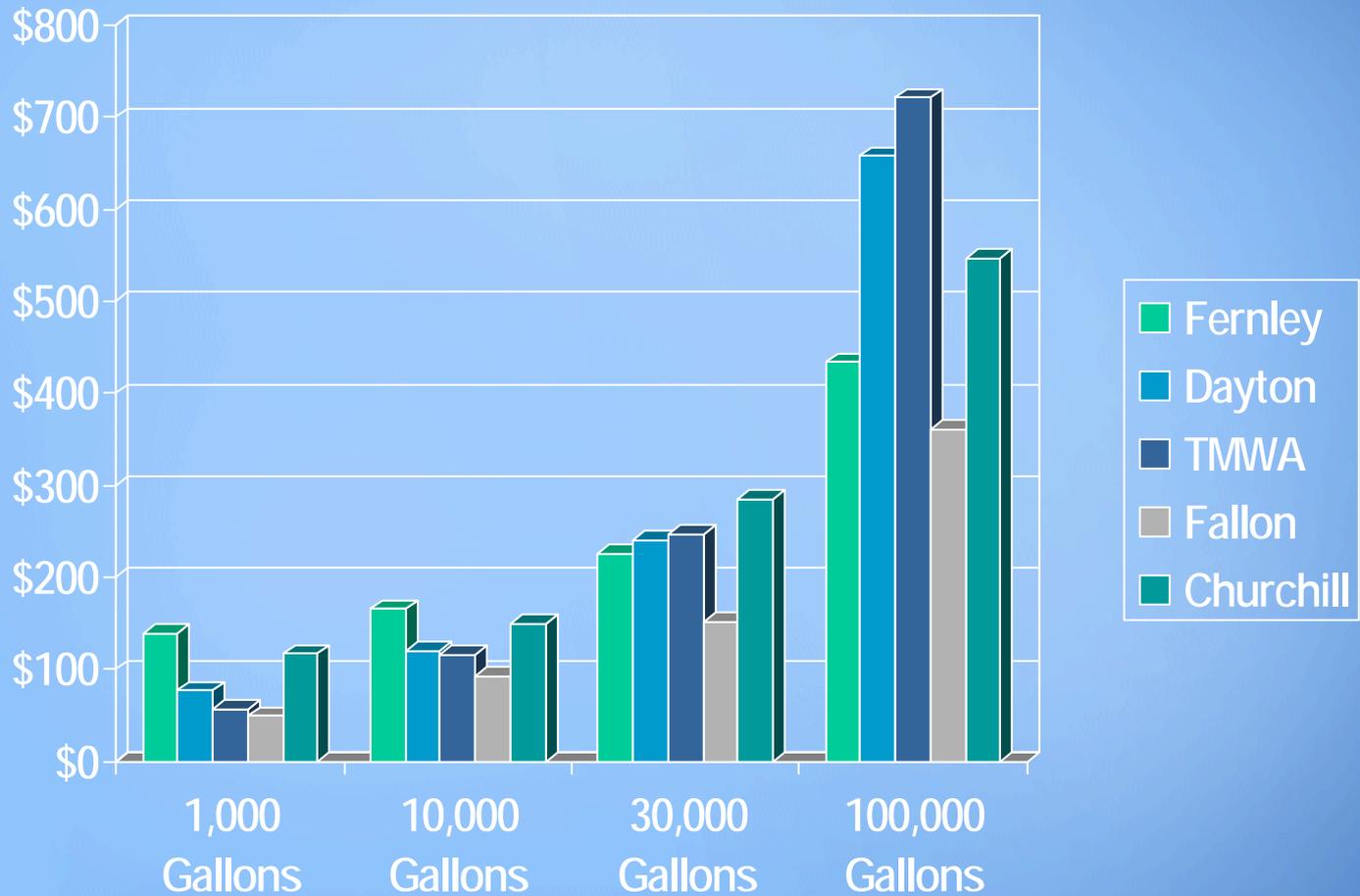
2" Commercial Monthly Water Bill



2" Commercial Monthly Water Bill

Gallons	Fernley	Dayton	Churchill	Fallon	TMWA
1,000	\$ 74.90	\$ 54.48	\$ 72.15	\$ 38.91	\$ 24.38
10,000	\$ 92.36	\$ 67.13	\$ 95.00	\$ 51.78	\$ 38.60
30,000	\$ 131.16	\$ 117.73	\$ 150.00	\$ 80.38	\$ 70.20
100,000	\$ 266.96	\$ 294.83	\$ 410.00	\$ 180.48	\$ 194.60

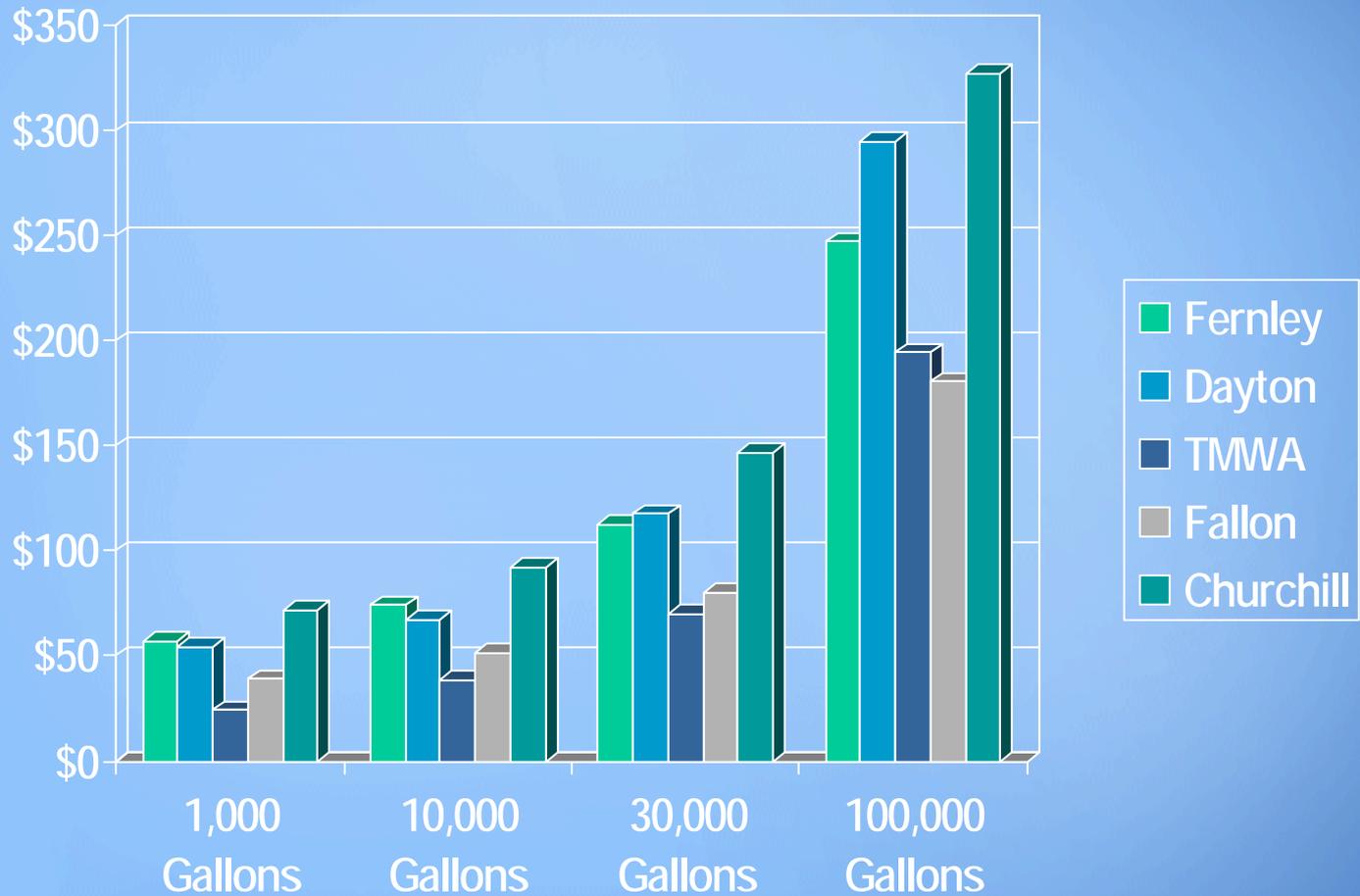
2" Commercial Water+Sewer Bill



2" Commercial Water+Sewer Bill

Gallons	Fernley	Dayton	Churchill	Fallon	TMWA
1,000	\$ 138.71	\$ 76.80	\$ 117.15	\$ 48.79	\$ 56.41
10,000	\$ 165.56	\$ 120.41	\$ 149.58	\$ 92.28	\$ 115.63
30,000	\$ 225.16	\$ 239.81	\$ 284.60	\$ 151.88	\$ 247.23
100,000	\$ 433.76	\$ 657.71	\$ 547.48	\$ 360.48	\$ 721.63

2" Master Meter Monthly Water Bill



2" Master Meter Monthly Water Bill

Gallons	Fernley	Dayton	Churchill	Fallon	TMWA
1,000	\$ 57.05	\$ 54.48	\$ 72.00	\$ 38.91	\$ 24.38
10,000	\$ 74.33	\$ 67.13	\$ 92.00	\$ 51.78	\$ 38.60
30,000	\$ 112.73	\$ 117.73	\$ 147.00	\$ 80.38	\$ 70.20
100,000	\$ 247.13	\$ 294.83	\$ 327.00	\$ 180.48	\$ 194.60

Series 2007 \$50M bond issue

- The Series 2007 \$50M bond issue is designed for interest only payments until 2-1-09 (first principal payment 2-1-09)
- The favorable Moody's bond rating of Aaa with an underlying rating of A3 resulted in very competitive rates on the bond sale
- Bonds are amortized over 30 years

Series 2007 \$50M bond issue

- The 2007 Series Bond issue was allocated \$5.5M (11%) to the Sewer Fund and \$44.5M (89%) to the Water Fund
- The \$5.5 M in the Sewer Fund was earmarked for the East Lift Station and Sewer Interceptor Upgrade Project that allowed WalMart, Lowe's etc to build
- The \$44.5 M in the Water Fund was earmarked for the Water Treatment Facility

Series 2008 \$32.6M bond issue

- The Series 2008 \$32.6M bond issue is designed for interest only payments until 2-1-2010 (first principal payment 2-1-2010)
- The favorable Moody's bond rating of Aaa with an underlying rating of A3 resulted in very competitive rates on the bond sale
- Bonds are amortized over 30 years

Series 2008 \$32.6M bond issue

- The 2008 Series Bond issue was allocated \$2.6M (8%) to the Sewer Fund and \$30M (92%) to the Water Fund
- The \$2.6 M in the Sewer Fund was earmarked for the Highway 50 Lift Station Project
- The \$30 M in the Water Fund was earmarked for the Water Treatment Facility and associated projects

Interest Earned on Investments

- Initially, interest earned on invested bond proceeds exceeded interest expense accrued on the bonds
- In other words, we made money on the bond issue that could be plowed back into the projects.
- Over about six months, \$200,000 ahead

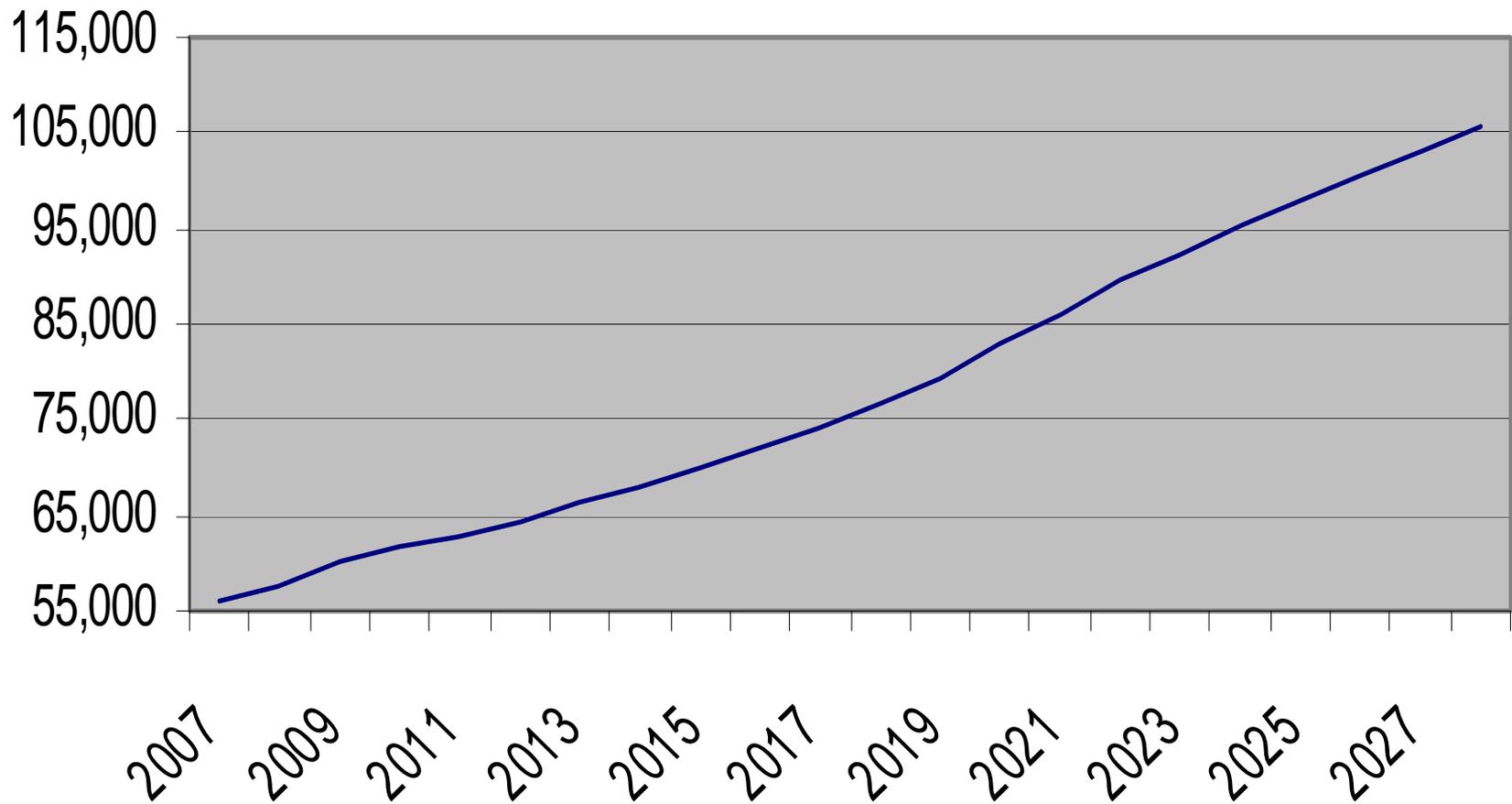
Grants and other financing

- AB198 Grants (populations under 6,000)
- USDA Grant and Loans
- EDA Grants
- CDBG Grants
- SRF **NOT** a grant

Cash Flow Projections

- Assumptions:
 - Very low growth
 - Very low connection fee revenue
 - User fees increase /# of customers flat
 - Increased costs for O&M Treatment Plant
 - Deferral of Growth Related Projects

Lyon Co. Projected Population



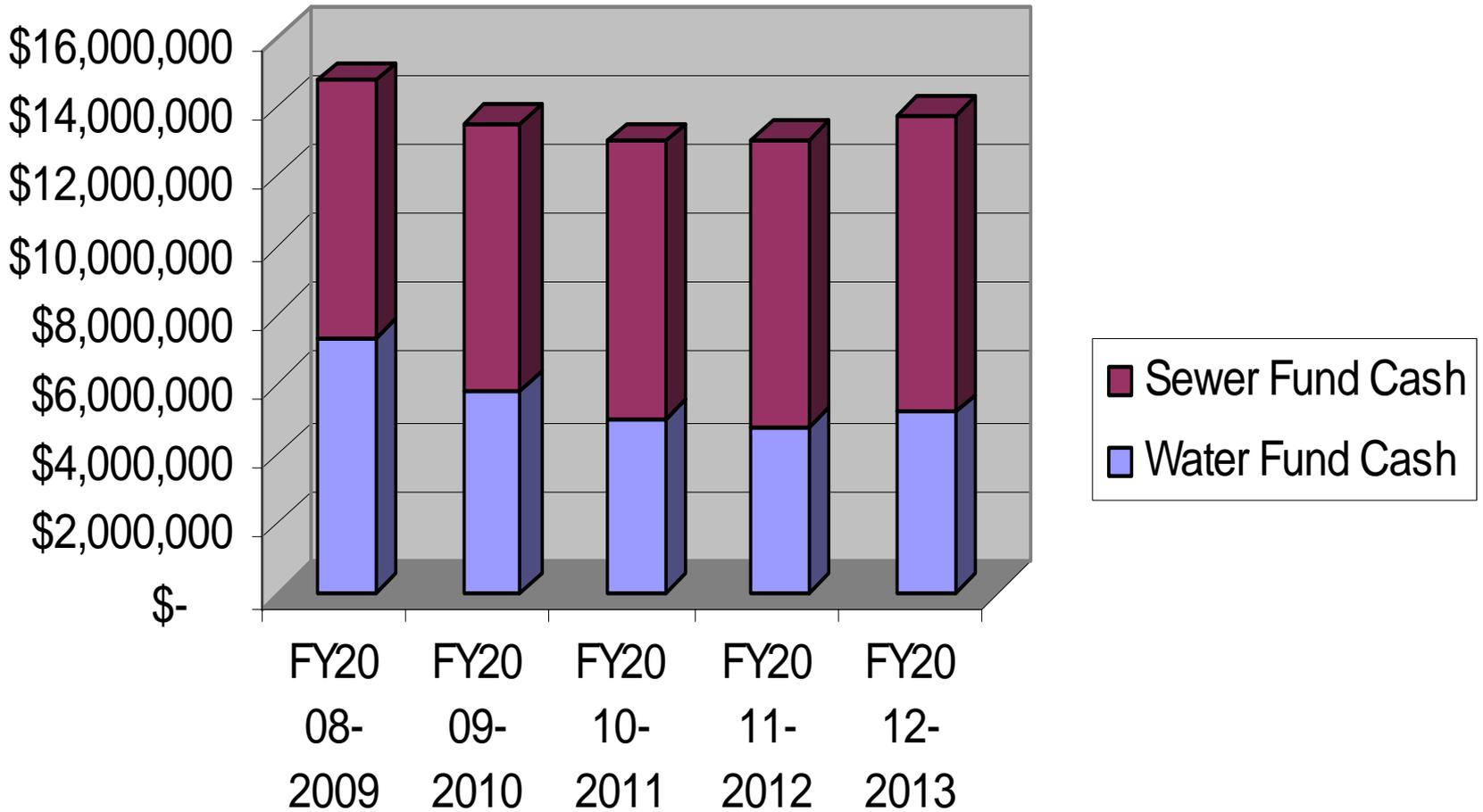
	Lyon		
	Total Population	Change Previous Year	Percentage Change
2007	55,903		
2008	57,655	1,752	3.1%
2009	60,018	2,363	4.1%
2010	61,536	1,518	2.5%
2011	62,986	1,450	2.4%
2012	64,543	1,557	2.5%
2013	66,139	1,596	2.5%
2014	67,900	1,761	2.7%
2015	69,806	1,905	2.8%
2016	71,857	2,051	2.9%
2017	74,091	2,235	3.1%
2018	76,532	2,441	3.3%
2019	79,174	2,641	3.5%
2020	82,764	3,590	4.5%
2021	86,172	3,408	4.1%
2022	89,408	3,236	3.8%
2023	92,470	3,062	3.4%
2024	95,369	2,899	3.1%
2025	98,122	2,753	2.9%
2026	100,724	2,602	2.7%
2027	103,193	2,469	2.5%
2028	105,533	2,340	2.3%

CIP

- The Capital Improvement Plan (CIP) used as a basis for the rate analysis contains projects that can be deferred if growth does not occur
- Projects have, in fact, been deferred

CIP

- The Sewer CIP contained an estimated \$32,031,934 in projects over the five year study period of which approximately \$22 M were deferred in response to the downturn in residential construction
- The Water CIP contained an estimated \$101,730,967 in projects over the five year study period of which approximately \$29 M were deferred
- Deferrals result in the “old way” of no connections until developers construct infrastructure and “buy” a portion of the existing system



Water Fund Cash Flow Projections

	FY2008-2009	FY2009-2010	FY2010-2011	FY2011-2012	FY2012-2013
Beginning Cash Balance	65,850,516	7,347,400	5,844,999	5,054,887	4,810,514
Cash In:					
Customer Charges	5,000,000	6,250,000	6,875,000	7,562,500	8,318,750
Capital Contributions	100,000	100,000	100,000	100,000	100,000
Grant Proceeds	600,000	0			
Non-Operating Revenues	350,000	350,000	350,000	350,000	350,000
Interest Received	1,317,010	293,896	292,250	252,744	240,526
Subtotal-Cash In	7,367,010	6,993,896	7,617,250	8,265,244	9,009,276
Cash Out:					
O&M	3,000,000	3,100,000	3,200,000	3,300,000	3,400,000
Debt Repayment	4,060,126	4,896,297	4,707,363	4,709,617	4,709,971
Capital Outlay	58,810,000	500,000	500,000	500,000	500,000
Subtotal Cash Out	65,870,126	8,496,297	8,407,363	8,509,617	8,609,971
Net Change in Cash	-58,503,116	-1,502,401	-790,113	-244,372	399,305
Ending Cash Balance	7,347,400	5,844,999	5,054,887	4,810,514	5,209,819

Sewer Fund Cash Flow Projections

	FY2008-2009	FY2009-2010	FY2010-2011	FY2011-2012	FY2012-2013
Beginning Cash Balance	10,954,115	7,412,123	7,656,613	7,966,769	8,268,940
Cash In:					
Customer Charges	1,875,500	1,931,765	1,989,718	2,049,409	2,110,892
Capital Contributions	250,000	250,000	250,000	250,000	250,000
Non-Operating Revenues	350,000	350,000	350,000	350,000	350,000
Interest Received	219,082	296,485	382,831	398,338	413,447
Subtotal-Cash In	2,694,582	2,828,250	2,972,549	3,047,748	3,124,339
Cash Out:					
O&M	1,500,000	1,575,000	1,653,750	1,736,438	1,823,259
Debt Repayment	436,575	508,759	508,643	509,139	509,248
Capital Outlay	4,300,000	500,000	500,000	500,000	500,000
Subtotal Cash Out	6,236,575	2,583,759	2,662,393	2,745,577	2,832,508
Net Change in Cash	-3,541,992	244,490	310,155	302,171	291,831
Ending Cash Balance	7,412,123	7,656,613	7,966,769	8,268,940	8,560,771

Financial Condition

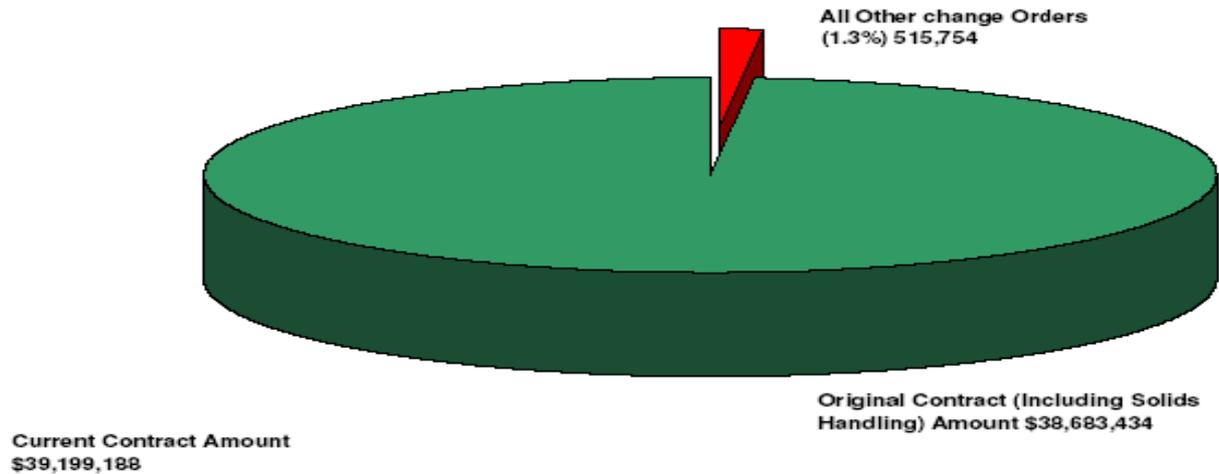
- The Enterprise Funds are in reasonably good financial condition, despite the recent economic downturn
- In a worst case scenario, the funds will remain healthy over the next five years
- Rates are low and will likely continue to increase each year but annual review can even out the increases and avoid large increases in a given year
- The City is in a better position to qualify for grants for some projects over the next five years

Part IV – Capital budget v actual

- Budget WTP \$42M
 - K G Walters contract \$39M
 - Pall Microfilter \$5M
 - CDM \$5M
- Associated Piping Projects
\$23M

K G Walters Change Orders

Figure 1 Water Treatment Plant Change Order Summary



Part V - Summary

- Public Processes Occurred (City Council actions and Public Meetings)
- Grants were examined
- Rates are comparable to surrounding communities
- Enterprise Funds are able to repay debt
- Expenditures are within budget
- Bond Financing Sound
- Technology decisions logical

Other information

- Appendix A-Timeline

Appendix A-Timeline

- 8/20/2002 American Water Works Association Albuquerque Arsenic Removal Workshop
- 11/7/2002 Teleconference – Emerging Arsenic Treatment Technologies
- 1/24/2003 Environmental Technology Verification (ETV) process reviewed for Arsenic Treatment technologies

Appendix A Timeline (continued)

- 1/25/2003 Nevada Board for Financing Water Projects Arsenic Presentation
- 4/28/2003 Severn Trent pilot testing at Well #11
- 6/18/2003 Severn Trent – Evaluating Arsenic Removal Workshop
- 8/6/2003 City Council addresses request to State for 3-year compliance extension

Appendix A Timeline (continued)

- 10/15/2003 City Council addresses request to State for 3-year compliance extension (second time)
- 12/12/2003 Bilateral Compliance Agreement executed by State (including milestones)
- 1/3/2004 City Council Water Workshop – Need for Water Master Plan Update identified

Appendix A Timeline (continued)

- 9/15/2004 Kurt Kramer's last City Council meeting as retiring Public Works Director
- 12/1/2004 Lowell Patton's first City Council meeting as Public Works Director
- 1/5/2005 City Council ratifies (Mayor signs) the Bilateral Compliance Agreement
- 1/22/2005 City Council Water Workshop

Appendix A Timeline (continued)

- 3/16/2005 City Council allows EaglePicher to continue pilot testing at Well #4
- 6/10/2005 Public Works advertises Request for Qualifications (RFQ) for WTP planning and engineering services
- 7/14/2005 Public Works interviews prospective WTP consultants

Appendix A Timeline (continued)

- 9/7/2005 City Council awards contract to CDM for study of water treatment options and Preliminary Engineering Report
- 12/5/2005 Public Works identified WTP stakeholders group
- 12/16/2005 CDM identifies potential site constraints at the Public Works Shop on Cottonwood

Appendix A Timeline (continued)

- 12/16/2005 CDM provides Public Works with Process Alternatives and relative cost comparisons
- 12/16/2005 CDM provides Public Works with groundwater treatment types and possible central or regionally clustered locations
- 12/21/2005 City Council adopts 2005 Water Master Plan Update

Appendix A Timeline (continued)

- 1/1/2006 CDM recommends pursuit of a single Water Treatment Plant rather than multiple regional plants
- 1/20/2006 City Engineering reviews CDM's draft Preliminary Engineering Report

Appendix A Timeline (continued)

- 2/3/2006 Public Works delivers memorandum with excerpts from draft Preliminary Engineering Report to Stakeholders Group. Group agrees that flocculation/sedimentation with microfiltration is preferred alternative
- 6/14/2006 CDM delivers Final Preliminary Engineering Report

Appendix A Timeline (continued)

- 6/21/2006 City Council addresses offer to acquire Johnson Property on west terminus of Mesa Drive
- 6/23/2006 Public Works considers alternate project delivery concepts (Design Build, Engineering Procurement Construction Management, etc.)
- 7/5/2006 City Council awards contract to FCS Group for Water and Sewer Rate Analysis

Appendix A Timeline (continued)

- 7/17/2006 NDEP receives a copy of the Preliminary Engineering Report
- 7/19/2006 City Council authorization to go to Lyon County Debt Management Commission for bonding
- 7/19/2006 City Council approves Indebtedness Report

Appendix A Timeline (continued)

- 7/20/2006 City Council Water Workshop – WTP update given
- 7/21/2006 City Council authorizes the purchase of the Johnson property
- 8/16/2006 City Council amends CDM contract to include 75% design of WTP

Appendix A Timeline (continued)

- 12/8/2006 CDM delivers 30% plans to the City. NDEP BSDW review and conceptually approve the project concept (as much as possible with 30% design set)
- 1/3/2007 City Council addresses impact of Well #13 pumping and awards design contract for Mesa Drive waterline.

Appendix A Timeline (continued)

- 1/20/2007 City Council Goals and Priorities Workshop – WTP identified as high priority
- 3/2/2007 CDM delivers 75% plans to City. State again reviews the plans and conceptually approves the project
- 3/7/2007 City Council adopts Bill #83 authorizing issuance of \$50,000,000 bonds

Appendix A Timeline (continued)

- 3/7/2007 City Council authorizes bid advertisement of Mesa Drive waterline construction contract
- 3/21/2007 City Council amends CDM contract to include Final Design and Bid Support
- 4/4/2007 City Council awards contract to Fehr & Peers for traffic study for WTP

Appendix A Timeline (continued)

- 4/4/2007 City Council awards construction contract for Mesa Drive waterline
- 4/4/2007 City Council awards a contract to TRC to begin corridor mapping of water conveyance facilities for inbound and outbound water lines for WTP

Appendix A Timeline (continued)

- 4/12/2007 CDM delivers 90% plans to City. State again reviews and conceptually approves the project
- 4/18/2007 City Council directs staff to prepare a Business Impact Statement for amended water and sewer fee structure
- 4/25/2004 City Council Goals and Priorities Workshop – WTP High Priority

Appendix A Timeline (continued)

- 5/2/2007 City Council initial presentation of Water and Sewer Rates
- 5/31/2007 CDM delivers complete plans to the City and the project advertised for bid.
- 6/29/2007 Addendum #1 to the WTP plans delivered

Appendix A Timeline (continued)

- 7/2/2007 City Council WTP overview presentation
– Information Only with separate presentation on status of grants and loan funding
- 7/11/2007 Extension of Bilateral Compliance Agreement to July 23, 2009
- 8/15/2007 City Council awards WTP test well drilling contract to Humboldt Drilling and Pump Co.

Appendix A Timeline (continued)

- 9/5/2007 City Council awards WTP construction contract to K G Walters
- 9/5/2007 City Council awards microfiltration membrane contract to Pall Corporation
- 10/3/2007 City Council awards Construction Management Contract to CDM

Appendix A Timeline (continued)

- 10/22/2007 City meets with Jim Johnson to discuss acquisition of additional 10' of right of way at east end of Mesa Drive. City later receives sales offer
- 10/29/2007 City meets with Daniel Hyde to discuss acquisition of additional 10' of right of way at west end of Mesa Drive

Appendix A Timeline (continued)

- 11/7/2007 City Council addresses alternatives for WTP solids handling facilities
- 11/14/2007 City meets with Danny Lamb to discuss acquisition of existing easement as dedicated right of way at extreme west end of Mesa Drive.
- 11/19/2007 Staff presents timeline indicating actions to be taken for arsenic compliance

