County Utility In-house Water Cost-of-Service Study and Water Rate & Fee Proposal

Board of County Commission
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Presentation Outline

- Background on Utility Section I
- Method of Rate Analysis Section II
- Results and Findings Section III
- Proposed Action Section IV

I. Background

- * Attributes of an Enterprise Utility
- * Water Service Area
- * Size and Revenue of Utility
- * Water Use
- * Residential Potable Water Use
- * Non-Residential Residential Potable Water Use
- * Safe, Reliable and Sustainable

Attributes of an Enterprise Utility

- * Designed so that rates and fees cover costs of:
 - * Ongoing operations
 - * Salaries, benefits, supplies, fuel, etc.
 - Capital Assets required:
 - * Vehicles, equipment
 - * Reserves for Repair, Replacement and Emergencies
 - Capital Improvements
 - New waterlines, tanks, treatment, etc.
 - * External administrative support functions (HR, legal, etc.)

West Sector South Sector

Water Service Area

Size and Revenue of Utility

* Number of accounts: ~3,020 serving ~10,000 people

* Residential: ~2,900

* Non-residential: ~120

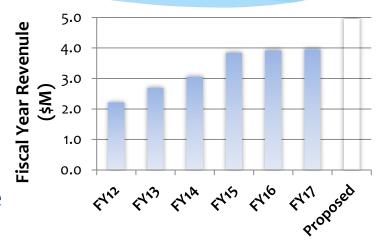
* Revenue generated, FY16: ~\$3.9 M

* Residential: \$2.0 M

* Fire Protection: \$0.02M

* Non-residential: \$1.8 M

* 7 individual customers generate 94% of the non-residential revenue



Revenue generated in FY16 by largest customers:

- * Las Campanas Club: \$398K
- * Las Campanas Coop: \$354K
- * SF Community College: \$339K
- * Santa Fe County Jail: \$245K

- * NM Dept. of Corrections: \$191K
- **IAIA:** \$112K
- Dept of Military Affairs: \$66K

Water Use

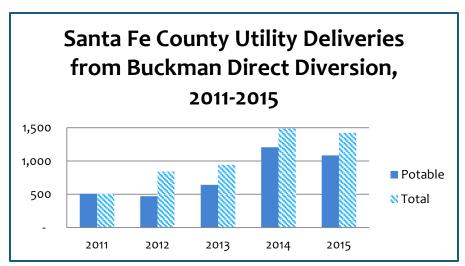
Water Supply, 2015: 1,370 acre-feet = 446 million gallons (mg)

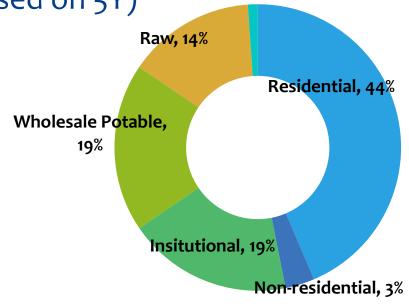
* Potable: 1,032 acre-feet = 336 mg

* Raw: 338 acre-feet = 110 mg

* Source: 89% from BDD; 11% back-up from City of Santa Fe, when BDD is down (based on 5Y)

Bulk Water, 1%





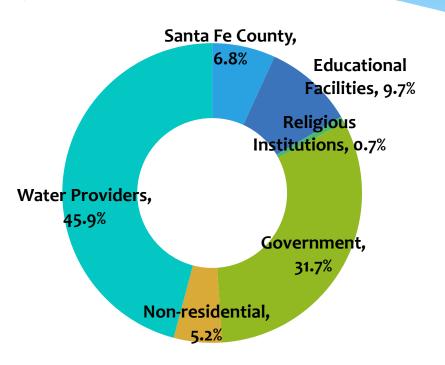
Residential Potable Water Use

Annual total: 1,032 acre-feet = 336 mg

- * Residential:
 - * 51%; 177.4 mg
 - * Average water use: 4,914 g/month = 59,000 g/year = 0.18 acre-foot/year (low!)
 - * Gallons per capita per day (gpcd):
 - * 67 gpcd year-round
 - * 55 gpcd indoor
 - * Use varies geographically



Non-residential Potable Water Use



Non-residential represents 49% of total 171 million gallons per year (mgy)

- * Largest customers
 - * Las Campanas Coop: 72.5 MGY
 - * NM Dept. of Corrections: 45.5 MGY
 - * SF Community College: 19.9 MGY
 - * SFCo Adult Corrections: 12.6 MGY
 - * IAIA: 5.2 MGY
 - * Agua Fria Water System: 2.4 MGY
 - Dept of Military Affairs: 2.2 MGY
 - * Browncastle Ranch: 1.6 MGY
 - Santa Fe Animal Shelter: 1.6 MGY

Safe, Reliable, and Sustainable

Water Quality

- Water system has high water quality; no regulatory exceedances
- 2015 Consumer Confidence Report and previous year's water quality testing results on the website

Reliable

Diversified: have two sources of supply

Sustainable

- Renewable surface water supply (via the BDD) represents
 ~90% of the supply
- Increases the longevity of the groundwater



II. Methods of Rate Analysis

* Process and Method

Process and Method

Develop Policies ■ BCC adopted rate policies Resolution 2015-87 (June 2105): price tiers, conservation incentives; customer class equity; CPI increases; zonal pricing; seasonal pricing

Identify Revenue Requirements Based on Utilities FY17 budget; adjusted for additional costs

Determine Cost Components

- Three cost components: demand, commodity, and customer (commodity- demand method)
- Cash-needs approach (no profit)

American Water Works Association Manual M1

Distribute Costs to Customer Classes

- New class: multi-family,
- Include gov't use into non-residential rate

Design Rates

- Low cost for basin human needs
- Encourages conservation
- Equitable across customers

Santa Fe County Utilities Division In-house, Interim Cost of Service Study and Water Rates & Fee Proposal

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11/2/2016

III. Results and Findings

- Important Findings
- Recent / Pending Cost Increases
- * Additional Revenue Needed for Financial Self-Sufficiency
- * Revenue Gap
- Implications for Rates
- Proposed Revenue Requirements
- * Cost Components

Important Findings

- SFCU cost to BDD for potable water is \$5.47 per 1,000 gallons
- Current rate structure is not equitable across customer classes
- * Utility not currently recovering costs from following classes:
 - Mutual Domestic / Government (sell at \$3.22 per 1,000 g)
 - * Wholesale potable (sell at \$5.47 per 1,000 g)
- Similar finding with raw water sales
 - * Cost to SFCU is \$4.71 per 1,000 g; sell at \$4.01 per 1,000 g
- Non-residential water users include many large, institutional, and governmental customers; few private businesses
- * Average SFCU residential customer uses less than 5,000 gallons/month
 - * Seasonal variability results in higher summertime use

Recent/Pending Cost Increases

- Increased BDD costs associated with sediment removal: \$250,000
- * Annual payment of back-up water under City-County 2005 Water Resources Agreement: \$175,000
- * Increase of wholesale/ back-up rate from City of Santa Fe from \$3.79/1,000g to \$6.06/1,000g: \$104,000
- * Operational cost increases (e.g. salary, benefits, supplies, electricity): \$87,000
- * Incorporation of Pojoaque Valley regional water system noncapital costs (salary, outreach, planning): \$228,000
- * Total recent/pending cost increases: \$844,000

Additional Revenue Needed for Financial Self-Sufficiency

- * BDD Debt Service: **\$3,420,000**
- * Future System Expansion Debt Service (\$23M @5% for 30Y):\$1,475,000
- * Assets and capital improvements (e.g. vehicle replacement, upsizing of infrastructure, master meters): \$210,000

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- * Repair and replacement and emergency funds: \$224,000
- * Total for self-sufficiency: \$5,329,000

Revenue Gap

- FY17 Operational Costs
- * Recent/Pending Cost Increases:
- * Total for self-sufficiency:
- * Total Annual Revenue Requirement:
- * Total FY17 Revenue Projections:
- * Annual Revenue Gap:

\$3,896,000

\$ 844,000

\$5,329,000

\$10,069,000

\$3,840,000

\$6,229,000

Implications for Rates

- * To <u>fully</u> recover this shortfall, revenues must increase 260% (from \$3.9 million per year to \$10.1 million per year)
- * Rate shock to customers would be severe
- Average monthly residential bill would increase from \$52 to \$135
- * Similarly-scaled disruptive shocks to commercial, institutional and wholesale customers

Proposed Revenue Requirements

Line Item	Amount (\$) ¹
BDD Water Supply	1,989,500
Backup Supply	258,681 ²
Personnel	1,416,252
Operations and Maintenance	801,066
Asset Renewal & Replacement	210,000
Transfer to General Fund	135,000
Emergency & Reserves	224,995 ³
Total	5,035,494
BDD Debt Service	3,420,000 *
Future Needs/Debt Service	1,613,506*
Grand Total	10,069,000 *

¹ Modified from the FY17 Utilities operating budget

² Assumes 11% BDD downtime, \$6.06/1000g City wholesale rate

³~2% of estimated infrastructure value; industry standard is 3%

^{*} not included in subsequent rate recovery analysis

Cost Components

Cost Component	Amount (\$)	% of Total	
Demand	3,279,195	65.1%	
Commodity	838,349	16.6%	
Customer Service	917,951	18.2%	
Fire Protection	na	-	
Total	5,035,494		

- * Demand: fixed costs associated with providing water
- * Commodity: variable costs associated with providing water
- Customer Service: costs related to meter reading, billing, collecting, adjustments, inquiries, etc.
- * Fire Protection Costs: not included in this analysis

IV. Proposed Actions

- * Phased Rate Increase Approach
- Changes to Customer Class
- Proposed Residential Rate After All Phases
- Proposed Multi-Family Rate
- Proposed Non-Residential Monthly Service Charge
- Proposed Rate for Non-Residential After all Phases (with 2 inch or smaller meter)
- Proposed Rate for High Volume Users After all Phases (with greater than 2-inch meters)

Phased Rate Increase Approach

- * Proposed approach to reduce rate shock:
 - * Defer rate recovery of debt service; continued reliance on subsidies from other funds, i.e. only recover \$1.14M with this action
 - * Implement a phased rate increase
- * Proposed phased rate increase schedule
 - * Residential: January 2017 and January 2018
 - * Non-residential: January 2017, July 2017, and January 2018
- * Incorporate CPI adjustment to rates beginning January 2019
- * Consolidation of Customer Classes

Changes to Customer Classes

Current Classes

- * Residential
- Non-residential
- * Wholesale 1
- * WholesaleGovernment
- * Wholesale 2 = Raw
- * Bulk (potable)

Proposed Classes

- > Residential
- > Multi-family
- Non-residential (includes business, government, institutional, etc.)
- ➤ High-volume
- > Raw
- > Self-Serve (potable)

Proposed Residential Rate After All Phases

Current			New		Delta
5/8" Monthly Service Charge		\$ 14.50		\$ 18.42	\$ 3.92
1" Monthly	Service Charge	\$ 17.99		\$ 21.42	\$ 3.43
Tier 1 (g)	0-5,000	\$ 6.12	0-4,000	\$ 6.12	\$ 0.00
Tier 2 (g)	5,001-10,000	\$ 8.43	4,001-10,000	\$ 9.00	\$ 0.57
Tier 3 (g)	10,001-15,000	\$ 13.02	> 10,000	\$ 21.72	\$ 8.70
Tier 4 (g)	>15,000	\$ 17.62	omitted		

- This rate structure is affordable for low water-use customers
- 4,000g water user bill will increase \$3.92/mo from \$38.98 to \$42.90
- Average customer bill will increase \$6.54/mo from \$44.55/mo to \$51.09/mo
- Similar to the City of Santa Fe rates in monthly charge and tiers
- New tiers incentivize conservation, even with average water use customer
- Residential customers in W. Sector close to pre-annexation rates

Proposed Multi-family Rate

One Dwelli	ng Unit	e.g. Ten Dwelling Units		
5/8" Month	ly Service Charge	\$ 18.42	varies w/ meter size	\$184.20
Tier 1 (g)	0-4,000	\$ 6.12	0-40,000	\$ 6.12
Tier 2 (g)	4,001-10,000	\$ 9.00	40,001-100,000	\$ 9.00
Tier 3 (g)	>10,000	\$ 21.72	> 100,000	\$ 21.72

- New class is more equitable
- No current customers in this class
- Applies a multiplier to the monthly service charge based on number of dwelling units
- Applies a multiplier to tier range based on number of dwelling units
- Fixed and variable rates the same as residential (per dwelling unit)
- Several customers anticipated: Elevation, Senior Campus, mobile home parks

Proposed Non-Residential Monthly Service Charge

Meter Size		
(inches)	CURRENT	NEW
5/8	\$ 30.38	\$ 32.81
3/4	\$ 43.59	\$ 47.08
1	\$ 69.42	\$ 74.97
1 1/2	\$ 133.99	\$ 144.71
2	\$ 211.46	\$ 228.38
3	\$ 407.77	\$ 440.39
4	\$ 484.45	\$ 523.21
6	\$ 964.05	\$ 1,041.17
8	\$ 1,539.58	\$ 1,662.75
10	\$ 2,138.00	\$ 2,309.04

- 8% increase in each meter size
- Implemented in a single phase for simplicity

Proposed Rate for Non-Residential After all Phases (with 2 inch or smaller meter)

	Current		New		Delta
Tier 1 (g)	0-5,000	\$ 5.91	0-5,000	\$ 6.38	\$ 0.47
Tier 2 (g)	5,001-10,000	\$ 8.16	5,001-10,000	\$ 8.81	\$ 0.65
Tier 3 (g)	10,001-15,000	\$ 12.65	10,001-15,000	\$ 13.66	\$ 1.01
Tier 4 (g)	>15,000	\$ 17.07	>15,000	\$ 18.44	\$ 1.37

- Tiers do not change
- 8% increase in each tier
- Implemented in 3 phases
- Tiers continue to incentivize conservation
- Customers with > 2-inch meter in different customer class

Proposed Rate for High-volume Users After all Phases (with greater than 2-inch meters)

	Current		New		Delta
Tier 1 (g)	0-5,000	\$ 5.91	All	\$ 6.38	\$ 0.47
Tier 2 (g)	5,001-10,000	\$ 8.16			-\$ 1.78
Tier 3 (g)	10,001-15,000	\$ 12.65			-\$ 6.27
Tier 4 (g)	>15,000	\$ 17.07			-\$ 10.69

- No tiers; all use charged at same rate
- Variable rate of \$6.38
- Increase of 8% above previous Tier 1
- Reduction in rate for all other previous tiers
- Combines several existing customer classes including Mutual Domestic, Government, and Wholesale 1

Proposed Fee Changes

- Fees scaled to recover service costs
- Fees will be charged to user of services
- * Fixes water right acquisition costs @ \$16,000/acre foot with ability to adjust
- Includes a zonal charge for specific circumstances
- Includes annual increase to all rates beginning CY2019 using consumer price index (CPI) escalator



Comparable Residential Rates-6,000 Gallons per Month

- * NMED collects data statewide for 6,000 gallons per month
- * SFC Current \$53.53
- * SFC Proposed after phase I \$59.48
- * SFC Proposed after phase II \$60.90
- City of Santa Fe \$54.78
- * EAWSD (Eldorado) \$89.70
- * Chupadero MDWCA \$39.00
- * Galisteo MDWCA \$30.00
- Greater Chimayo MDWCA \$72.45
- * Greater Glorieta MDWCA \$30.00
- * City of Las Vegas \$43.32

Note - Average
SFC customer uses
4,900 gallons per
month

Planned Outreach

- Individual meetings with interested Commissioners
- * Rate/Fee ordinance presentation and request to publish-11/8/2016 BCC
- * Individual meeting with large customers:
 - * NM Dept. of Corrections, NM Dept. of Military Affairs, Santa Fe Community College, Las Campanas Water Cooperative, SF Co Public Safety, Agua Fria Mutual Domestic
- * Customer bill insert including proposed rate change, notice of public meeting date, and adoption schedule
- Public meeting for customers
- * Possible outreach and survey via social media
- * Rate/Fee ordinance request for approval 11/29/2016 BCC

Summary of Proposed Rate and Fee Increases

- Equitably assigns costs to customer classes
- * Recovers "cost-of-doing-business"
- * Funds utility system repair, replacement and reserves
- * Increases monthly service charge and variable use rate
- * Lowest residential tier range supports conservation
- * 8% increase for non-residential rates (less than 3-inch meter)
- * Combines several current customer classes in to one class of high-volume users to increase equity
- * Charges recover user-based services