

AGENDA ITEM # 4

CITY COUNCIL COMMUNICATION FORM

FROM: Joe Zimmerman, Utility Systems Superintendent
(970) 871-8209

THROUGH: Philo Shelton, Public Works Director (x204)

DATE: August 3, 2010

ITEM: Water and Wastewater Rate Study. The first draft of the rate study is being presented to City Council by Red Oak Consulting for review and comment.

NEXT STEP: Adoption via ordinance with first and second readings on 9/7 and 9/21/2010.

DIRECTION
 INFORMATION
 ORDINANCE
 MOTION
 RESOLUTION

I. REQUEST OR ISSUE:

Review the rate study and provide feed back on the proposal.

II. RECOMMENDED ACTION

Provide comments allowing Red Oak Consulting to finalize the rate study.

III. FISCAL IMPACTS:

This study will provide the path to provide sustainable revenues for the water and wastewater operating and capital improvements funds.

IV. BACKGROUND INFORMATION:

Red Oak Consulting was hired to study the City's water and wastewater rates, and to provide a plan to sustain rates which will put the water and wastewater funds on a sound financial basis now and into the future.

V. LEGAL ISSUES:

None.

VI. CONFLICTS OR ENVIRONMENTAL ISSUES:

None.

VII. SUMMARY AND ALTERNATIVES:

There will be alternatives presented in the rate study that will require Council's direction.

LIST OF ATTACHMENTS

- | | |
|---------------|---|
| Attachment 1. | Memo from Red Oak Consulting. |
| Attachment 2. | Water and wastewater rate study presentation. |



MEMORANDUM

To: Philo Shelton, Public Works Director
City of Steamboat Springs, Colorado

From: Andrew Rheem, Project Manager
Red Oak Consulting

Re: August 3, 2010 City Council Presentation – 2010 Rate and Fee Draft Study Findings

Date: July 27, 2010

The City of Steamboat Springs (City) retained Red Oak Consulting (Red Oak) in 2010 to complete a comprehensive rate and fee study of the City's water and wastewater utility operations.

The study included the following four main components which were completed separately for each utility:

- Prepare 10-year financial plan
- Review and update of tap fees
- Complete cost of service analysis for a single test-year - 2013
- Develop rates for service for 2011 through 2013
 - Two alternatives for City customers
 - Single alternative for wholesale customers

During the August 3, 2010 City Council meeting, Red Oak and City staff will present the study findings, for each of the components previously listed:

10-Year Financial Plan

Working with City staff, Red Oak developed separate water and wastewater 10-year financial planning models. The financial plans evaluate the adequacy of system revenues, adjusted for growth, to:

- Fund annual operation and maintenance (O&M) expenses, debt service and capital costs
- Maintain established financial performance requirements
 - Debt service coverage ratio targets¹
 - End-of-year reserve requirements²

¹ Debt service coverage ratio is the ratio of total system revenues less operating expenditures divided by the annual debt service. The City's targeted debt service coverage ratio is 1.50 times annual debt service with a legal requirement of 1.10 times annual debt service.

² The City's end-of-year cash requirement is 20% or approximately 75 days of annual O&M expenses.

If system revenues are not adequate to fund annual expenditures while exceeding financial performance requirements, the following three variables are used to balance the financial plan:

- Draw down accumulated reserves to fund annual expenditures
- Issue debt to fund a portion of annual capital improvements
- Increase user charges

The summary of key financial plan results and inputs is summarized on pages 1 and 2 of attachment A. Figures 1 and 2 summarize the projected annual increases in rate revenues necessary to fund annual expenditures and meet financial performance thresholds through level annual increases.

Figure 1 – Projected Annual Water Rate Revenue Increases

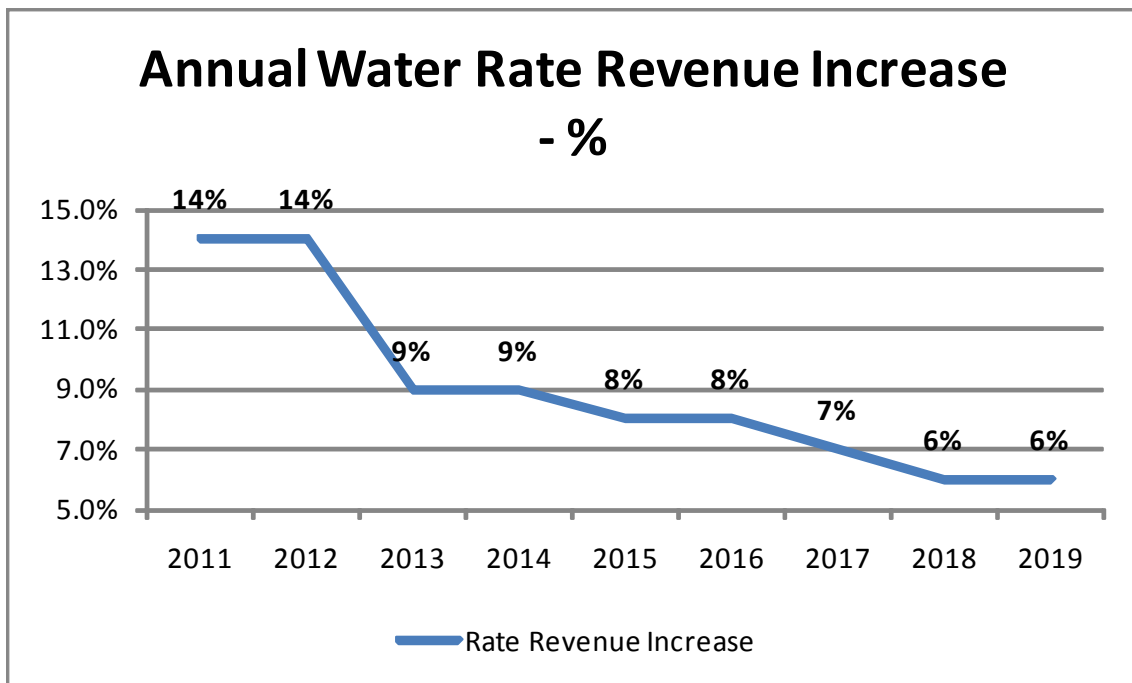
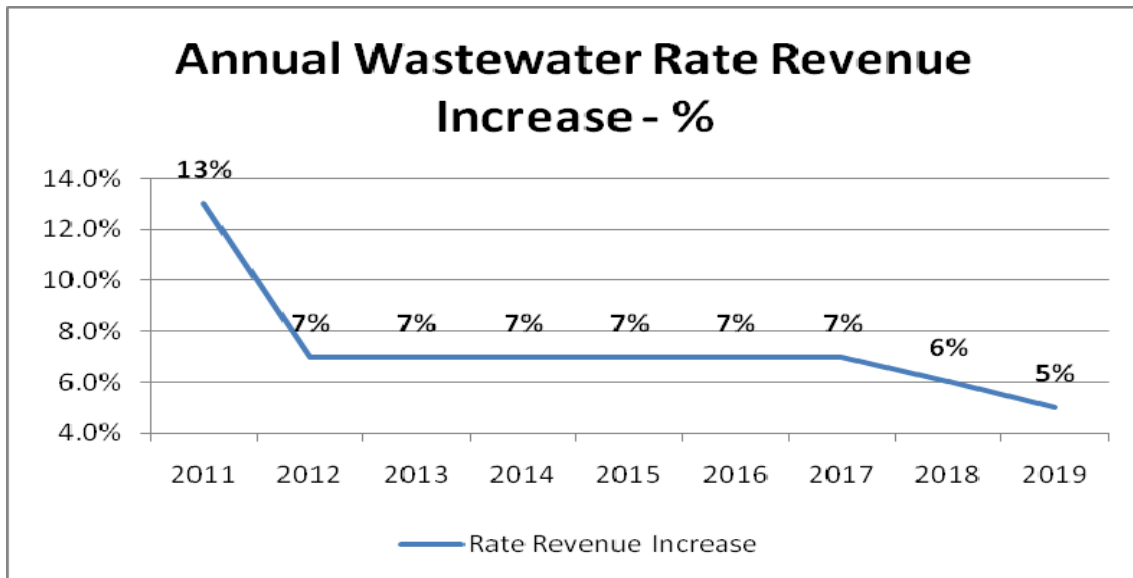


Figure 2 – Projected Annual Wastewater Rate Revenue Increases



A major driver of the financial plan requirements and overall results is the capital improvement plan. City staff developed the 10-year capital improvement plan for each utility. Attachment A, pages 3 through 6 summarize the projected annual growth-related (expansionary) and non-growth related (repair and replacement) capital improvement project listing for water and wastewater respectively.

Tap / Development Fees

Red Oak worked with City staff to evaluate the existing water and wastewater tap fees assessed by the City. Tap fees are one-time capital recovery fees assessed to new development to recover the cost of system capacity to serve new customers.

The City currently assesses three different tap fees; a water system tap fee, a wastewater treatment plant (WWTP) and interceptor tap fee to city, and wholesale customers and a wastewater collection tap fee to only City customers.

Red Oak also worked with City staff to calculate a new water rights tap fee that would be assessed only to new development within the City.

Table 1 summarizes the current and updated water and wastewater tap fees and overall change.

Table 1 – Current and Updated Water and Wastewater Tap Fees per Residential Equivalent

| Description | Current | Calculated | Change |
|--|----------------|-------------------|----------------|
| Water System (1) | \$3,640 | \$4,064 | \$424 |
| Water Rights | 0 | 5,223 | 5,223 |
| Total Water | 3,640 | 9,287 | 5,647 |
| WWTP & Interceptor | \$3,424 | \$4,313 | \$889 |
| Collection System | 371 | 590 | 219 |
| Total Wastewater | 3,795 | 4,903 | 1,108 |
| Total Water and Wastewater | \$7,435 | \$14,190 | \$6,755 |
| (1) Fee assessed per fixture unit. Assumes 140 water fixture units and 130 wastewater fixture units per equivalent residential connection. | | | |

A survey of ten comparable communities summarizes the water, wastewater and combined tap fees and will be discussed during the presentation on August 3rd.

Cost of Service Analysis

Red Oak completed separate water and wastewater cost of service analyses for a 2013 test-year.

Water

The City provides water service to retail customers throughout the water service territory and to one wholesale customer (Steamboat II) that purchases treated water from the City.

Table 2 summarizes the 2013 water cost of service analysis that reflects a 42% cumulative overall system rate revenue increase by 2013 as developed during the financial plan analysis.

Table 2 – 2013 Water Cost of Service Analysis

| | 2013 Test Year | Revenue at | Indicated |
|-----------------------|-----------------------|--------------------|------------------|
| | Cost of | Existing | Revenue |
| Customer Class | Service | Rates | Increase |
| City | | | |
| Residential | \$1,621,584 | \$1,058,003 | 53.27% |
| Commercial | 676,625 | 572,990 | 18.09% |
| Combined | 69,850 | 88,711 | -21.26% |
| Total | 2,368,060 | 1,719,704 | 37.70% |
| Wholesale | | | |
| Steamboat II | 131,614 | 44,814 | 193.69% |
| Total | 131,614 | 44,814 | 193.69% |
| Total System | \$2,499,674 | \$1,764,518 | 41.66% |

Wastewater

The City provides wastewater service to retail customers throughout the sewer service territory and to three wholesale customers that discharge sewer flows for conveyance and treatment at the City’s wastewater treatment plant.

Table 3 summarizes the system components that each customer type uses reflected in the cost of service analysis.

Table 3 – Wastewater System Components by Customer Type

| Cost Type | City | Mt Werner | Steamboat II | Tree Haus |
|---------------------------|-------------|------------------|---------------------|------------------|
| Treatment | X | X | X | X |
| Interceptor | X | X | | X |
| Collection | X | | | |
| Steamboat II Lift Station | | | X | |
| Meters & Services | X | X | X | X |
| Administration | X | X | X | X |

Table 4 summarizes the 2013 wastewater cost of service analysis for all wastewater customers that generate a 29% cumulative overall rate revenue increase.

Table 4 – 2013 Wastewater Cost of Service Analysis

| | | 2013 Test Year | Revenue at | Indicated |
|----------------------------|--|-----------------------|--------------------|------------------|
| | | Cost of | Existing | Revenue |
| Customer Class | | Service | Rates | Increase |
| City | | | | |
| Residential | | \$1,280,686 | \$940,585 | 36.16% |
| Commercial | | 465,173 | 454,954 | 2.25% |
| Combined | | 1,712 | 1,844 | -7.16% |
| Total City | | 1,747,571 | 1,397,383 | 25.06% |
| Wholesale | | | | |
| Steamboat II - Residential | | 148,975 | 34,396 | 333.12% |
| Steamboat II - Commercial | | 1,316 | 716 | 83.80% |
| Steamboat II - Combined | | 0 | 0 | #N/A |
| Total Steamboat II | | 150,291 | 35,112 | 328.03% |
| Mt Werner - Residential | | 810,427 | 781,161 | 3.75% |
| Mt Werner - Commercial | | 296,539 | 152,620 | 94.30% |
| Mt Werner - Combined | | 143,696 | 78,495 | 83.06% |
| Total Mt Werner | | 1,250,662 | 1,012,276 | 23.55% |
| Tree Haus | | 32,450 | 13,979 | 132.13% |
| Total Wholesale | | 1,433,403 | 1,061,367 | 35.05% |
| Total System | | \$3,180,974 | \$2,458,750 | 29.37% |

2011, 2012 and 2013 Rates for Service

Red Oak developed 2011 through 2013 rates for service. The rates include two alternatives for City customers and a single alternative for wholesale customers. The existing rate structure for each customer class was not modified, but service charge per unit and the rate per unit or 1,000 gallons was modified.

Water

For City water customers, Alternative 1 reflects a uniform annual increase to user charges necessary to generate required system revenues. Alternative 2 reflects cost-of-service results phased in over the three-year period while generating sufficient system revenue in each year.

Tables 5 and 6 summarize water rate Alternatives 1 and 2.

Table 5 – 2011 through 2013 Water User Charges - Alternative 1

| | Existing | Phased Rates - Alt. 1 | | |
|---|----------|-----------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - City | | | | |
| Residential | \$15.00 | \$17.10 | \$19.49 | \$21.25 |
| Commercial | 19.50 | 22.23 | 25.34 | 27.62 |
| Combined | 19.50 | 22.23 | 25.34 | 27.62 |
| Residential Volume Rate per 1,000 gallons | | | | |
| 0 - 4,000 gallons | \$1.58 | \$1.80 | \$2.05 | \$2.28 |
| 4,001 - 12,000 gallons | 2.37 | 2.70 | 3.08 | 3.42 |
| 12,001 - 20,000 gallons | 3.63 | 4.14 | 4.72 | 5.24 |
| 20,001 - 28,000 gallons | 4.73 | 5.39 | 6.15 | 6.83 |
| > 28,000 gallons | 7.10 | 8.09 | 9.23 | 10.25 |
| Commercial Volume Rate per 1,000 gallons | \$4.17 | \$4.75 | \$5.42 | \$5.91 |
| Combined Volume Rate per 1,000 gallons | \$4.17 | \$4.75 | \$5.42 | \$5.91 |

Table 6 – 2011 through 2013 Water User Charges - Alternative 2

| | Existing | Phased Rates - Alt. 2 | | |
|---|----------|-----------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - City | | | | |
| Residential | \$15.00 | \$18.92 | \$23.40 | \$26.66 |
| Commercial | 19.50 | 23.95 | 29.20 | 32.70 |
| Combined | 19.50 | 18.92 | 23.40 | 26.66 |
| Residential Volume Rate per 1,000 gallons | | | | |
| 0 - 4,000 gallons | \$1.58 | \$1.80 | \$2.05 | \$2.22 |
| 4,001 - 12,000 gallons | 2.37 | 2.70 | 3.08 | 3.33 |
| 12,001 - 20,000 gallons | 3.63 | 4.14 | 4.71 | 5.10 |
| 20,001 - 28,000 gallons | 4.73 | 5.39 | 6.14 | 6.65 |
| > 28,000 gallons | 7.10 | 8.09 | 9.21 | 9.98 |
| Commercial Volume Rate per 1,000 gallons | \$4.17 | \$4.28 | \$4.41 | \$4.50 |
| Combined Volume Rate per 1,000 gallons | \$4.17 | \$4.28 | \$4.41 | \$4.50 |

The contract with the City’s only wholesale water customer, Steamboat II, specifies a the method for determining the assessed purchased water rate that the City has followed based on treated water costs. Based on inflation assumptions, the City’s treated water costs are anticipated to increase approximately 4% per year equating to a similar increase to Steamboat II’s volume water charge per 1,000 gallons of treated water. The rate will be set annually as has been the City’s historic practice.

Wastewater

For City wastewater customers, Alternative 1 reflects class cost-of-service phased in over the three-year period while generating sufficient system revenue in each year. Alternative 2 rates maintain some subsidy between City commercial and residential customer classifications, but recover the same total revenue from City customers as under Alternative 1.

Tables 7 and 8 summarize the wastewater rate Alternatives 1 and 2 for City customers.

Table 7 – 2011 through 2013 City Wastewater User Charges - Alternative 1

| | Existing | Phased Rates - Alt. 1 | | |
|-------------------------------|----------|-----------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - City | | | | |
| Residential | \$26.88 | \$31.18 | \$33.80 | \$36.60 |
| Commercial | 23.61 | 24.53 | 25.09 | 25.70 |
| Combined | 23.61 | 24.53 | 25.09 | 25.70 |
| Volume Rate per 1,000 gallons | | | | |
| Residential | 0.00 | 0.00 | 0.00 | 0.00 |
| Commercial | 4.97 | 4.98 | 4.99 | 5.00 |
| Combined | 4.97 | 4.98 | 4.99 | 5.00 |

Table 8 – 2011 through 2013 City Wastewater User Charges - Alternative 2

| | Existing | Phased Rates - Alt. 2 | | |
|-------------------------------|----------|-----------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - City | | | | |
| Residential | \$26.88 | \$31.26 | \$33.92 | \$36.00 |
| Commercial | 23.61 | 27.46 | 29.80 | 31.62 |
| Combined | 23.61 | 27.46 | 29.80 | 31.62 |
| Volume Rate per 1,000 gallons | | | | |
| Residential | 0.00 | 0.00 | 0.00 | 0.00 |
| Commercial | 4.97 | 4.97 | 4.97 | 4.97 |
| Combined | 4.97 | 4.97 | 4.97 | 4.97 |

For wholesale wastewater customers, phase-in rates (for 2011 through 2013) were calculated so as to reflect cost of service in 2013. Tables 9 through 11 summarize the rates by customer type and classification for the three wholesale customers.

Table 9 – 2011 through 2013 Steamboat II Wastewater User Charges

| | Existing | Wholesale Customer Rates | | |
|---------------------------------------|----------|--------------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - Steamboat II | | | | |
| Residential | \$7.06 | \$17.48 | \$23.82 | \$30.60 |
| Commercial | 0.00 | 0.00 | 0.00 | 0.00 |
| Volume Rate per 1,000 gallons | | | | |
| Residential | 0.00 | 0.00 | 0.00 | 0.00 |
| Commercial | \$2.67 | \$3.66 | \$4.26 | \$4.91 |

Table 10 – 2011 through 2013 Mt Werner Wastewater User Charges

| | Existing | Wholesale Customer Rates | | |
|------------------------------------|----------|--------------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - Mt Werner | | | | |
| Residential | \$10.59 | \$10.77 | \$10.88 | \$11.00 |
| Commercial | 0.00 | 0.00 | 0.00 | 0.00 |
| Combined | 10.59 | 10.77 | 10.88 | 11.00 |
| Volume Rate per 1,000 gallons | | | | |
| Residential | 0.00 | 0.00 | 0.00 | 0.00 |
| Commercial | 2.67 | 3.74 | 4.39 | 5.08 |
| Combined | \$2.67 | \$3.74 | \$4.39 | \$5.08 |

Table 11 – 2011 through 2013 Tree Haus Wastewater User Charges

| | Existing | Wholesale Customer Rates | | |
|------------------------------------|----------|--------------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - Tree Haus | | | | |
| Residential | \$10.59 | \$16.77 | \$20.53 | \$24.55 |

During the August 3rd presentation, Red Oak will present impacts to customer bills for each of the rate structure alternatives as well as results of a survey of the water and wastewater rates and monthly bills of ten comparable communities’.

City of Steamboat Springs, Colorado
2010 Rate and Fee Study – City Council Presentation
Attachment A

| | <u>Page</u> |
|--|-------------|
| Water Decision Criteria | 1 |
| Wastewater Decision Criteria | 2 |
| Water Growth-Related Capital Projects – 2010 through 2019 | 3 |
| Water Non-Growth Related Capital Projects – 2010 through 2019 | 4 |
| Wastewater Growth-Related Capital Projects – 2010 through 2019 | 5 |
| Wastewater Non-Growth Related Capital Projects – 2010 through 2019 | 6 |

STEAMBOAT SPRINGS, COLORADO
 2010 RATE & FEE STUDY
 DECISION CRITERIA - WATER

FILE: Stmboat_W
 SCHEDULE: Dec_Crit
 DATE: 07/27/10
 RANGE: DECCRIT1

| Line No. | DESCRIPTION | Estimated | Projected | | | | | | | | |
|---|---|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| 1 | Rate Revenue Increase | 0.0% | 14.0% | 14.0% | 9.0% | 9.0% | 8.0% | 8.0% | 7.0% | 6.0% | 6.0% |
| 2 | Effective Month of Rate Increase (effective 1st day of month: 1=Jan 12=Dec) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | Typical Residential Bill (1 unit and 7 kgals per mont | \$28.43 | \$32.41 | \$36.95 | \$40.27 | \$43.90 | \$47.41 | \$51.20 | \$54.79 | \$58.07 | \$61.56 |
| 4 | Water System Fee Increase | 0.0% | 11.7% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| 5 | Effective Month of Fee Increase (effective 1st day of month: 1=Jan 12=Dec) | - | - | - | - | - | - | - | - | - | - |
| 6 | Water System Fee per Fixture | \$26.00 | \$29.03 | \$29.61 | \$30.20 | \$30.81 | \$31.42 | \$32.05 | \$32.69 | \$33.35 | \$34.01 |
| 7 | Water Resource Fee per ERU | \$0 | \$5,223 | \$5,327 | \$5,434 | \$5,543 | \$5,654 | \$5,767 | \$5,882 | \$6,000 | \$6,120 |
| Bond/Loan Proceeds | | | | | | | | | | | |
| 8 | Operations Subfund Revenue Bonds | \$0 | \$8,000,000 | \$0 | \$3,900,000 | \$0 | \$3,300,000 | \$0 | \$2,900,000 | \$0 | \$1,500,000 |
| 9 | Development Fee Subfund Revenue Bonds | 0 | 2,800,000 | 0 | 0 | 0 | 500,000 | 0 | 1,800,000 | 0 | 0 |
| 10 | Total | \$0 | \$10,800,000 | \$0 | \$3,900,000 | \$0 | \$3,800,000 | \$0 | \$4,700,000 | \$0 | \$1,500,000 |
| Loans (to) Development Fee Subfund from Operations Subfund | | | | | | | | | | | |
| 11 | Annual | (\$250,000) | \$0 | \$0 | \$265,302 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 12 | Payments | - | - | - | - | - | - | - | - | - | - |
| 13 | Cumulative Loan Balance | \$250,000 | \$255,000 | \$260,100 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 14 | (Principal & Accrued Int) | | | | | | | | | | |
| Cash Balances - End of Year | | | | | | | | | | | |
| 15 | Operations Subfund | \$420,407 | \$2,843,219 | \$249,846 | \$2,554,209 | \$278,051 | \$1,590,728 | \$299,364 | \$1,617,796 | \$288,521 | \$344,055 |
| 16 | Development Fee Subfund | 18,788 | 572,069 | 16,116 | 74,664 | 702,945 | 1,603,093 | 171,377 | 49,701 | 610,350 | 1,103,834 |
| 17 | Total Fund | \$439,195 | \$3,415,287 | \$265,962 | \$2,628,873 | \$980,996 | \$3,193,820 | \$470,741 | \$1,667,498 | \$898,871 | \$1,447,889 |
| 18 | Debt Service Coverage Includes Dev. Fees [1] | 9.17 | 2.13 | 1.79 | 2.06 | 2.01 | 1.92 | 1.91 | 1.80 | 1.75 | 1.81 |
| 19 | Debt Service Coverage Excludes Dev. Fees [1] | 8.98 | 1.77 | 1.36 | 1.26 | 1.29 | 1.26 | 1.30 | 1.24 | 1.23 | 1.28 |
| 20 | Cash Reserve Ratio [2] - Operations Subfund | 44.3% | 272.8% | 22.3% | 219.3% | 23.0% | 126.3% | 22.9% | 118.7% | 20.4% | 23.3% |
| 21 | Cash Reserve Ratio [2] - Total Fund | 46.3% | 327.7% | 23.7% | 225.7% | 81.0% | 253.5% | 35.9% | 122.4% | 63.4% | 98.3% |
| 22 | Cumulative Debt Issued | \$0 | \$10,800,000 | \$10,800,000 | \$14,700,000 | \$14,700,000 | \$18,500,000 | \$18,500,000 | \$23,200,000 | \$23,200,000 | \$24,700,000 |
| 23 | Cumulative % of CIP Funded by Debt | 0.0% | 113.8% | 81.2% | 94.2% | 79.6% | 88.3% | 73.8% | 78.6% | 73.1% | 72.4% |
| Funded CIP - Inflated \$ | | | | | | | | | | | |
| 24 | Operations Subfund | \$1,801,038 | \$5,356,278 | \$3,081,513 | \$1,965,977 | \$2,804,699 | \$2,236,583 | \$1,935,827 | \$2,031,424 | \$2,131,766 | \$2,237,087 |
| 25 | Development Fee Subfund | 249,285 | 2,085,147 | 733,904 | 325,633 | 56,275 | 260,605 | 2,168,697 | 2,429,849 | 63,339 | 182,185 |
| 26 | Total Annual CIP | 2,050,323 | 7,441,425 | 3,815,417 | 2,291,609 | 2,860,974 | 2,497,188 | 4,104,524 | 4,461,273 | 2,195,104 | 2,419,272 |
| 27 | Cumulative CIP Amount | \$2,050,323 | \$9,491,748 | \$13,307,165 | \$15,598,775 | \$18,459,749 | \$20,956,937 | \$25,061,461 | \$29,522,734 | \$31,717,838 | \$34,137,110 |

[1] Target debt service coverage including development fees: 1.5 Legal requirement of 1.1

[2] Target ending cash balance as a percent of O&M expenditures: 20%

STEAMBOAT SPRINGS, COLORADO
 2010 RATE & FEE STUDY
 DECISION CRITERIA - WASTEWATER

FILE: Stmboat_WW
 SCHEDULE: 0
 DATE: 07/27/10
 RANGE: DECCRIT1

| Line No. | DESCRIPTION | Estimated | | | | | Projected | | | | |
|--|--|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| 1 | Rate Revenue Increase | 0.0% | 13.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 7.0% | 6.0% | 5.0% |
| 2 | Effective Month of Rate Increase (effective 1st day of month: 1=Jan 12=Dec) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | Typical Residential Bill | \$26.88 | \$30.37 | \$32.50 | \$34.78 | \$37.21 | \$39.81 | \$42.60 | \$45.58 | \$48.32 | \$50.73 |
| 4 | Wastewater Treatment Development Fee Increase | 0.0% | 26.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| 5 | Wastewater Collection Development Fee Increase | 0.0% | 59.3% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| 6 | Effective Month of Fee Increase (effective 1st day of month: 1=Jan 12=Dec) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | Wastewater Treatment Development Fee per Fixture U | \$26.34 | \$33.18 | \$33.84 | \$34.52 | \$35.21 | \$35.92 | \$36.63 | \$37.37 | \$38.11 | \$38.88 |
| 8 | Wastewater Collection Fee per Fixture Unit | \$2.85 | \$4.54 | \$4.63 | \$4.72 | \$4.82 | \$4.91 | \$5.01 | \$5.11 | \$5.22 | \$5.32 |
| Bond/Loan Proceeds | | | | | | | | | | | |
| 9 | Operations Subfund Revenue Bonds | \$0 | \$4,000,000 | \$0 | \$3,000,000 | \$0 | \$3,000,000 | \$0 | \$3,750,000 | \$0 | \$2,500,000 |
| 10 | Development Fee Subfund Revenue Bonds | 0 | 600,000 | 0 | 750,000 | 0 | 750,000 | 0 | 5,125,000 | 0 | 2,000,000 |
| 11 | Total | \$0 | \$4,600,000 | \$0 | \$3,750,000 | \$0 | \$3,750,000 | \$0 | \$8,875,000 | \$0 | \$4,500,000 |
| Loan (to) Development Fee Subfund from Operations Subfund | | | | | | | | | | | |
| 12 | Annual | (\$650,000) | (\$580,000) | (\$225,000) | \$225,000 | \$175,000 | \$500,000 | \$0 | \$0 | (\$325,000) | (\$250,000) |
| 13 | Payments | - | - | - | - | - | - | - | - | - | - |
| 14 | Cumulative Loan Balance | \$650,000 | \$1,243,000 | \$1,492,860 | \$1,297,717 | \$1,148,672 | \$671,645 | \$685,078 | \$698,779 | \$1,037,755 | \$1,308,510 |
| 15 | (Principal & Accrued Int) | | | | | | | | | | |
| Cash Balances - End of Year | | | | | | | | | | | |
| 16 | Operations Subfund | \$1,643,960 | \$2,783,956 | \$993,403 | \$2,238,104 | \$1,176,912 | \$3,171,641 | \$1,256,387 | \$2,767,139 | \$441,132 | \$446,569 |
| 17 | Development Fee Subfund | 14,901 | 49,915 | 14,657 | 9,524 | 23,165 | 516,693 | 27,279 | 3,777,658 | 24,206 | 13,002 |
| 18 | Total Fund | \$1,658,861 | \$2,833,870 | \$1,008,060 | \$2,247,628 | \$1,200,077 | \$3,688,335 | \$1,283,666 | \$6,544,797 | \$465,338 | \$459,571 |
| 19 | Debt Service Coverage Including Dev. Fees [1] | 1.38 | 1.51 | 1.57 | 1.94 | 1.88 | 1.88 | 1.98 | 1.82 | 1.61 | 1.60 |
| 20 | Debt Service Coverage Excluding Dev. Fees [1] | 1.32 | 1.28 | 1.16 | 1.17 | 1.17 | 1.22 | 1.32 | 1.26 | 1.12 | 1.13 |
| 21 | Cash Reserve Ratio [2] - Operations Subfund | 113.1% | 178.2% | 61.1% | 132.4% | 67.0% | 173.5% | 66.1% | 140.0% | 21.5% | 20.9% |
| 22 | Cash Reserve Ratio [2] - Total Fund | 114.1% | 181.4% | 62.0% | 133.0% | 68.3% | 201.8% | 67.5% | 331.0% | 22.6% | 21.5% |
| 23 | Cumulative Debt Issued | \$0 | \$4,600,000 | \$4,600,000 | \$8,350,000 | \$8,350,000 | \$12,100,000 | \$12,100,000 | \$20,975,000 | \$20,975,000 | \$25,475,000 |
| 24 | Cumulative % of CIP Funded by Debt | 0.0% | 78.1% | 56.1% | 72.9% | 61.3% | 76.4% | 61.4% | 87.2% | 66.7% | 68.7% |
| Funded CIP - Inflated \$ | | | | | | | | | | | |
| 25 | Operations Subfund | \$2,516,390 | \$2,699,161 | \$2,270,907 | \$2,495,892 | \$2,065,895 | \$2,201,643 | \$3,077,139 | \$3,213,560 | \$3,356,280 | \$3,505,598 |
| 26 | Development Fee Subfund | 32,500 | 644,800 | 36,823 | 754,406 | 109,273 | 0 | 802,218 | 1,124,797 | 4,024,147 | 2,168,710 |
| 27 | Total Annual CIP | 2,548,890 | 3,343,961 | 2,307,729 | 3,250,298 | 2,175,167 | 2,201,643 | 3,879,357 | 4,338,358 | 7,380,427 | 5,674,308 |
| 28 | Cumulative CIP Amount | \$2,548,890 | \$5,892,851 | \$8,200,580 | \$11,450,878 | \$13,626,046 | \$15,827,689 | \$19,707,046 | \$24,045,403 | \$31,425,830 | \$37,100,138 |

[1] Target debt service coverage including development fee: 1.5. Legal requirement of 1.1
 [2] Target ending cash balance as a percent of O&M expenditures: 20%

STEAMBOAT SPRINGS, COLORADO
 2010 RATE & FEE STUDY
 CAPITAL IMPROVEMENT PROJECTS
 (Inflated \$)

FILE: Stmboat_W
 SCHEDULE: CIP
 DATE: 07/27/10
 RANGE: CIP_INFL

| Line No. | DESCRIPTION | Function | Estimated | Projected | | | | | | | | Growth | Total | |
|---------------------------------|---|----------|------------------|--------------------|------------------|------------------|-----------------|------------------|--------------------|--------------------|-----------------|------------------|-------|--------------------|
| | | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | | Percent Allocation |
| Growth Related CIP | | | | | | | | | | | | | | |
| 1 | Airport Water Redundancy | 4 | \$69,000 | \$104,947 | \$256,207 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | 23% | \$430,154 |
| 2 | Water Distribution System Expansion (Fairview area) | 4 | 5,875 | 378,525 | 389,881 | - | - | - | - | - | - | - | 50% | 774,281 |
| 3 | Fish Creek Reservoir Capacity Options | 3 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 4 | Water Main Replacement | 4 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 5 | Land Acquisition Costs | 2 | 32,660 | 33,758 | 34,771 | - | - | - | - | - | - | - | 23% | 101,189 |
| 6 | 1.0 MG West City Tank Including 16-inch main | 1 | 51,750 | 479,723 | - | - | - | - | - | - | - | - | 23% | 531,473 |
| 7 | Yampa River Infiltration Gallery Expansion | 3 | 90,000 | 1,036,695 | - | - | - | - | - | - | - | - | 50% | 1,126,695 |
| 8 | Street Shop Expansion | 5 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 9 | Meter Reading Conversion | 5 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 10 | Water Rights Firming | 2 | - | 51,500 | 53,045 | 54,636 | 56,275 | 57,964 | 59,703 | 61,494 | 63,339 | 65,239 | 50% | 523,194 |
| 11 | Rate Study | 5 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 12 | Booster Pump Station & PRV - W of Overlook | 4 | - | - | - | - | - | 106,653 | - | - | - | - | 23% | 106,653 |
| 13 | 12-inch Main - 12th Street to Indian Trails | 4 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 14 | Fish Creek Water Filtration Plant Expansion | 3 | - | - | - | - | - | 95,988 | 2,017,053 | 1,412,744 | - | 116,947 | 100% | 3,642,731 |
| 15 | Skyline Tank Zone Redundancy | 1 | - | - | - | 270,996 | - | - | - | - | - | - | 62% | 270,996 |
| 16 | Water Distribution System Expansion (West Lincoln area) | 4 | - | - | - | - | - | - | 91,942 | 955,612 | - | - | 100% | 1,047,554 |
| Total Growth Related CIP | | | \$249,285 | \$2,085,147 | \$733,904 | \$325,633 | \$56,275 | \$260,605 | \$2,168,697 | \$2,429,849 | \$63,339 | \$182,185 | | \$8,554,920 |

DRAFT - PRELIMINARY

STEAMBOAT SPRINGS, COLORADO
 2010 RATE & FEE STUDY
 CAPITAL IMPROVEMENT PROJECTS
 (Inflated \$)

FILE: Stmboat_W
 SCHEDULE: CIP
 DATE: 07/27/10
 RANGE: CIP_INFL2

| Line No. | DESCRIPTION | Function | Estimated | Projected | | | | | | | | Non-Growth | | |
|-------------------------------------|---|----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|
| | | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Percent Allocation | Total |
| Non-Growth Related CIP | | | | | | | | | | | | | | |
| 1 | Airport Water Redundancy | 4 | \$231,000 | \$351,343 | \$857,738 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | 77% | \$1,440,081 |
| 2 | Water Distribution System Expansion (Fairview area) | 4 | 5,875 | 378,525 | 389,881 | - | - | - | - | - | - | - | 50% | 774,281 |
| 3 | Fish Creek Reservoir Capacity Options | 3 | 175,000 | 180,250 | - | - | - | - | - | - | - | - | 100% | 355,250 |
| 4 | Water Main Replacement | 4 | 803,574 | 1,470,000 | 1,543,500 | 1,620,675 | 1,701,700 | 1,786,785 | 1,876,124 | 1,969,930 | 2,068,427 | 2,171,848 | 100% | 17,012,563 |
| 5 | Land Acquisition Costs | 2 | 109,340 | 113,017 | 116,407 | - | - | - | - | - | - | - | 77% | 338,764 |
| 6 | 1.0 MG West City Tank Including 16-inch main | 1 | 173,250 | 1,606,028 | - | - | - | - | - | - | - | - | 77% | 1,779,278 |
| 7 | Yampa River Infiltration Gallery Expansion | 3 | 90,000 | 1,036,695 | - | - | - | - | - | - | - | - | 50% | 1,126,695 |
| 8 | Street Shop Expansion | 5 | 157,999 | - | - | - | - | - | - | - | - | - | 100% | 157,999 |
| 9 | Meter Reading Conversion | 5 | - | 168,920 | 120,943 | 124,571 | - | - | - | - | - | - | 100% | 414,433 |
| 10 | Water Rights Firming | 2 | - | 51,500 | 53,045 | 54,636 | 56,275 | 57,964 | 59,703 | 61,494 | 63,339 | 65,239 | 50% | 523,194 |
| 11 | Rate Study | 5 | 55,000 | - | - | - | - | 34,778 | - | - | - | - | 100% | 89,778 |
| 12 | Booster Pump Station & PRV - W of Overlook | 4 | - | - | - | - | - | 357,056 | - | - | - | - | 77% | 357,056 |
| 13 | 12-inch Main - 12th Street to Indian Trails | 4 | - | - | - | - | 1,046,723 | - | - | - | - | - | 100% | 1,046,723 |
| 14 | Fish Creek Water Filtration Plant Expansion | 3 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 15 | Skyline Tank Zone Redundancy | 1 | - | - | - | 166,095 | - | - | - | - | - | - | 38% | 166,095 |
| 16 | Water Distribution System Expansion (West Lincoln area) | 4 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| Total Non-Growth Related CIP | | | \$1,801,038 | \$5,356,278 | \$3,081,513 | \$1,965,977 | \$2,804,699 | \$2,236,583 | \$1,935,827 | \$2,031,424 | \$2,131,766 | \$2,237,087 | | \$25,582,190 |

DRAFT - PRELIMINARY

STEAMBOAT SPRINGS, COLORADO
 2010 RATE & FEE STUDY
 CAPITAL IMPROVEMENT PROJECTS
 (Inflated \$)

FILE: Stmboat_WW
 SCHEDULE: CIP
 DATE: 07/27/10
 RANGE: CIP_INFL

| Line No. | DESCRIPTION | Function | Estimated | Projected | | | | | | | | | Growth Percent | Total |
|-------------------------------------|--------------------------------------|----------|-----------------|------------------|-----------------|------------------|------------------|------------|------------------|--------------------|--------------------|--------------------|----------------|--------------------|
| | | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Allocation | |
| Growth Related CIP | | | | | | | | | | | | | | |
| Wastewater Collection System | | | | | | | | | | | | | | |
| 1 | Collection Main Replacement | 3 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | 0% | \$0 |
| 2 | Riverwalk Sewer Cost Sharing | 3 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 3 | Meter Conversion | 5 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 4 | Dream Island Interceptor Replacement | 2 | 32,500 | 644,800 | 36,823 | 754,406 | - | - | - | - | - | - | 65% | 1,468,528 |
| 5 | Mt Werner Interceptor Replacement | 2 | - | - | - | - | - | - | 802,218 | 826,284 | 851,073 | 876,605 | 50% | 3,356,179 |
| 6 | I&I Reduction | 2 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 7 | Lagoon Reclamation | 5 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 8 | Shop Expansion | 5 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 9 | Rate Study | 5 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| WWTP | | | | | | | | | | | | | | |
| 10 | Bar Screen Replacement | 1 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 11 | Polishing Pond Liner | 1 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 12 | Payment Maintenance | 1 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 13 | UV Modules (addition) | 1 | - | - | - | - | 109,273 | - | - | - | - | - | 100% | 109,273 |
| 14 | Digester #4 | 1 | - | - | - | - | - | - | - | 298,513 | 3,074,685 | - | 100% | 3,373,198 |
| 15 | Blower Addition | 1 | - | - | - | - | - | - | - | - | 98,390 | - | 100% | 98,390 |
| 16 | Administration/Lunch Room Addition | 1 | - | - | - | - | - | - | - | - | - | 443,370 | 100% | 443,370 |
| 17 | Major Capital Maintenance Projects | 1 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 18 | Steamboat II Lift Station Rebuild | 4 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 19 | Lower Field Improvements | 1 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| WSSAP | | | | | | | | | | | | | | |
| 20 | New WSSA Lift Station | 6 | - | - | - | - | - | - | - | - | - | 848,736 | 100% | 848,736 |
| Total Growth Related CIP | | | \$32,500 | \$644,800 | \$36,823 | \$754,406 | \$109,273 | \$0 | \$802,218 | \$1,124,797 | \$4,024,147 | \$2,168,710 | | \$9,697,674 |

DRAFT - PRELIMINARY

STEAMBOAT SPRINGS, COLORADO
 2010 RATE & FEE STUDY
 CAPITAL IMPROVEMENT PROJECTS
 (Inflated \$)

FILE: Stmboat_WW
 SCHEDULE: CIP
 DATE: 07/27/10
 RANGE: CIP_INFL2

| Line No. | DESCRIPTION | Function | Estimated | Projected | | | | | | | | Non-Growth | Total | |
|-------------------------------------|--------------------------------------|----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------|---------------------|
| | | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | | Allocation |
| Non-Growth Related CIP | | | | | | | | | | | | | | |
| Wastewater Collection System | | | | | | | | | | | | | | |
| 1 | Collection Main Replacement | 3 | \$1,084,450 | \$1,526,699 | \$1,603,034 | \$1,683,185 | \$1,767,345 | \$1,855,713 | \$1,948,498 | \$2,045,922 | \$2,148,218 | \$2,255,630 | 100% | \$17,918,695 |
| 2 | Rivenwalk Sewer Cost Sharing | 3 | 230,000 | - | - | - | - | - | - | - | - | - | 100% | 230,000 |
| 3 | Meter Conversion | 5 | - | 164,000 | 117,420 | 120,943 | - | - | - | - | - | - | 100% | 402,363 |
| 4 | Dream Island Interceptor Replacement | 2 | 17,500 | 347,200 | 19,828 | 406,219 | - | - | - | - | - | - | 35% | 790,746 |
| 5 | Mt Werner Interceptor Replacement | 2 | - | - | - | - | - | - | 802,218 | 826,284 | 851,073 | 876,605 | 50% | 3,356,179 |
| 6 | I&I Reduction | 2 | - | 60,000 | 61,800 | 63,654 | 65,564 | 67,531 | 69,556 | 71,643 | 73,792 | 76,006 | 100% | 609,546 |
| 7 | Lagoon Reclamation | 5 | 125,433 | - | - | - | - | - | - | - | - | - | 100% | 125,433 |
| 8 | Shop Expansion | 5 | 158,407 | - | - | - | - | - | - | - | - | - | 100% | 158,407 |
| 9 | Rate Study | 5 | 15,600 | - | - | - | - | 33,765 | - | - | - | - | 100% | 49,365 |
| WWTP | | | | | | | | | | | | | | |
| 10 | Bar Screen Replacement | 1 | 500,000 | - | - | - | - | - | - | - | - | - | 100% | - |
| 11 | Polishing Pond Liner | 1 | 275,000 | - | - | - | - | - | - | - | - | - | 100% | 500,000 |
| 12 | Payment Maintenance | 1 | - | 400,000 | - | - | - | - | - | - | - | - | 100% | 400,000 |
| 13 | UV Modules (addition) | 1 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 14 | Digester #4 | 1 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 15 | Blower Addition | 1 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 16 | Administration/Lunch Room Addition | 1 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| 17 | Major Capital Maintenance Projects | 1 | - | 201,262 | 211,325 | 221,891 | 232,986 | 244,635 | 256,867 | 269,711 | 283,196 | 297,356 | 100% | 2,219,230 |
| 18 | Steamboat II Lift Station Rebuild | 4 | - | - | 257,500 | - | - | - | - | - | - | - | 100% | 257,500 |
| 19 | Lower Field Improvements | 1 | 110,000 | - | - | - | - | - | - | - | - | - | 100% | 110,000 |
| WSSAP | | | | | | | | | | | | | | |
| 20 | New WSSA Lift Station | 6 | - | - | - | - | - | - | - | - | - | - | 0% | - |
| Total Non-Growth Related CIP | | | \$2,516,390 | \$2,699,161 | \$2,270,907 | \$2,495,892 | \$2,065,895 | \$2,201,643 | \$3,077,139 | \$3,213,560 | \$3,356,280 | \$3,505,598 | | \$27,402,465 |

DRAFT - PRELIMINARY

City of Steamboat Springs

2010 Water and Wastewater Rate and Fee Study

City Council Briefing Draft Study Findings

August 3, 2010

Agenda

- Overview of Rate and Fee Study
- Review 10-Year Financial Plan
- Review Calculated Tap Fees
- Discuss Water and Wastewater Cost of Service Analysis
 - Results
 - 2011 through 2013 Rates for Service
 - Customer Bill Impacts and Rate Survey
- Discussion / Next Steps

Pathways to Lasting Solutions



Notes:

Rate and Fee Study

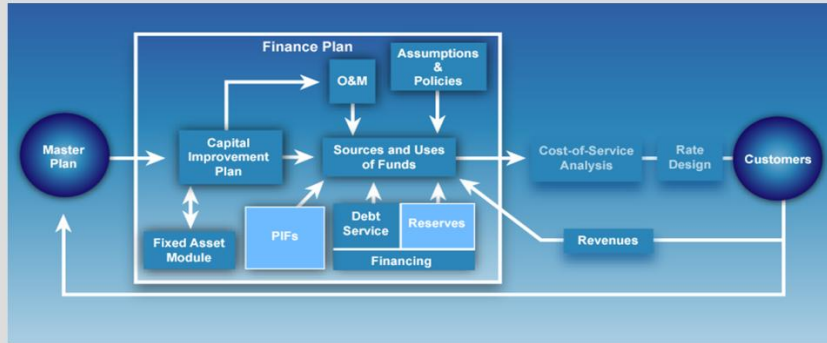
- Four Major Components
 - 10-year Financial Plan
 - Cost of Service Analysis for Single, 2013 Test-Year
 - Rate and Fees for 2011, 2012 and 2013
 - City
 - Wholesale Customers
 - Updated Tap Fees for January 1, 2011
 - Presentation of Preliminary Recommendations
 - Finalization of Study and Issuance of Report
 - Delivery of Model, User Manual and Training Session

Pathways to Lasting Solutions



Notes:

Financial Planning Element is the First Part of the Study



Pathways to Lasting Solutions



Notes:

Prudent Financial Planning

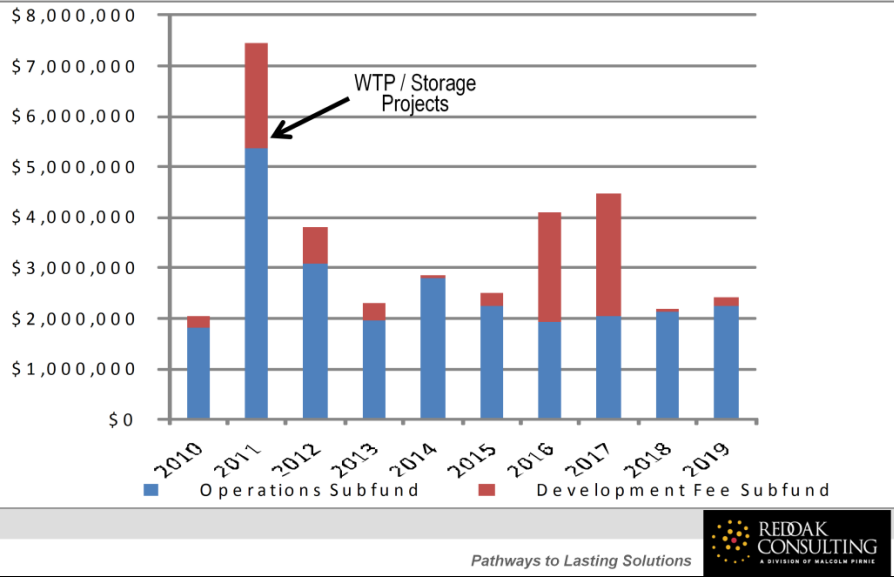
- Total System Revenue Must Be Sufficient To Meet:
 - O&M, Debt Service, And Capital Requirements
 - End-of-Year Cash Reserve Target
 - 20% of Annual O&M Expenses
 - Debt Service Coverage Requirements
 - Target of 1.50 times annual debt service
 - Legal requirement is 1.10 times
- Segment each Utility into Operations (Rate) and Tap Fee (Growth) Funds
- Variables to “Balance” Financial Plan
 - Draw Down Reserves
 - Debt Issuance to Fund Capital Improvements
 - Increases in Rate Revenues

Pathways to Lasting Solutions



Notes:

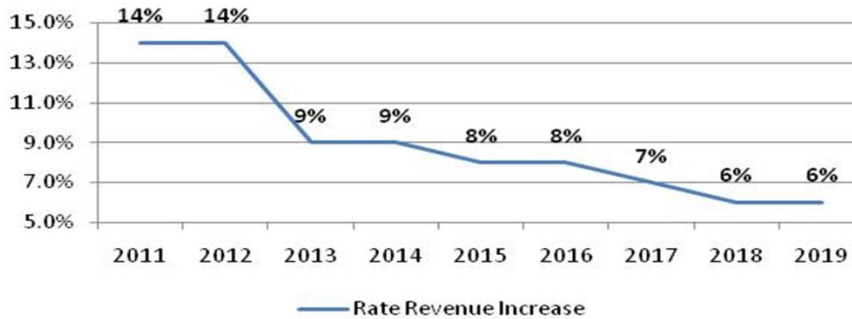
Annual Water Capital Expenditures



Notes:

Financial Plan Results – Annual Increases are Needed

Annual Water Rate Revenue Increase
- %

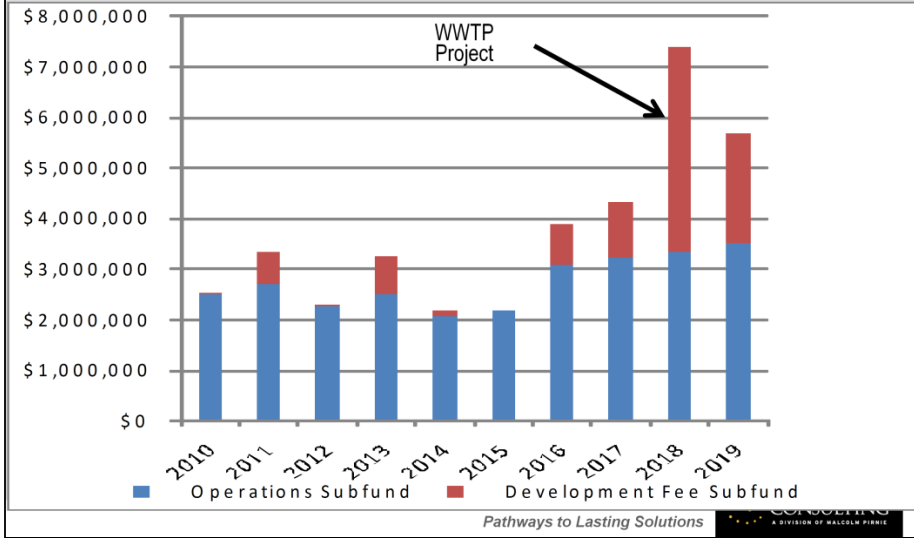


Pathways to Lasting Solutions



Notes:

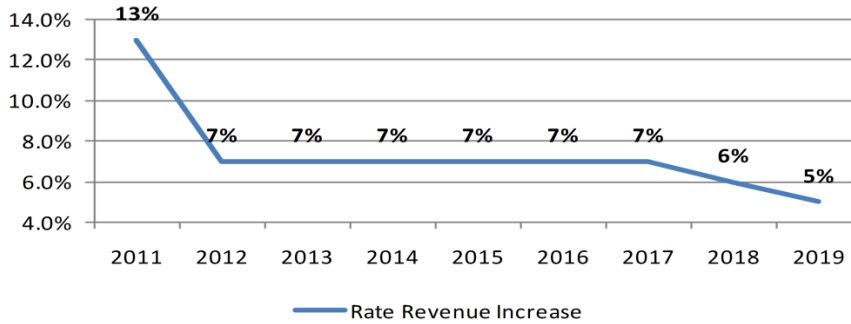
Annual Wastewater Capital Expenditures



Notes:

Financial Plan Results – Annual Increases are Needed

Annual Wastewater Rate Revenue Increase - %



Pathways to Lasting Solutions



Notes:

Update Tap Fees

- Water System
- WWTP and Interceptor
 - Applies to all City and Wholesale Customers
- Wastewater Collection System
 - Applies only to City Customers
- New Tap Fee
 - Water Rights per Equivalent Residential Connection
 - ½ acre-foot of water rights per equivalent connection
 - Based on most recent City water resource project
 - 1996 Reservoir Expansion

Pathways to Lasting Solutions



Notes:

Updated Tap Fees – City Only Customers

| Description | Current | Updated | Change |
|-----------------------------------|---------------------|---------------------|---------------------|
| Water System (1) | \$ 3,640 | \$ 4,064 | \$ 424 |
| Water Rights | <u>0</u> | <u>5,223</u> | <u>5,223</u> |
| Total Water | 3,640 | 9,287 | 5,647 |
| | | | |
| WWTP & Interceptor (1) | 3,424 | 4,313 | 889 |
| Collection System (1) | <u>371</u> | <u>590</u> | <u>219</u> |
| Total Wastewater | <u>3,795</u> | <u>4,903</u> | <u>1,108</u> |
| | | | |
| Total Water and Wastewater | \$ 7,435 | \$ 14,190 | \$ 6,755 |

(1) Fee assessed per fixture unit. Assumes 140 water fixture units and 130 wastewater fixture units per equivalent residential connection.

Pathways to Lasting Solutions



Notes:

Updated Tap Fees – Wholesale Customers

| Description | Current | Updated | Change |
|------------------------|----------|----------|--------|
| Water System (1) | \$ 1,820 | \$ 2,032 | \$ 212 |
| WWTP & Interceptor (1) | 3,424 | 4,313 | 889 |

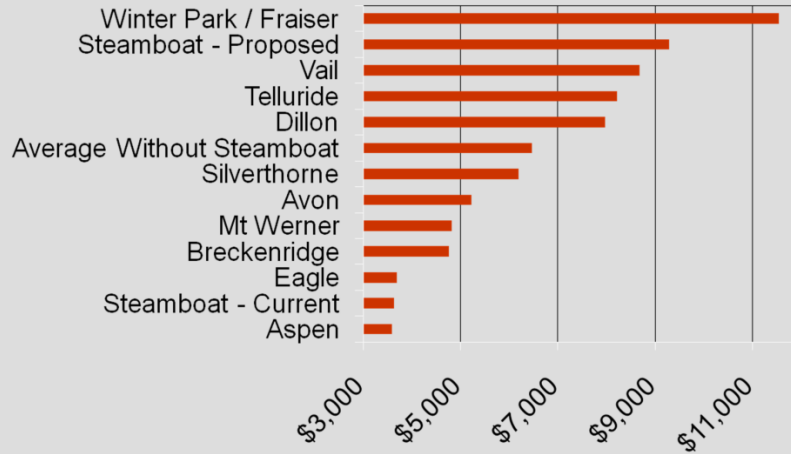
(1) Steamboat II remits 50% of City's water system tap fee for each residential equivalent. Water rights tap fee only applies to City development. Fee assessed per fixture unit. WWTP & Interceptor Tap Fee assessed to development within Steamboat II, Mt Werner and Tree Haus. Assumes 140 water fixture units and 130 wastewater fixture units per equivalent residential connection.

Pathways to Lasting Solutions



Notes:

Water Tap Fee Survey



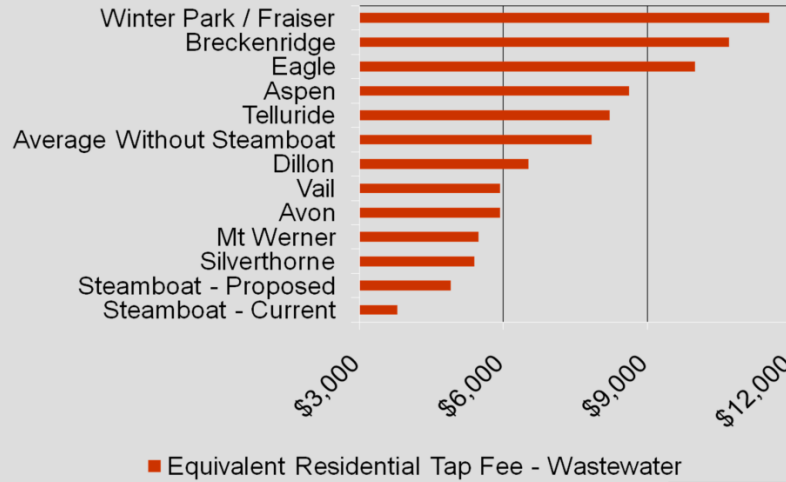
■ Equivalent Residential Tap Fee - Water

Pathways to Lasting Solutions



Notes:

Wastewater Tap Fee Survey



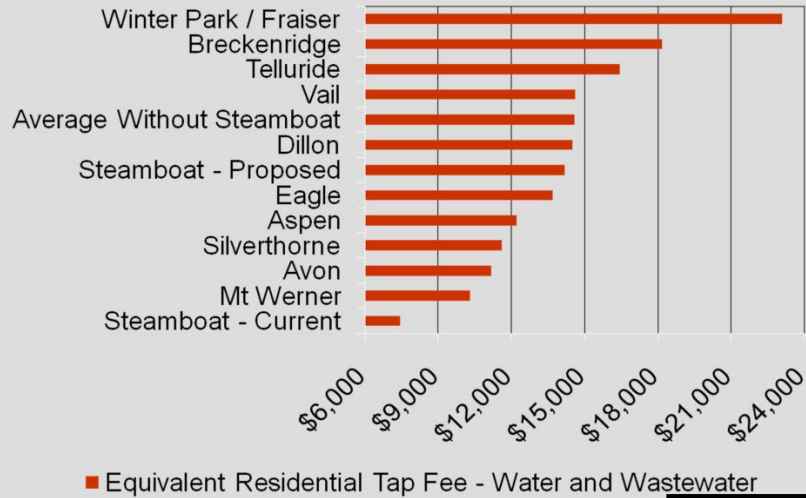
■ Equivalent Residential Tap Fee - Wastewater

Pathways to Lasting Solutions



Notes:

Water and Wastewater Tap Fee Survey



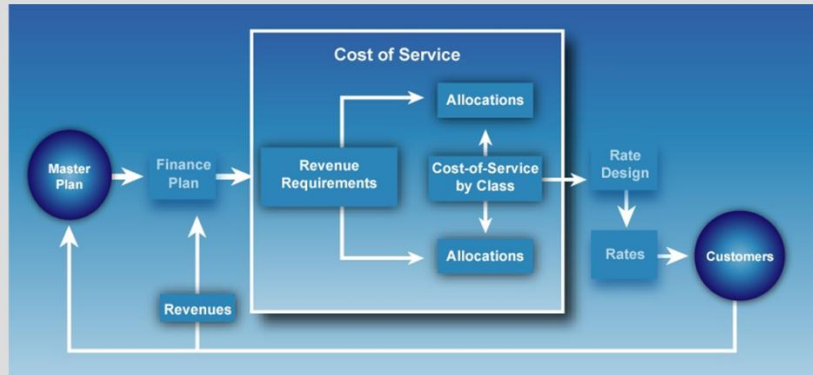
■ Equivalent Residential Tap Fee - Water and Wastewater

Pathways to Lasting Solutions



Notes:

Cost of Service and Rate Design Are the Second and Third Steps in the Study



Pathways to Lasting Solutions



Notes:

Cost of Service and Rate Design Completed for Retail and Wholesale Customer Groups

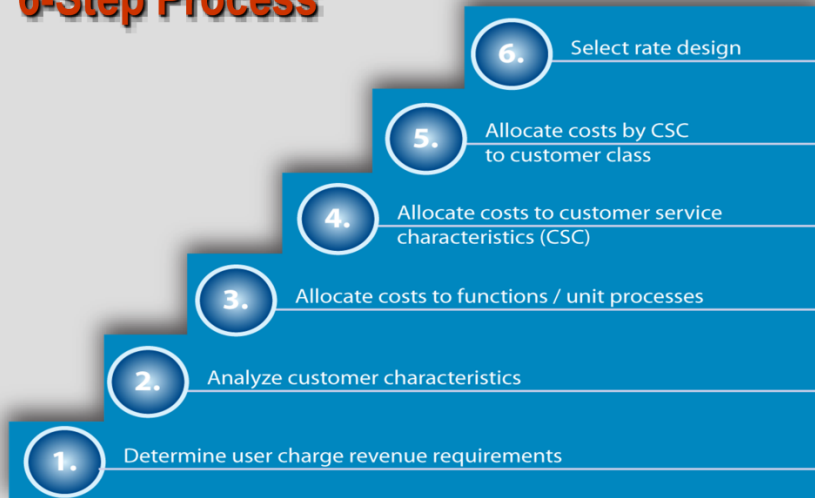
- 2013 Test-Year for Cost-of-Service Analysis
 - Water
 - City
 - Steamboat II
 - Wastewater
 - City
 - Steamboat II
 - Mt Werner
 - Tree Haus

Pathways to Lasting Solutions



Notes:

Cost of Service and Rate Setting 6-Step Process



Pathways to Lasting Solutions



Notes:

Cost of Service to Existing Revenue - Water

| Customer Class | 2013 Test Year Cost of Service | Revenue at Existing Rates | Indicated Revenue Increase |
|---------------------|--------------------------------------|---------------------------------|----------------------------------|
| City | | | |
| Residential | \$1,621,584 | \$1,058,003 | 53.27% |
| Commercial | 676,625 | 572,990 | 18.09% |
| Combined | 69,850 | 88,711 | -21.26% |
| Total | 2,368,060 | 1,719,704 | 37.70% |
| Wholesale | | | |
| Steamboat II | 131,614 | 44,814 | 193.69% |
| Total | 131,614 | 44,814 | 193.69% |
| Total System | \$2,499,674 | \$1,764,518 | 41.66% |

Pathways to Lasting Solutions



Notes:

Water Rate Alternatives

- Alternative 1
 - Uniform increases applied to existing water rates; existing cost relationships maintained
- Alternative 2
 - Phase-in to cost of service based rates by 2013
- Steamboat II
 - Rate governed by contract
 - Assessed a treated water rate per 1,000 gallons
 - Anticipated to increase for inflation

Pathways to Lasting Solutions



Notes:

Alternative 1 Water Rates - City

| | Existing | Phased Rates - Alt. 1 | | |
|---|----------|-----------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - City | | | | |
| Residential | \$15.00 | \$17.10 | \$19.49 | \$21.25 |
| Commercial | 19.50 | 22.23 | 25.34 | 27.62 |
| Combined | 19.50 | 22.23 | 25.34 | 27.62 |
| Residential Volume Rate per 1,000 gallons | | | | |
| 0 - 4,000 gallons | \$1.58 | \$1.80 | \$2.05 | \$2.28 |
| 4,001 - 12,000 gallons | 2.37 | 2.70 | 3.08 | 3.42 |
| 12,001 - 20,000 gallons | 3.63 | 4.14 | 4.72 | 5.24 |
| 20,001 - 28,000 gallons | 4.73 | 5.39 | 6.15 | 6.83 |
| > 28,000 gallons | 7.10 | 8.09 | 9.23 | 10.25 |
| Commercial Volume Rate per 1,000 gallons | \$4.17 | \$4.75 | \$5.42 | \$5.91 |
| Combined Volume Rate per 1,000 gallons | \$4.17 | \$4.75 | \$5.42 | \$5.91 |

Pathways to Lasting Solutions



Notes:

Alternative 2 Water Rates - City

| | Existing | Phased Rates - Alt. 2 | | |
|---|----------|-----------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - City | | | | |
| Residential | \$15.00 | \$18.92 | \$23.40 | \$26.66 |
| Commercial | 19.50 | 23.95 | 29.20 | 32.70 |
| Combined | 19.50 | 18.92 | 23.40 | 26.66 |
| Residential Volume Rate per 1,000 gallons | | | | |
| 0 - 4,000 gallons | \$1.58 | \$1.80 | \$2.05 | \$2.22 |
| 4,001 - 12,000 gallons | 2.37 | 2.70 | 3.08 | 3.33 |
| 12,001 - 20,000 gallons | 3.63 | 4.14 | 4.71 | 5.10 |
| 20,001 - 28,000 gallons | 4.73 | 5.39 | 6.14 | 6.65 |
| > 28,000 gallons | 7.10 | 8.09 | 9.21 | 9.98 |
| Commercial Volume Rate per 1,000 gallons | \$4.17 | \$4.28 | \$4.41 | \$4.50 |
| Combined Volume Rate per 1,000 gallons | \$4.17 | \$4.28 | \$4.41 | \$4.50 |

Pathways to Lasting Solutions



Notes:

Bill Impact – City and Wholesale Water Rates

| Customer Classification | Monthly | | | 2011 | | | 2012 | | | 2013 | | |
|--------------------------------|---------|----------|----------|--------|-------|----------|--------|-------|----------|--------|-------|---|
| | Use | Current | | \$ | \$ | % | \$ | \$ | % | \$ | \$ | % |
| | kgal | | | | | | | | | | | |
| Alternative 1 | | | | | | | | | | | | |
| Inside City - Residential | 7 | \$28.43 | \$32.41 | \$3.98 | 14.0% | \$36.95 | \$4.54 | 14.0% | 40.63 | \$3.68 | 10.0% | |
| Inside City - Residential | 15 | 51.17 | 58.33 | 7.16 | 14.0% | 66.50 | 8.17 | 14.0% | 73.44 | 6.94 | 10.4% | |
| Inside City - Residential | 20 | 69.32 | 79.02 | 9.70 | 14.0% | 90.09 | 11.06 | 14.0% | 99.63 | 9.55 | 10.6% | |
| Inside City - Commercial | 28 | 136.26 | 155.34 | 19.08 | 14.0% | 177.08 | 21.75 | 14.0% | 193.02 | 15.94 | 9.0% | |
| Alternative 2 | | | | | | | | | | | | |
| Inside City - Residential | 7 | 28.43 | 34.22 | 5.79 | 20.4% | 40.83 | 6.61 | 19.3% | 45.53 | 4.71 | 11.5% | |
| Inside City - Residential | 15 | 51.17 | 60.13 | 8.96 | 17.5% | 70.33 | 10.20 | 17.0% | 77.48 | 7.15 | 10.2% | |
| Inside City - Residential | 20 | 69.32 | 80.80 | 11.48 | 16.6% | 93.88 | 13.07 | 16.2% | 102.98 | 9.11 | 9.7% | |
| Inside City - Commercial | 28 | 136.26 | 143.79 | 7.53 | 5.5% | 152.68 | 8.89 | 6.2% | 158.70 | 6.02 | 3.9% | |
| Steamboat II - Residential (1) | 3651 | 3,734.97 | 3,884.37 | 149.40 | 4.0% | 4,039.75 | 155.37 | 4.0% | 4,201.34 | 161.59 | 4.0% | |

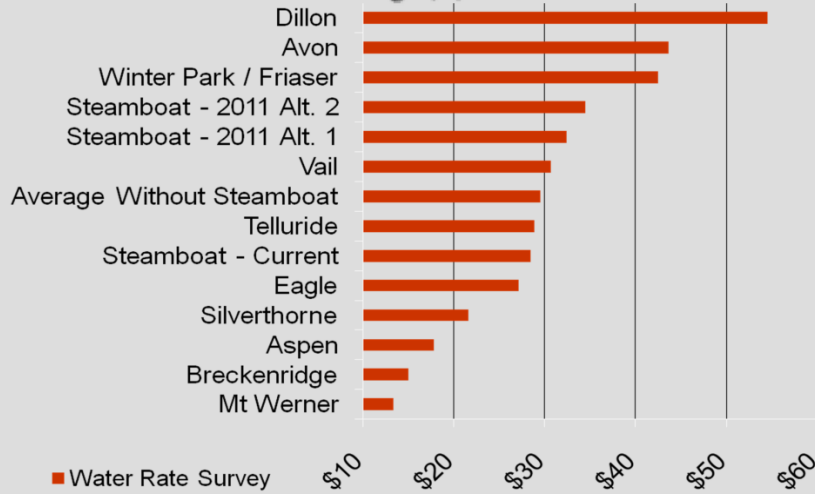
(1) Inflation adjustment to rate; not cost of service.

Pathways to Lasting Solutions



Notes:

Water Rate Survey (1)

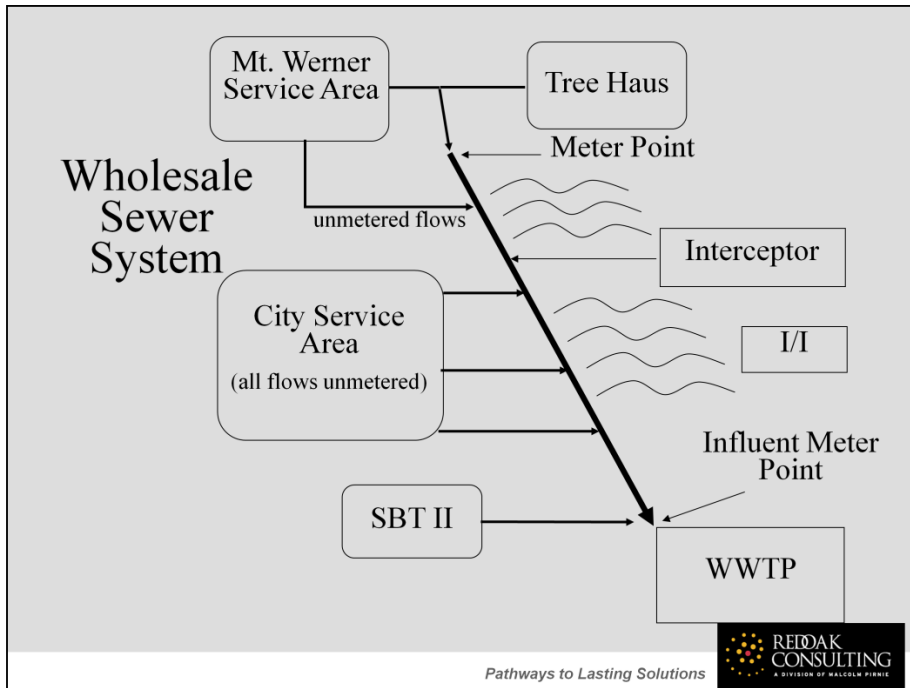


(1) 1 EQR with 7,000 gallons per month water use.

Pathways to Lasting Solutions



Notes:



Notes:

Cost of Service to Existing Revenue - Wastewater

| Customer Class | 2013 Test Year Cost of Service | Revenue at Existing Rates | Indicated Revenue Increase |
|-------------------|--------------------------------------|---------------------------------|----------------------------------|
| City | | | |
| Residential | \$1,280,686 | \$940,585 | 36.16% |
| Commercial | 465,173 | 454,954 | 2.25% |
| Combined | 1,712 | 1,844 | -7.16% |
| Total City | \$1,747,571 | \$1,397,383 | 25.06% |

Pathways to Lasting Solutions



Notes:

Cost of Service to Existing Revenue - Wastewater

| Customer Class | 2013 Test Year Cost of Service | Revenue at Existing Rates | Indicated Revenue Increase |
|----------------------------|--------------------------------------|---------------------------------|----------------------------------|
| Wholesale | | | |
| Steamboat II - Residential | \$148,975 | \$34,396 | 333.12% |
| Steamboat II - Commercial | 1,316 | 716 | 83.80% |
| Steamboat II - Combined | 0 | 0 | #N/A |
| Total Steamboat II | \$150,291 | \$35,112 | 328.03% |

Pathways to Lasting Solutions



Notes:

Cost of Service to Existing Revenue - Wastewater

| Customer Class | 2013 Test Year Cost of Service | Revenue at Existing Rates | Indicated Revenue Increase |
|-------------------------|--------------------------------------|---------------------------------|----------------------------------|
| Wholesale | | | |
| Mt Werner - Residential | \$810,427 | \$781,161 | 3.75% |
| Mt Werner - Commercial | 296,539 | 152,620 | 94.30% |
| Mt Werner - Combined | 143,696 | 78,495 | 83.06% |
| Total Mt Werner | \$1,250,662 | \$1,012,276 | 23.55% |

Pathways to Lasting Solutions



Notes:

Cost of Service to Existing Revenue - Wastewater

| Customer Class | 2013 Test Year Cost of Service | Revenue at Existing Rates | Indicated Revenue Increase |
|----------------|--------------------------------------|---------------------------------|----------------------------------|
| Wholesale | | | |
| Tree Haus | \$32,450 | \$13,979 | 132.13% |

Pathways to Lasting Solutions



Notes:

Wastewater Rate Alternatives

- Alternative 1
 - Phase-in to cost of service based rates by 2013
- Alternative 2
 - Approaches cost of service based rates by 2013
 - Some subsidy from Commercial to Residential customers continues to exist
- Wholesale customers
 - Phase-in to cost of service by 2013

Pathways to Lasting Solutions



Notes:

Alternative 1 Wastewater Rates - City

| | Existing | Phased Rates - Alt. 1 | | |
|-------------------------------|----------|-----------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - City | | | | |
| Residential | \$26.88 | \$31.18 | \$33.80 | \$36.60 |
| Commercial | 23.61 | 24.53 | 25.09 | 25.70 |
| Combined | 23.61 | 24.53 | 25.09 | 25.70 |
| Volume Rate per 1,000 gallons | | | | |
| Residential | 0.00 | 0.00 | 0.00 | 0.00 |
| Commercial | 4.97 | 4.98 | 4.99 | 5.00 |
| Combined | 4.97 | 4.98 | 4.99 | 5.00 |

Pathways to Lasting Solutions



Notes:

Alternative 2 Wastewater Rates - City

| | Existing | Phased Rates - Alt. 2 | | |
|-------------------------------|----------|-----------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - City | | | | |
| Residential | \$26.88 | \$31.26 | \$33.92 | \$36.00 |
| Commercial | 23.61 | 27.46 | 29.80 | 31.62 |
| Combined | 23.61 | 27.46 | 29.80 | 31.62 |
| Volume Rate per 1,000 gallons | | | | |
| Residential | 0.00 | 0.00 | 0.00 | 0.00 |
| Commercial | 4.97 | 4.97 | 4.97 | 4.97 |
| Combined | 4.97 | 4.97 | 4.97 | 4.97 |

Pathways to Lasting Solutions



Notes:

Customer Bill Impact From Rates - City

| Customer Classification | Avg Use / Bill | Current | | | | | | | | | |
|---------------------------|----------------|----------|----------|--------|-------|----------|--------|------|----------|--------|------|
| | | 2011 | | 2012 | | | 2013 | | | | |
| | | \$ | \$ | \$ | % | \$ | \$ | % | \$ | \$ | % |
| Alternative 1 | | | | | | | | | | | |
| Inside City - Residential | | \$26.88 | \$31.18 | \$4.30 | 16.0% | \$33.80 | \$2.62 | 8.4% | \$36.60 | \$2.80 | 8.3% |
| Inside City - Commercial | 18 | \$113.07 | \$114.17 | \$1.10 | 1.0% | \$114.91 | \$0.74 | 0.6% | \$115.70 | \$0.79 | 0.7% |
| Alternative 2 | | | | | | | | | | | |
| Inside City - Residential | | \$26.88 | \$31.26 | \$4.38 | 16.3% | \$33.92 | \$2.66 | 8.5% | \$36.00 | \$2.08 | 6.1% |
| Inside City - Commercial | 18 | \$113.07 | \$116.92 | \$3.85 | 3.4% | \$119.26 | \$2.34 | 2.0% | \$121.08 | \$1.82 | 1.5% |

Pathways to Lasting Solutions



Notes:

Wastewater Rates – Steamboat II

| | Existing | Wholesale Customer Rates | | |
|---------------------------------------|----------|--------------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - Steamboat II | | | | |
| Residential | \$7.06 | \$17.48 | \$23.82 | \$30.60 |
| Commercial | 0.00 | 0.00 | 0.00 | 0.00 |
| Volume Rate per 1,000 gallons | | | | |
| Residential | 0.00 | 0.00 | 0.00 | 0.00 |
| Commercial | \$2.67 | \$3.66 | \$4.26 | \$4.91 |

Pathways to Lasting Solutions



Notes:

Wastewater Rates – Mt Werner

| | Existing | Wholesale Customer Rates | | |
|------------------------------------|----------|--------------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - Mt Werner | | | | |
| Residential | \$10.59 | \$10.77 | \$10.88 | \$11.00 |
| Commercial | 0.00 | 0.00 | 0.00 | 0.00 |
| Combined | 10.59 | 10.77 | 10.88 | 11.00 |
| Volume Rate per 1,000 gallons | | | | |
| Residential | 0.00 | 0.00 | 0.00 | 0.00 |
| Commercial | 2.67 | 3.74 | 4.39 | 5.08 |
| Combined | \$2.67 | \$3.74 | \$4.39 | \$5.08 |

Pathways to Lasting Solutions



Notes:

Wastewater Rates – Tree Haus

| | Existing | Wholesale Customer Rates | | |
|------------------------------------|----------|--------------------------|---------|---------|
| | 2010 | 2011 | 2012 | 2013 |
| Monthly Service Charge - Tree Haus | | | | |
| Residential | \$10.59 | \$16.77 | \$20.53 | \$24.55 |

Pathways to Lasting Solutions



Notes:

Customer Bill Impact From Rates – Wholesale Customers

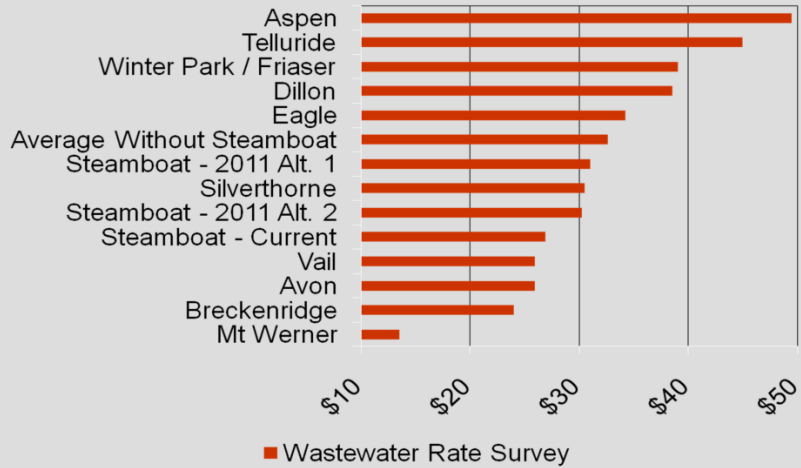
| Customer Classification | Avg Use / Bill | Current | | 2011 | | 2012 | | | 2013 | | |
|----------------------------|-------------------|----------------------------|----------|----------|--------|----------|---------|-------|----------|---------|-------|
| | | \$ | \$ | \$ | % | \$ | \$ | % | \$ | \$ | % |
| | | Wholesale Customers | | | | | | | | | |
| Steamboat II - Residential | | \$7.06 | \$17.48 | \$10.42 | 147.6% | \$23.82 | \$6.34 | 36.3% | \$30.60 | \$6.78 | 28.5% |
| Steamboat II - Commercial | 20 | \$53.40 | \$73.20 | \$19.80 | 37.1% | \$85.20 | \$12.00 | 16.4% | \$98.20 | \$13.00 | 15.3% |
| Mt Werner - Residential | | \$10.59 | \$10.77 | \$0.18 | 1.7% | \$10.88 | \$0.11 | 1.0% | \$11.00 | \$0.12 | 1.1% |
| Mt Werner - Commercial | 52 | \$48.06 | \$194.48 | \$146.42 | 304.7% | \$228.28 | \$33.80 | 17.4% | \$264.16 | \$35.88 | 15.7% |
| Tree Haus - Residential | | \$10.59 | \$16.77 | \$6.18 | 58.4% | \$20.53 | \$3.76 | 22.4% | \$24.55 | \$4.02 | 19.6% |



Pathways to Lasting Solutions

Notes:

Wastewater Rate Survey (1)



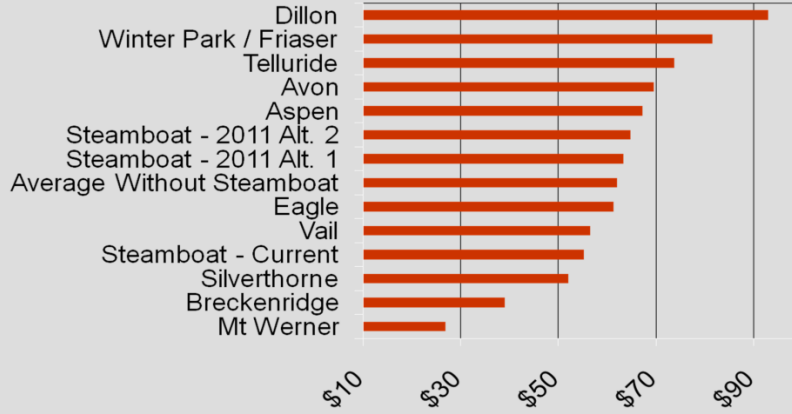
(1) 1 EQR with 4,000 gallons per month billed wastewater use.

Pathways to Lasting Solutions



Notes:

Water and Wastewater Rate Survey (1)



■ Water and Wastewater Rate Survey

(1) 1 EQR with 7,000 gallons water use per month and 4,000 gallons per month billed wastewater use.

Pathways to Lasting Solutions



Notes:

Discussion

- Discuss Recommendations and Rate Alternatives
- Next Steps
 - Finalize Study and Rate and Fees Proposed for Adoption by City Council
 - January 1, 2011 Effective Date Assumed
 - Special Connectors Agreement Expires in November 2010
 - Update to reflect rate study

Pathways to Lasting Solutions



Notes:

For Additional Information Contact:

Rick Giardina
Vice President
303-316-6505
rgiardina@pirnie.com

Andrew Rheem
Senior Consultant
303-316-6525
arheem@pirnie.com

Red Oak Consulting
100 Fillmore Street, Suite 200
Denver, CO 80206

Phone: (303) 316-6500
Fax: (303) 316-6599

Pathways to Lasting Solutions



Notes:
