


10/10/06 Sorenson / McGregor
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1


Final



**Board of Directors Meeting
October 18, 2006**

**A. Refined Levels of Service, Rates, and
Rate Structures
B. Rate System Policies
C. Billing Implementation
D. Technical Information for Public Outreach**


Jon Sorensen
Bob McGregor
Carrie Thompson




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Today's Presentation

• Refined Levels of Service and Supporting Rates	Jon
• Refined Rate Structure Options	Jon
• Pending Rate System Policies	Bob
• Billing Implementation	Carrie
• Technical Information for Public Outreach	Jon



Board of Directors Meeting - October 18, 2006 - Levels of Service, Rate Structures and Rates



Proposed Level of Service (refined)

Three Categories- now aligned with budget

- | | |
|-----------------------|----------------------------------|
| 1. Program Costs- | <i>refined from last meeting</i> |
| 2. Maintenance Costs- | <i>refined from last meeting</i> |
| 3. Capital Costs- | <i>same as last meeting</i> |



Board of Directors Meeting - October 18, 2006 - Levels of Service, Rate Structures and Rates



Proposed Level of Service *Recommended Increases in Service and Inflation* (refined)

1. Program (salaries, benefits, building, services and administration)
 - *Five Year NPDES Permit Terms Drive Program*
 - Program Salaries and Benefits increase: **15% once every 5 yrs**
 - Services and Admin. increase: **5% once every 5 yrs**
 - Building and related increase: **20% every 7 yrs**
 - Inflation increases: **5% per year**

2. Maintenance-
 - Increase: **100% in 8 Years**
(from low level to medium level)

 - Inflation increases: **4% per year**



Board of Directors Meeting - October 18, 2006 - Levels of Service, Rate Structures and Rates



Proposed Level of Service

Recommended Level of Service Increases

3. Capital-

- Increase: None- Steady State program
- **Inflation increases** 3% per year
- Critical CIP: \$30 Million Constructed in Years 1 - 10
- Medium CIP: \$20 Million Constructed in Years 11 - 20
- Emerging Needs: \$0.75 Million per year for yet to be identified needs for emergencies and new master plans
- **3% inflation increases annually**

THIS SLIDE
DID NOT
MATCH
PRESENTATION.



Board of Directors Meeting - October 18, 2006 - Levels of Service, Rate Structures and Rates



Proposed Level of Service

Level of Service Categories Revised to Match 2006 and 2007 Budget

1. Program Costs portion of 2006 and 2007 Budget:

	2006	2007
Operating Expenses		
Salaries and Benefits (maintenance portion in 2007 (\$267,000) moved to maintenance, below)	\$44,481	\$1,770,880
Building and Related	\$130,500	\$223,692
Field Operations (moved to Maintenance, below)	-	-
Services and Administration	\$243,025	\$479,792
Consultant Services	\$440,000	\$260,000
Non-operating Expenditures		
Bank Loan Payments (Principle)	\$102,269	\$633,057
Bank Loan Payments (Interest)	\$30,923	\$166,094
Repayment of City and County Loans	-	\$700,000
TOTAL PROGRAM COSTS	\$991,558	\$4,233,515

Proposed Level of Service

Level of Service Categories Revised to Match 2006 and 2007 Budget

2. Maintenance Costs portion of 2006 and 2007 Budget:

	2006	2007
<i>Operating Expenses</i>		
Salaries and Benefits (maintenance portion)		\$267,000
Field Operations	\$409,750	\$740,865
<i>Non-operating Expenditures</i>		
None		
TOTAL MAINTENANCE COSTS	\$409,750	\$1,007,865

Proposed Level of Service

Level of Service Categories Revised to Match 2006 and 2007 Budget

3. Capital Costs portion of 2006 and 2007 Budget:

	2006	2007
<i>Operating Expenses</i>		
None	-	-
<i>Non-operating Expenditures</i>		
Capital Projects – Unrestricted	-	\$4,676,000
Capital Projects - Restricted	-	-
TOTAL CAPITAL COSTS	-	\$4,676,000

Proposed Rates to Meet Level of Service

- Initial fee for the median single family residential (detached) parcel is:
\$6.50 per month or \$78.00 per year
- Initial fee for non single family residential (detached) is the same rate per square foot for 41% to 70% impervious, less for 2% to 40%, and more for 71% to 100%
- Automatic annual increase is 5% to account for inflation and increases in levels of service
- Assumption of 1.75% increase in rate base due to development of additional impervious area (not an increase in rates or fees).

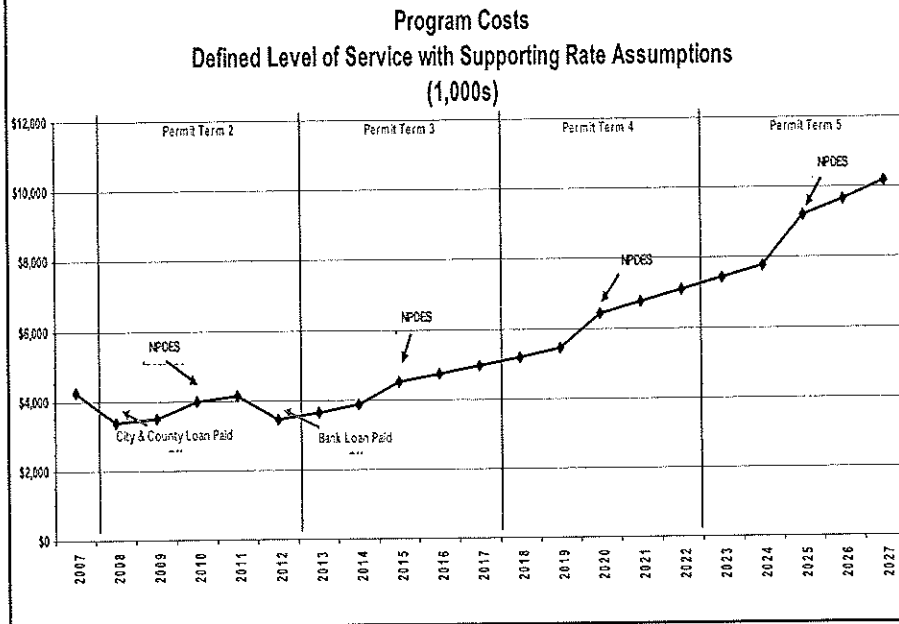
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MATCH.

Proposed Level of Service and Rates

Review of Handouts
Showing Refined 20 Year Budget and Rates

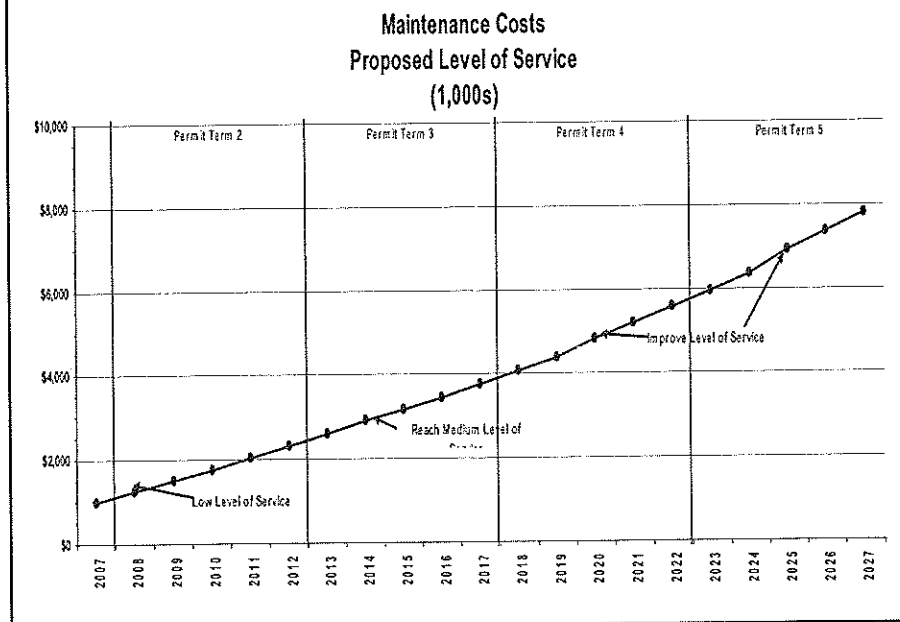
Proposed Level of Service and Rates

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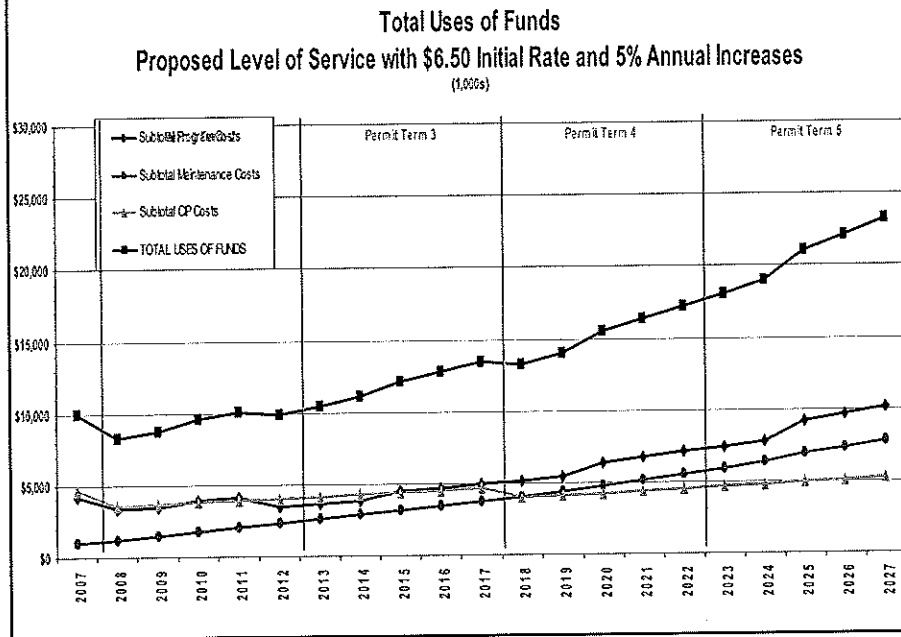
Proposed Level of Service and Rates

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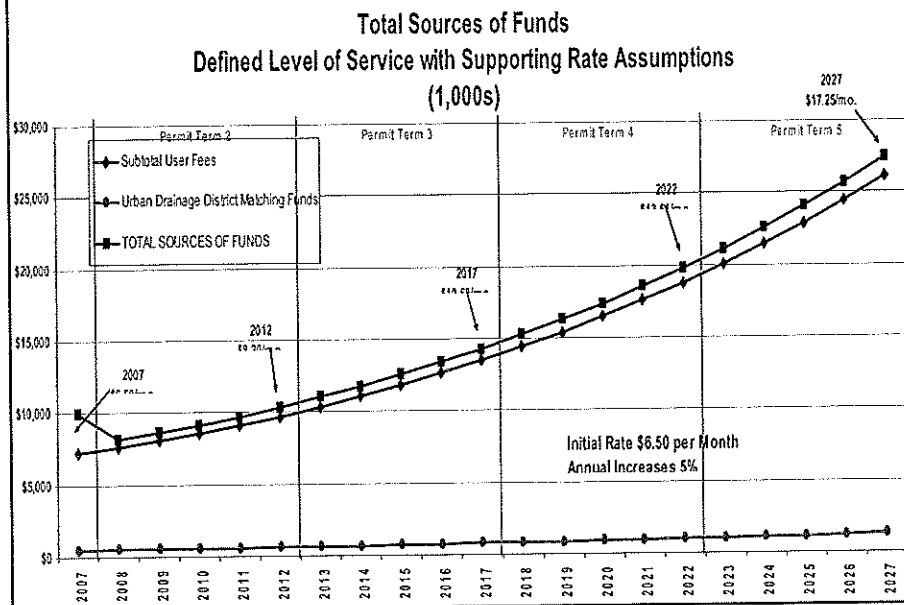
Proposed Level of Service and Rates

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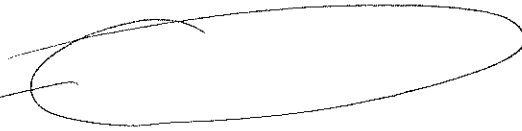


Proposed Level of Service and Rates

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Refined Rate Structure Options



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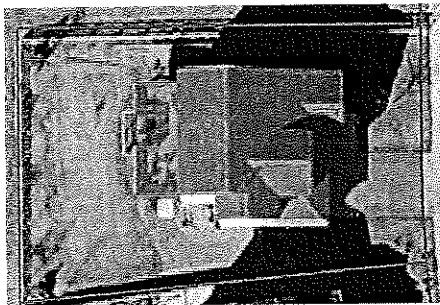


Board of Directors Meeting - October 18, 2011 - Levels of Service, Rate Structures and Rates



Refined Rate Structure Options

Single Family Residential (detached)



- 5 Tiers
- Credits for Low Percentage Impervious Parcels



Board of Directors Meeting - October 18, 2011 - Levels of Service, Rate Structures and Rates



Refined Rate Structure Options
Single Family Residential (detached)

Tier	Impervious Area Range (square feet)		Monthly Fee	Annual Fee
1	100	1,000	\$3.75	\$45.00
2	1,001	2,900	\$5.00	\$60.00
3	2,901	3,862	\$6.50	\$78.00
4	3,863	7,500	\$8.75	\$105.00
5	10,001 7,501	50,000	\$19.00	\$228.00



Board of Directors Meeting - October 18, 2018 - Levels of Service, Rate Structures and Rates



Refined Rate Structure Options
Single Family Residential (detached)

Tier	Impervious Area Range (square feet)		Number of Parcels
1	100	1,000	1,955
2	1,001	2,900	14,702
3	2,901	3,862	17,020
4	3,863	7,500	9,119
5	10,001 7,501	50,000	992
TOTAL			43,778



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Refined Rate Structure Options
Single Family Residential (detached)

Tier	Impervious Area Range (square feet)		Annual Revenue
1	100	1,000	\$87,975
2	1,001	2,900	\$882,120
3	2,901	3,862	\$1,327,560
4	3,863	7,500	\$957,495
5	10,001	50,000	\$226,176
TOTAL			\$3,500,000

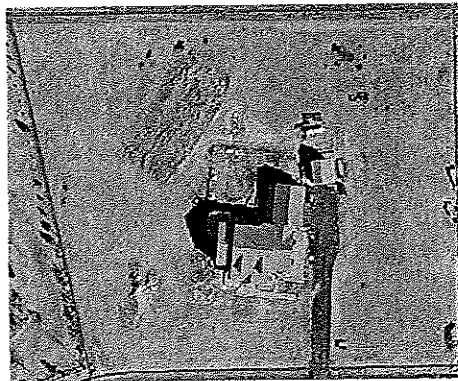


Board of Directors Meeting - October 18, 2010 - Levels of Service, Rate Structures and Rates



Refined Rate Structure Options
Single Family Residential (detached)

Credits for Low Percentage Impervious Parcels



- **Parcels with less than 20% +/- * impervious eligible for credit (approximately 3,000 parcels)**

CREDIT PT. 35% +/-

* Under evaluation



Board of Directors Meeting - October 18, 2010 - Levels of Service, Rate Structures and Rates



Refined Rate Structure Options

Non Single Family Residential (Commercial, government, exempt. Other)

- Fees based on both impervious area and percent impervious:
 1. Determine impervious area
 2. Multiply times Tier 1, 2, or 3 rate based on percent impervious
- Automatic annual increase is 5% to account for inflation and increases in levels of service
- Assumption of 1.75% increase in rate base due to development of additional impervious area (not an increase in rates or fees).

Refined Rate Structure Options

Non Single Family Residential

Tier	Impervious Percent Range (percent)		Fee Ratio	Monthly Rate per Square Foot of Impervious Area
1	2%	40%	65%	0.001280
2	41%	70%	100%	0.001970 *
3	71%	100%	135%	0.002659
•Same rate as Tier 3 of single family residential (detached)				

Refined Rate Structure Options

Non Single Family Residential

Tier	Impervious Percent Range (percent)		Number of Parcels	Total Impervious Area (SF)	Annual Revenue
1	2%	40%	2,017	23,000,000	\$355,000
2	41%	70%	9,319	70,000,000	\$1,645,419
3	71%	100 %	2,204	61,000,000	\$1,949,732
TOTAL NON SINGLE FAMILY					\$3,950,000
TOTAL SINGLE FAMILY					\$3,500,000
TOTAL					\$7,450,000



Board of Directors Meeting - October 18, 2009 - Levels of Service, Rate Structures and Rates



Pending Rate System Policies

Potential Policies Under Development to Complement Basic Rate Structure

Presented by Robert McGregor, Principal in Charge



Board of Directors Meeting - October 18, 2009 - Levels of Service, Rate Structures and Rates



Pending Rate System Policies

Potential Policies Under Development to Complement Basic Rate Structure

- ✓ Appeals and Customer Service
- ✓ Credits
- ✓ System Development Charges
- ✓ Exemptions



Board of Directors Meeting - October 18, 2018 Levels of Service, Rate Structures and Rates



Pending Rate System Policies

Potential Policies Under Development to Complement Basic Rate Structure

- ✓ Appeals and Customer Service
 - ✓ Appeals process to be developed
 - ✓ Single Family Residential (detached)
 - ✓ Non Single Family Residential
 - ✓ Typically works like this:
 - ✓ First call is to County Treasurer
 - ✓ Treasurer responds to billing only questions and refers to SEMSWA
 - ✓ Types of appeals
 - ✓ Impervious Area Incorrect
 - ✓ Incorrect Tier
 - ✓ Resolution process
 - ✓ Send picture of parcel with calculations
 - ✓ Explain on phone
 - ✓ Send technician to site
 - ✓ Elevate to director and then to Board
- ✓ Customer service
 - ✓ For billing issues
 - ✓ For maintenance and program questions



Board of Directors Meeting - October 18, 2018 Levels of Service, Rate Structures and Rates



Pending Rate System Policies

Potential Policies Under Development to Complement Basic Rate Structure

✓ Credits

- Economic incentive for large property owners to modify system for mutual benefit
- Based on estimate of actual program cost reduction accruing to the local program and usually requires
 - Formal application by property owner to SEMSWA Board providing rationale for credit on form approved by board
 - Assurance of long-term effectiveness of basis for credit
 - Board approval
 - Renewal or cancellation of credit based on review of effectiveness of measures by property owner via a credit renewal process (i.e. once every 5 years)
- Examples
 - Peak flow reduction via special detention or disconnection of impervious areas from SEMSWA system
 - Pollution reduction via low impact or "green" site design that goes beyond standards adopted by SEMSWA
 - Provision of public education services for NPDES permit program.



etc Board of Directors Meeting - October 16, 2009 Levels of Service, Rate Structures and Rates



Pending Rate System Policies

Potential Policies Under Development to Complement Basic Rate Structure

✓ System Development Charges

- Capital contributions to pay for special burdens placed on system by new developments
- Consistent fee structure levels the playing field for all developments within the service area
- Fees can be applied by SEMSWA to highest priority projects on an interim basis to maximize the effectiveness of the collected fees



etc Board of Directors Meeting - October 12, 2009 Levels of Service, Rate Structures and Rates



Pending Rate System Policies

Potential Policies Under Development to Complement Basic Rate Structure

✓ Exemptions

- Could be considered only if property owner provides full mitigation of service demands
- Exemptions for any other purpose (community service, financial hardship, etc) are inconsistent with "user pays" philosophy of utilities, tend to undermine the viability of a rate structure, and are usually not provided



Billing Implementation

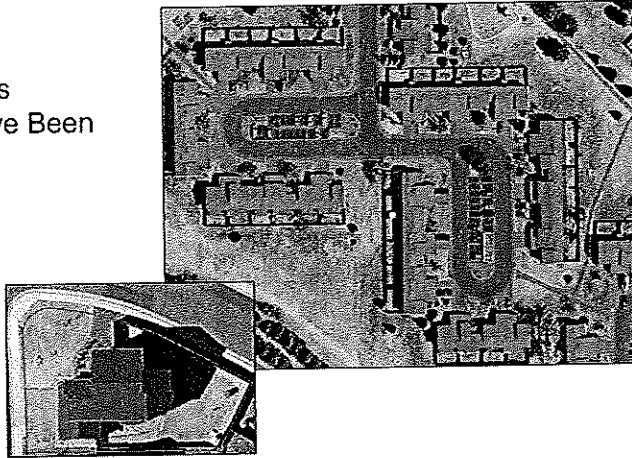
**Presented by Carrie Thompson, Task Manager
Billing Implementation**



Billing Implementation

Stormwater Database Development

All Impervious
Surfaces Have Been
Digitized and
Measured



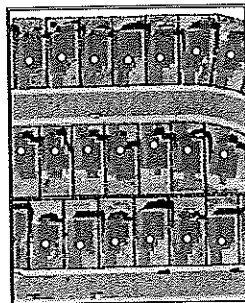
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Billing Implementation

Stormwater Database Development

Assignment Procedure – Single Family Residential Properties (SFR)



Each property's impervious area (IA) is represented by a point to ensure registration with correct parcel.

Why?

- > parcel position, size or shape
- > imagery



Board of Directors Meeting October 19, 2009 Levels of Service, Rate Structures and Rates



Billing Implementation

Stormwater Database Development

Assignment Procedure – All Non-Single Family Properties (NSFR)

Impervious surfaces are digitized and intersected (*cut*) by the parcel layer.

Next, the IA is calculated and summarized per parcel.



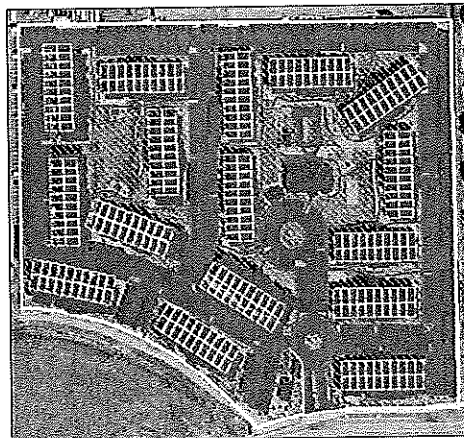
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Billing Implementation

Stormwater Database Development

Assignment Procedure – Pro-Rated Groups of Parcels



Many developments include common area shared by many parcels.

These parcels are grouped and assigned a portion of the total IA.

The ratio of owned parcels to total IA equals the prorated area assigned to each.



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Assessor Tabular Database

[illegible]

*Impervious area /
rate information for
each parcel will be
linked to the
Treasurer's billing
system by the
parcel number.*

Summary IA/Parcel Table

[illegible]

- **A sample set of data has been delivered to the Treasurer for testing integration with the billing database**
- **Final quality assurance and quality control will be completed by November 1st for final delivery to the County Treasurer**

Billing Implementation

Customer Notification Options

A message explaining the stormwater fee to recipients is suggested. Options include:

- Separate mailing prior to tax bill (60,000 – mailing just to SEMSWA parcels)
 - Printing, handling, and postage costs
- One-page insert with tax bill (190,000 - mailed to all)
 - Printing costs only
- Short message printed on tax bill message page (possible- not guaranteed)
 - No extra fee, but limited space



Board of Directors Meeting October 17, 2008 Levels of Service, Rate Structures and Rates



Billing Implementation

Stormwater Fee Collection

- Stormwater fee billed and collected by Arapahoe County Treasurer as a line-item on tax bill
 - Parcels within the Authority will be assessed a stormwater fee
 - The line item for SEMSWA will only appear on bills within the Authority
- Tax bills mailed out in January
 - ½ of fees due in February, second ½ due in June
- 1%+ (600 to 1,000) of customers expected to call with questions or concerns
 - Treasurer's office will direct inquiries to the Authority's customer service team
 - Need to implement customer service hiring, database software, training, office, computers, phone system



Board of Directors Meeting October 17, 2008 Levels of Service, Rate Structures and Rates



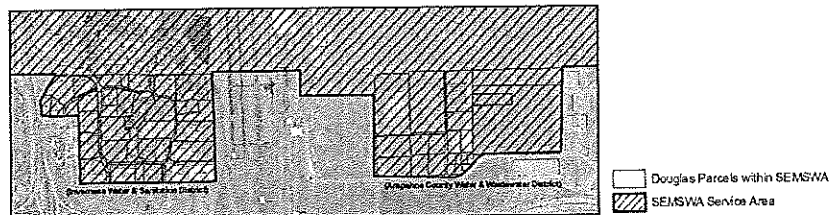
Billing Implementation

Stormwater Fee Collection – Special Properties

• Douglas County properties within the Authority Boundary cannot be billed or collected by Arapahoe County Treasurer

• SEMSWA will need to complete separate billing

- Inverness Water & Sanitation District
- Arapahoe County Water & Wastewater Authority



Board of Directors Meeting October 18, 2008 Levels of Service, Rate Structures and Rates



Billing Implementation

Enforcement

- Parcels billed on tax statement OK
 - Treasurer follows up with delinquency notices
 - Lien process follows
- Parcels not billed on tax statement need a different process
 - Tax-exempt parcels
 - Douglas County parcels



Board of Directors Meeting October 18, 2008 Levels of Service, Rate Structures and Rates



Billing Implementation

Customer Service

Customer questions and concerns will need to be addressed by a customer service team who can:

- Explain the stormwater program, why it is necessary, and how the fee is determined
- Answer questions about how IA was measured or assigned
- Assess contested IA, adjust fee if necessary



Board of Directors Meeting - October 19, 2005 - Levels of Service, Rate Structures and Rates



Billing Implementation

Stormwater Database Maintenance

Maintenance of the stormwater database will be necessary on an annual basis. Tasks will include:

- Identification of new construction
- Acquisition of updated Assessor parcel / ownership data
- Correction and adjustment of existing data
- Preparation and adjustment of stormwater parcel layer for assignment process
- Utilization / integration of new imagery



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Technical Information for Public Outreach

SEMSWA Rate System

Jon Sorensen



Board of Directors Meeting October 18, 2006 Levels of Service, Rate Structures and Rates



Technical Information for Public Outreach

SEMSWA Rate System

Current Program (\$2- \$3 Million per year)

- ✓ **Program**
 - Unfunded federal mandate throughout service area (NPDES Permits)
 - Special needs of Cherry Creek watershed
- ✓ **CIP**
 - Ad hoc
 - Supported from General Funds of Centennial and Arapahoe County
 - Supported by system development charges in East Cherry Creek Valley and Arapahoe County Water and Wastewater Authority
 - Limited support from Denver Urban Drainage and Flood Control District (\$500,000 per year)
 - Current critical backlog \$30 Million
- ✓ **Maintenance**
 - Below Low Level of Service
 - Deferred maintenance has created a \$12 Million backlog of remedial repairs



Board of Directors Meeting October 18, 2006 Levels of Service, Rate Structures and Rates



Technical Information for Public Outreach

SEMSWA Rate System

Program Needs (\$7.4 Million per year)

- ✓ **Program**
 - Unfunded federal mandate throughout service area (NPDES Permits)
 - Special needs of Cherry Creek watershed
- ✓ **Maintenance**
 - Low Level for the first 2 years
 - Low Level to Medium Level in 8 years
- ✓ **CIP**
 - 2007 CIP: \$4.7 – see map
 - Critical CIP: \$25.3 Million Constructed in Years 2 – 11
 - Medium CIP: \$20 Million Constructed in Years 12 – 21
 - Emerging Needs: \$0.75 Million per year for yet to be identified needs for emergencies and new master plans



Board of Directors Meeting - October 14, 2004 - Levels of Service, Rate Structures and Rates



Technical Information for Public Outreach

SEMSWA Rate System

Rate System Design

- ✓ **Who pays ?**
 - All users of the system
 - Users include all property owners who use the stormwater management system including tax exempt properties
 - Developers also contribute capital in the form of system development charges to pay for capital improvements needed to accommodate the additional burdens new developments place on the system
- ✓ **What do they pay for ?**
 - Program (water quality and other)
 - Maintenance and repairs to the system
 - Capital improvements
- ✓ **How is everyone's share calculated ?**
 - Proportional to the service demands and costs they create for the service provider
 - Single Family Detached Residential: Impervious area (pending Board decision)
 - Other Properties: Impervious Area and Percent Impervious (pending Board decision)



Board of Directors Meeting - October 14, 2004 - Levels of Service, Rate Structures and Rates



Summary

Revised when today's presentation finished

- Refined Levels of Service and Supporting Rates
- Refined Rate Structure Options
- Pending Rate System Policies
- Billing Implementation
- Technical Information for Public Outreach

