

# Presentation of the Water and Sewer System Development Charge Analysis

June 21, 2010

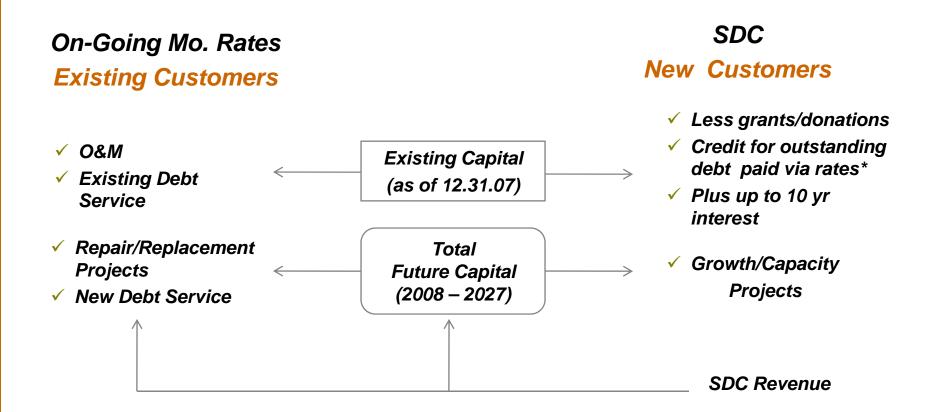
**City Council Workshop** 



## Today's Discussion

- Rate and SDC overview
- Present proposed sewer and water SDCs
  - ✓ charges reflect most recent capital plans
- Other issues/concerns

#### Monthly Rate and SDC Overview



\*Existing debt service credit on SDC for remaining principal outstanding; water \$5.7 million credit and sewer \$16.5 million

# Project Funding

Project	Growth	R&R	Rates	SDC	Developer	Total
NW 38th Avenue Waterline	100%	0%	\$ -	\$ 750,000	\$ -	\$ 750,000
Pac Rim/ 38th Avenue Water Intertie	100%	0%	\$ -	\$ 106,667	\$ 213,333	\$ 320,000
Well 14	100%	0%	\$ -	\$ 872,000	\$ 600,000	\$1,472,000
Misc Water Main Replacement	25%	75%	\$ 56,250	\$ 18,750	\$ -	\$ 75,000

### **Proposed Sewer SDC**

Matan	Eviation	Pro	posed
Meter	Existing	Non NUGAE	NUGAE
Residential	\$ 2,349	\$ 2,493	\$ 4,420
Commercial I			
5/8"	\$ 2,349	\$ 2,493	\$ 4,420
3/4"	3,523	3,740	6,630
1"	5,872	6,234	11,050
1.5"	11,745	12,467	22,101
2"	18,792	19,948	35,361
3"	37,584	39,896	70,722
4"	58,725	62,337	110,503
6"	117,449	124,674	221,006
8"	187,919	199,478	353,609
Commercial II			
Flow (gallons)	\$ 8.55	\$ 12.61	\$ 22.84
BOD (lbs / day)	1,364	2,386	3,948
TSS (lbs / day)	1,006	904	1,495

- Capital from updated sewer system plan
- Existing shared assets = \$39.8 million
- Future shared capital \$450,000
- Future Non-NUGAE capital:
  - **✓** \$11.2 million
- ➤ Future NUGAE capital:
  - ✓ \$16.1 million future project costs
- Future capital \$900K reduction
- ➤ 24,890ERUs NON-NUGAE
- ➤ 5, 228 NUGAE

Notes: Proposed SDCs are a ceiling, a lower charge may be implemented.

### Water SDC – All Customers (Except Industrial)

Meter	MCEs	Pro	posed
Meter	MCES	Non NUGAE	NUGAE
5/8"	1	\$ 3,185	\$ 4,873
3/4"	1.5	4,778	7,310
1"	2.5	7,963	12,183
1.5"	5	15,925	24,365
2"	8	25,480	38,984
3"	16	50,960	77,968
4"	25	79,625	121,825
6"	50	159,250	243,650
8"	80	254,800	389,840

Current 5/8" residential SDC = \$1,714; Commercial \$1,673

**Notes:** Proposed SDCs are a ceiling, lower charges may be implemented.

- Capital from updated water system plan
- Existing shared assets = \$42.8 million
- Future shared capital = \$6.5 million
- ➤ Future Non-NUGAE capital:
  - ✓ \$4.7 million
- ➤ Future NUGAE capital:
  - ✓ \$13.3 million future capital costs
- Future capital \$2.6 million reduction
- ➤ 16,226 MCEs for Non-NUGAE
- > 5,581 MCEs for NUGAE

## Water SDC – Industrial Class Only

- Industrial: Nonresidential property owners who use water in the processing, treatment, or manufacture of products
- Two options developed
  - ✓ Option 1 existing methodology meter size:
    - ◆ Base and peak costs allocated by meter size / maximum day capacity
  - ✓ Option 2 formula methodology meter size & flow:
    - ◆ Base costs are allocated based on one ERU 283.6 gallons per day
    - ♦ Peak costs allocated by meter size / maximum day capacity

## Water SDC: Industrial Option 1 – Meter Size

Meter	Evicting	Propo	sed
Meter	Existing	Non NUGAE	NUGAE
5/8"	\$ 9,987	\$ 19,647	\$ 30,948
3/4"	13,984	28,270	44,723
1"	22,004	45,555	72,313
1.5"	41,964	88,632	141,151
2"	66,078	140,568	223,999
3"	131,729	281,092	446,958
4"	203,992	436,781	695,386
6"	404,375	868,727	1,384,939
8"	644,731	1,386,905	2,212,246

<sup>✓</sup> Only max. capacity is considered; higher average water users receive a break

Notes: Proposed SDCs are a ceiling, lower charge may be implemented.

<sup>✓</sup> Lower charges may promote economic development

# **Example Customer SDC Calculations**

Sample Customers	Meter Size	CCF	Current SDC	Option 2	Difference	Option 1	Difference
Customer 1	4	105,000	\$203,992	\$802,591	\$598,599	\$436,781	\$232,789
Customer 2	3	3,400	\$131,729	\$45 <b>,289</b>	(\$86,440)	<b>\$281,092</b>	\$149,363
Customer 3	2	9,214	\$66,078	<b>\$77,107</b>	\$11,029	\$140,568	\$74,490
Customer 4	6	278,000	\$404,375	\$2,102,230	\$1,697,855	\$868,727	\$464,352
Example 1	4	10,000	\$203,992	<b>\$103,7</b> 57	(\$100,235)	\$436,781	\$232,789
Example 2	6	50,000	\$404,375	\$425,029	\$20,654	\$868,727	\$464,352
Example 3	8	300,000	\$644,731	\$2,296,340	\$1,651,609	\$1,386,905	\$742,174
Example 1 - NUGAE	4	105,000	\$0	\$1,637,212	\$0	\$695,386	\$0
Example 2 - NUGAE	6	50,000	\$0	\$844,249	\$0	\$1,384,939	\$0
Example 3 - NUGAE	8	300,000	\$0	\$4,685,476	\$0	<b>\$2,212,246</b>	\$0



# Water SDC: Industrial Option 2 – Meter Size & Flow Based

Meter	Annual Use	ERUs	Proposed		Optio	n 1
Miciel	(ccf)	ERUS	Non NUGAE	NUGAE	Non NUGAE	NUGAE
4"	10,000	72	\$ 103,757	\$ 196,296	\$ 436,781	\$ 695,386
"	50,000	361	398,003	802,998	436,781	695,386
"	300,000	2,168	2,237,040	4,594,881	436,781	1,384,939
6"	10,000	72	130,783	237,547	868,727	1,384,939
"	50,000	361	425,029	844,249	868,727	1,384,939
"	300,000	2,168	2,264,066	4,636,132	868,727	1,384,939
8"	10,000	72	163,057	286,891	1,386,905	2,212,246
11	50,000	361	457,303	893,593	1,386,905	2,212,246
"	300,000	2,168	2,296,340	4,685,476	1,386,905	2,212,246

- ✓ Customers with lower usage benefit from lower charges
- ✓ Higher users allocated higher cost
- ✓ Higher cost may discourage economic development

Notes: Proposed SDCs are a ceiling, lower charges may be implemented.

### SDC Comparison 5/8" x 3/4" Meter

AGENCY	WATER	SEWER
Proposed Camas	\$ 3,185	\$ 2,493
Proposed Camas North Area	4,873	4,420
Camas Current	1,714	2,349
Washougal Zone 1	2,939	5,620
Washougal Zone 2	3,370	5,620
Clark County to Vancouver	N/A	1,898
Clark County to County Plan	N/A	6,342
Ridgefield[1]	3,950	10,090
Battle Ground	2,210	7,500
La Center[2]	1,650	7,200
Vancouver[3]	2,360	2,740

**Notes**: [1] Effective September 1, 2010

[2] Values taken from presentation last year, not confirmed as of this date

[3] Does not include utility tax

## Discussion/ Next Steps

#### Policy Decisions

- ✓ Sewer SDC Implement proposed charge?
- ✓ Water General SDC Implement proposed charge?
- ✓ Water Industrial SDC 2 options provided?
- ✓ Implement new charges for North Urban Growth Area Expansion (NUGAE)

#### Next Steps

✓ Ordinance or optional public hearing (July 5 or 19<sup>th</sup>), dependent on City adoption of water and sewer plans

# Additional Slides



#### SDC Increases Water

Water	Non-NUGAE	NUGAE
Existing Cost Basis	\$ 1,963	\$ 1,963
Future	1,222	2,910
Total SDC	\$ 3,185	\$ 4,873

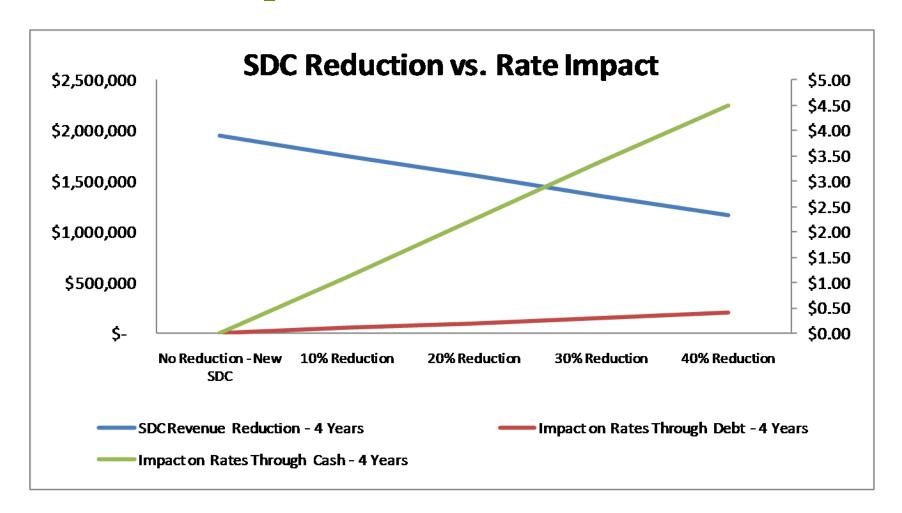
Existing Calculation Notes:	_	sset investment shared by total 2027 = 21,807
Future Calculation Notes:	\$4.7 million in future capital 100% charged to future Non-NUGAE ERUS = 6,780	\$13.3 million in future capital 100% charged to future Non- NUGAE ERUS = 5,581
	-	hared between Non-NUGAE and ERUs = 12,361

#### SDC Increases Sewer

Sewer	Non-NUGAE	NUGAE	
<b>Existing Cost Basis</b>	\$ 1,320	\$	1,320
Future	1,173		3,100
Total SDC	\$ 2,493	\$	4,420

Existing Calculation Notes:	_ ·	et investment shared by total 027 = 30,118
Future Calculation Notes:	\$11.2 million in future capital 100% charged to future Non-NUGAE ERUS = 9,804	\$16 million in future capital 100% charged to future Non- NUGAE ERUS = 5,228
	•	ed between Non-NUGAE and RUs = 15,032

# 5/8" Meter Water Rate Impact w/ Reduction of SDC



#### SDC Formula Basis

	Unit Costs	
	Non-	Unit Costs
Cost Component	NUGAE	NUGAE
Meter Size * Meter Service Equivalent Factor	\$393	\$393
Base: Average Flow per day ÷ 283.6 gpd	\$1,018	\$2,099
Peak: Meter Size * Meter Customer Equivalent Factor	\$971	<b>\$1,540</b>
Fire per account	\$419	\$619

<b>M</b> eter Size	Meter Service Equivalent	Meter Customer Equivalent
5/8"	1.00	1.00
3/4"	1.10	1.50
1"	1.40	2.50
1.5"	1.80	5.00
2"	2.90	8.00
3"	11.00	16.00
4"	14.00	25.00
6"	21.00	50.00
8"	29.00	80.00