



SCAPPOOSE *Oregon*

MONDAY, MARCH 6, 2023

CITY COUNCIL WORK SESSION ~ STORMWATER MASTER PLAN, 6PM

COUNCIL CHAMBERS

33568 EAST COLUMBIA AVENUE

SCAPPOOSE, OREGON 97056

Mayor Backus called the work session to order at 6:00 p.m.

Present: Mayor Joe Backus; Council President Megan Greisen; Councilor Pete McHugh; Councilor Tyler Miller; Councilor Andrew Lafrenz; City Manager Alexandra Rains; Legal Counsel Peter Watts; City Recorder Susan M. Reeves; Public Works Director Dave Sukau; City Engineer Chris Negelspach; Assistant to City Manager Isaac Butman; Brown and Caldwell Consultant Angela Wieland; and Brown and Caldwell Consultant Thomas Suesser.

Remote: Councilor Jeannet Santiago; Councilor Kim Holmes; FCS Group Consultant Amanda Levine; FCS Group Consultant John Ghilarucci; Gary Wheeler; Geoff Wenker; Leonard Waggoner; Debbie Murphey; and Amanda.

Consultant Angela Wieland and Consultant Thomas Suesser went over the presentation.



Scappoose Stormwater Master Plan: Council Work Session

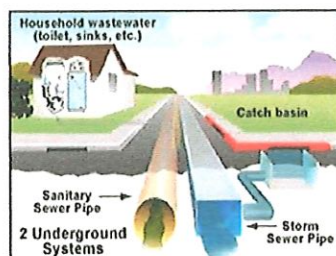
March 2, 2023



Work Session Goals

- Review the Master Plan development process/timeline
- Summarize technical project elements
- Summarize capital project and program recommendations
- Review preliminary stormwater utility rate and SDC analysis results

Where Does Stormwater Go?



Where Does Stormwater Go?



- **Surface Waters**
 - Gutters, catch basins, pipes, outfalls
 - Ditches, open channels
 - Streams and rivers
- **Underground**
 - Surface infiltration
 - Underground injection (drywells, U.Cs)
 - Pollutants on ground surfaces are conveyed via stormwater and enter streams
 - No end of pipe treatment system (treatment plant)

City's Stormwater System

- Collects and conveys stormwater to receiving water bodies.
- Stormwater collection system components include pipes, open channels (ditches, streams, creeks), ponds, water quality facilities, culverts, and structures (manholes, catch basins)
- 21.9 miles city-owned or managed stormwater pipe/culverts/ open channel
- 1,300+ structures
- 56 public UICs
- Water quality facilities

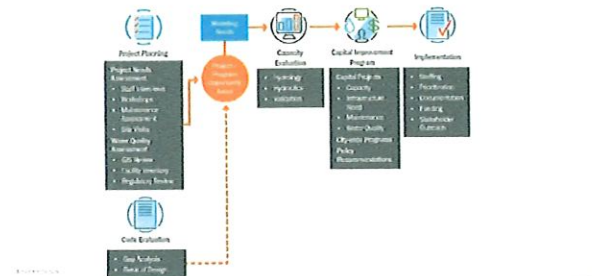


Stormwater Master Plan Goals and Objectives

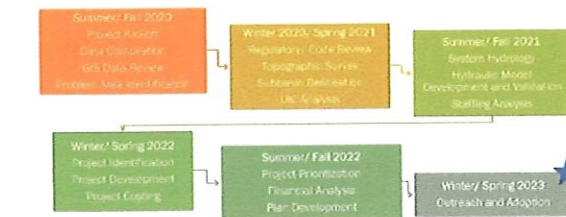
Goal: To guide storm drainage infrastructure improvements over a 20-year implementation period.

Harness Staff Knowledge	Incorporate information on project needs from City staff (Public Works and Engineering)
Identify Problem Areas	Identify and validate known problem areas using H/H modeling
Identify Programs	Identify programmatic opportunities to support of regulatory needs and ongoing system maintenance
Prioritize Projects	Develop comprehensive, prioritized CP list with associated costs
Evaluate Financials	Develop updated stormwater utility rate and system development charge to support improvements

Stormwater Master Plan Development Process



Project Timeline



Master Plan Elements

- Code Review/Policy Considerations
- Problem Area Identification
- Water Quality and UIC Assessment
- Hydrologic/Hydraulic Modeling
- Staffing Evaluation
- Capital Project Development and Prioritization
- Program Recommendations
- Rate and SDC Analysis
- Document Development



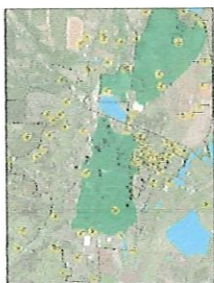
Problem Area Identification

- Staff Surveys (PW and Engineering)
- Staff discussions/ Problem Area Workshop
- GIS Data Review
- 1998 Stormwater Master Plan CIP Review
- Field Investigations and Site Visits



32 Stormwater "Problem Areas"

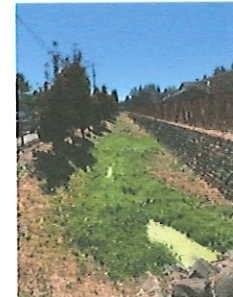
UIC Assessment



- GIS desktop analysis to identify where UIC installations are feasible.
- Must meet DEQ requirements related to setbacks
- Must be installed in permeable soils.
- Feasibility criteria included:
 - 5' min. vertical separation distance from groundwater
 - 255' min horizontal separation distance from water wells.
 - 20' max depth
 - Soil compatibility
- Informs new UIC placement opportunities

Staffing Analysis

- Regulatory requirements can drive stormwater inspection, maintenance, and retrofit requirements.
- TMDL for Willamette Basin (mercury)
- WPCF Permit (for public UICs)
- Reviewed frequency and coverage of inspection and maintenance activities.
- Identified implementation gaps.
- Estimated additional staffing levels required.
- Result = 1.3 FTE



Hydrologic and Hydraulic Model Evaluation

- 124 subbasins delineated and analyzed
- Land use (existing and future), soils, impervious percentages formed the basis of flow calculations
- Model extents based on problem area evaluation
 - 14 Problem Area Locations
 - Pipes, culverts, open channel
- Model validation based on anecdotal information, historical rainfall
- Source data:
 - City GIS data
 - Survey/field assessment
 - USGS S-0's data
 - City staff knowledge



Capital Project Identification

- Capital Project Workshop
- ID sources
- Project/Program Needs
- Project phasing and alternatives
- Project Sizing and Design
 - 25-year design storm
 - Future land use

Location ID	Model Location	Existing Conditions Peak Capacity (cfs)	Additional Project Peak Capacity (cfs)	1998 Model Peak CIP	Result CIP	Capital Project Development (cfs)
3	SE 15th St at SE 10th St	X	X	X	X	Y
4	SE 15th St at SE 10th St	X	X	X	X	Y
5	SE 15th St at SE 10th St	X	X	X	X	Y
6	SE 15th St at SE 10th St	X	X	X	X	Y
7	SE 15th St at SE 10th St	X	X	X	X	Y
8	SE 15th St at SE 10th St	X	X	X	X	Y
9	SE 15th St at SE 10th St	X	X	X	X	Y
10	SE 15th St at SE 10th St	X	X	X	X	Y
11	SE 15th St at SE 10th St	X	X	X	X	Y
12	SE 15th St at SE 10th St	X	X	X	X	Y
13	SE 15th St at SE 10th St	X	X	X	X	Y
14	SE 15th St at SE 10th St	X	X	X	X	Y
15	SE 15th St at SE 10th St	X	X	X	X	Y
16	SE 15th St at SE 10th St	X	X	X	X	Y
17	SE 15th St at SE 10th St	X	X	X	X	Y
18	SE 15th St at SE 10th St	X	X	X	X	Y
19	SE 15th St at SE 10th St	X	X	X	X	Y
20	SE 15th St at SE 10th St	X	X	X	X	Y
21	SE 15th St at SE 10th St	X	X	X	X	Y
22	SE 15th St at SE 10th St	X	X	X	X	Y
23	SE 15th St at SE 10th St	X	X	X	X	Y
24	SE 15th St at SE 10th St	X	X	X	X	Y
25	SE 15th St at SE 10th St	X	X	X	X	Y

Capital Project Development

- 18 Capital Projects Identified
- Projects numbering by basin
- Project Objectives (Primary)
 - Increase system capacity
 - Address infrastructure need
- Project Objectives (Secondary)
 - Reduce maintenance needs
 - Add water quality treatment
- Fact Sheet Narratives/Cost Estimates



Capital Project Prioritization

Scoring Criteria

- Capacity Deficiency
- Water Quality/Regulatory Benefits
- Maintenance
- Acquisition
- SDC Funding Eligibility
- Permitting Complexity
- Safety/Liability
- Sequencing
- Cost per Drainage Area Managed

Scoring Levels

- High (Score = 3)**
 - Adds models and validated flooding problem with safety element.
 - Adds recurring maintenance concern.
 - Limited permitting or land acquisition needs.
 - Funding efficiencies.
- Medium (Score = 2)**
 - Adds models system flooding or system condition/maintenance issue.
 - Adds periodic maintenance concern.
- Low (Score = 1)**
 - Some flood control benefit.
 - Permitting and acquisition complexities.
 - High cost per drainage area managed.

Programmatic Activities

- Annual cost to address regulatory requirements, ongoing maintenance, and repair and replacement activities.
- CCTV Program (pipe condition inspection)
 - \$10,000 - \$20,000/year (10% of piped system annually)
- Repair and Replacement Program
 - \$30,000 - \$60,000/year
- Stormwater Asset Management Program Maintenance
 - \$10,000/year
- UIC Retrofit Program
 - \$50,000/year (assuming 10-year period)
- Minor Drainage Improvement Program
 - \$25,000 - \$50,000/year
- Green Street Pilot Program
 - \$50,000/year (for recommended and aspirational LOS)



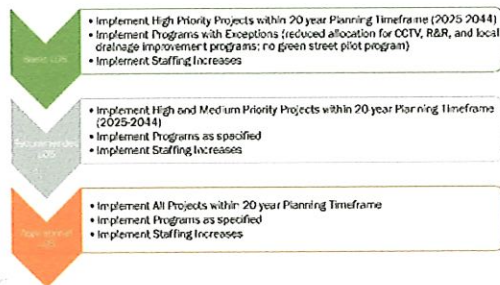
Cost Summary

Capital Projects	Total Cost
High Priority	\$4,711,000
Medium Priority	\$8,289,000
Low Priority	\$9,622,000
TOTAL	\$20,622,000
TOTAL (SDC Eligible)	\$6,379,000

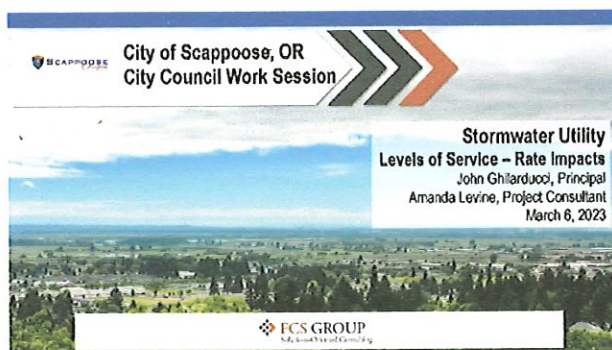
PROGRAMMATIC SUMMARY

- 1.3 FTE additional staffing (Engineering and/or Public Works)
- Annual Program Cost = \$135,000 - 250,000 (depending on LOS)

Level of Service



FCS Group Consultant John Ghilarducci and Consultant Amanda Levine went over the presentation.



Financial Study

- Introduction/Existing Stormwater Funding
- Rate Study Basics
- Rate Forecast
 - Levels of Service
 - Rate Forecast
 - Comparables
- System Development Charges
 - Calculation Summary
 - Comparables
- Summary



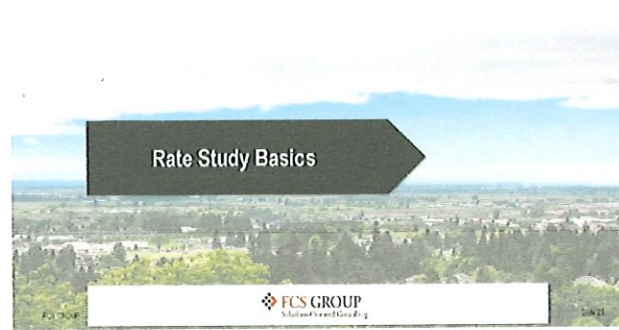
Existing Stormwater Funding

- Primary revenue source for Stormwater Program = User fees
- Stormwater fees are guided by strategies and plans; set by Council

Customer Class	Monthly 2022 Fees	Monthly 2023 Fees
Residential	\$5.53 per parcel	\$5.85 per parcel
Non-residential	\$5.53 per ESU	\$5.85 per ESU

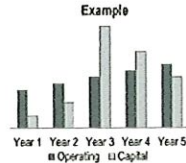
10/1/2021 10:11 AM Fee Rates.xlsx - Nov 22-16 Fee Rates
FCS Group - 7775 Imperial Ave, Suite 100

Slide 22



Introduction to Utility Rate Making

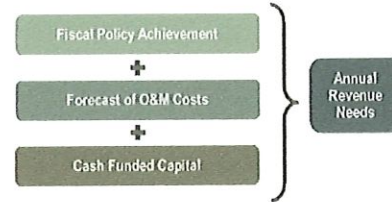
- Utility rates are set to cover the cost of providing service
- Operating & maintenance (O&M)
 - Stormwater Department salaries and benefits
 - Materials & Services
 - Contractual/Professional Expenses
 - New FTEs
 - Public Works & Engineering
- Capital costs
 - Infrastructure improvements
 - Repair & replacement programs
 - Rehabilitation programs
 - Etc.



10/1/2021

Slide 24

How Much Revenue is Needed?



10/1/2021

Slide 25

Fiscal Policies Recommendations

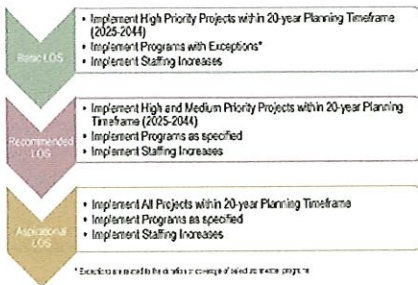
Policies	Recommendation	Amount
Operating reserve (one time)	Achieve a year-end minimum balance target of 120 days (33% of total annual operating expenditures excluding transfers)	\$161,000 in FY 2023
Capital reserve (one time)	Achieve a year-end target of \$100,000	(in addition to operating reserve)

10/1/2021

Slide 26



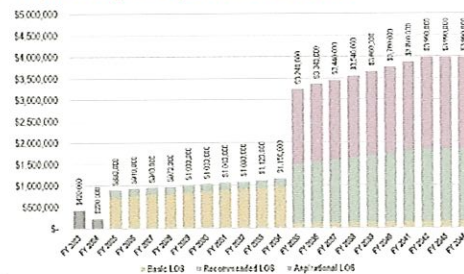
Capital Projects by Levels of Service



10/1/2021

Slide 27

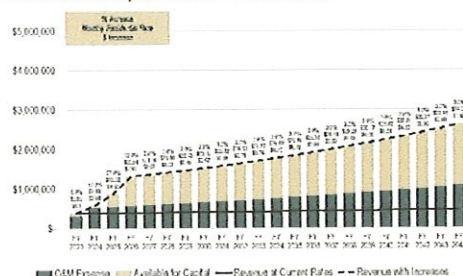
Capital Projects by Levels of Service



10/1/2021

Slide 28

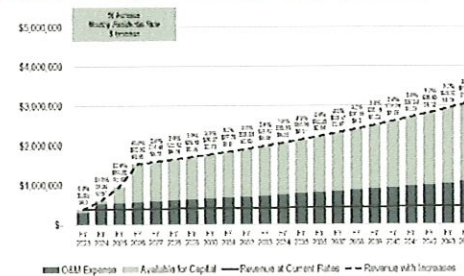
Revenue Requirement – Basic LOS



10/1/2021

Slide 29

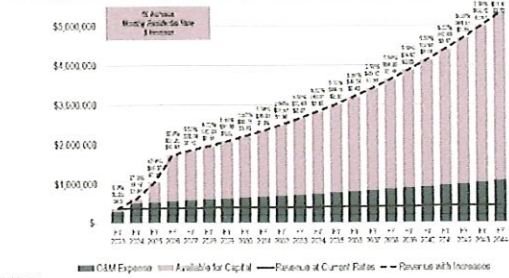
Revenue Requirement – Recommended LOS



10/1/2021

Slide 30

Revenue Requirement – Aspirational LOS



FCS GROUP

Slide 22

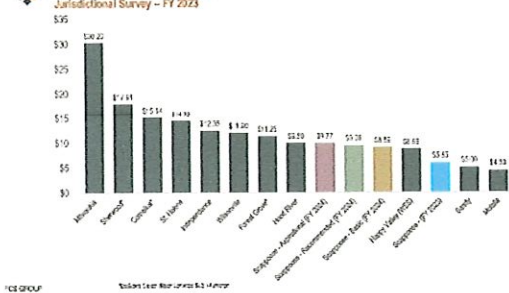
Monthly Residential Rates

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Basic LOS	\$5.85	\$6.89	\$13.52	\$23.54	\$21.19	\$21.80
Recommended LOS	\$5.85	\$6.38	\$14.98	\$23.95	\$24.68	\$25.42
Aspirational LOS	\$5.85	\$7.77	\$19.32	\$27.25	\$28.74	\$30.33

FCS GROUP

Slide 23

Residential Monthly User Fees

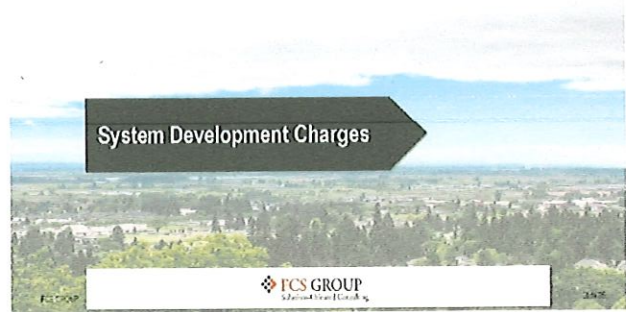


FCS GROUP

System Development Charges

Slide 24

System Development Charges



Stormwater SDC Basis

One ESU (2,750 SF) equals the impervious area on an average sized residential lot

The fee for commercial/retail development equals the total impervious area divided by one ESU (2,750 SF). For this example Fred Meyer equals 9 ESU.



Slide 26

FCS GROUP

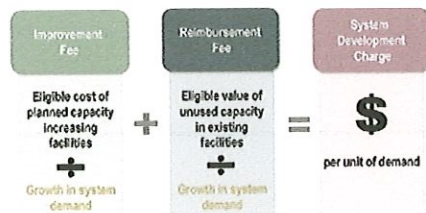
Slide 27

Key Characteristics of SDCs

- SDCs are one-time charges, not ongoing rates. Paid at the time of development.
- SDCs are available for water, wastewater, stormwater, transportation, and parks.
- SDCs are for capital only, in both their calculation and in their use.
- SDCs include both existing and future (planned) infrastructure cost components.
- SDCs are for "system" facilities, not "local" facilities.

FCS GROUP

The SDC Calculation



FCS GROUP

SDC Components

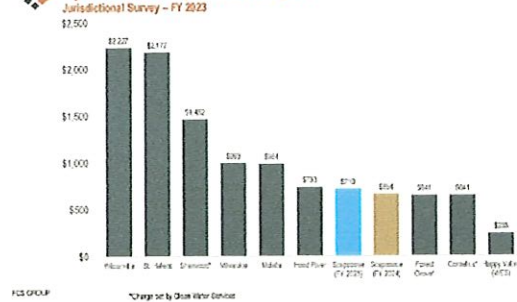
Adjustments to Cost Basis	
Unfunded Improvement Fee Cost Basis	\$ 3,378,000
Improvement Fee To Reimbursement Fee Cost Basis	\$ 4,880,800
Improvement Fee Cost Basis	\$ 8,258,800
Cost Basis	
Improvement Fee To Reimbursement Fee	\$ 4,880,800
Compliance Costs	\$ 263,000
Cost Basis	\$ 5,143,800
TOTAL COST BASIS	\$ 8,102,600
Customer Base	
Quantity of ESUs	7,808
Improvement Fee per ESU	\$ 627
Reimbursement Fee per ESU	\$ 31
Compliance Costs per ESU	\$ 664
Total SDC per ESU	\$ 658

Slide 28

FCS GROUP

Slide 29

System Development Charges



FCS GROUP

Slide 30

Angel Wieland went over the next steps.

Next Steps

- Determination of a preferred Level of Service
- Draft Master Plan for public review/ comment
- City Council Presentation(s)
- Master Plan Adoption
- Utility Rate Adoption (to match Level of Service)
- SDC Adoption



Thank you.
Questions?



SDC Components



Customer Base	
Growth in ESUs	7,809
Improvement Costs	\$ 4,880,503
Growth in ESUs	7,809
Improvement Fee per ESU	\$ 622
Reimbursement Fee per ESU	\$ -
Compliance Costs	\$ 243,025
Growth in ESUs	7,809
Compliance Costs per ESU	\$ 31
Total SDC per ESU	\$ 654
Resulting Charge	
Existing SDC per ESU	\$710
Increase (%) - Calculated Above Existing SDC	-8%
Increase (\$) - Calculated Above Existing SDC	\$ (57)

FCS GROUP

Slide 53

Council President Greisen stated when you look at our rates currently, they are quite low. Historically our rates have maintained that way. She asked Public Works Director Dave Sukau to give a background about where our rates are now, where they have been, why they have sort of stayed where they are and the need to maybe change that for the future.

Public Works Director Dave Sukau gave an overview of the stormwater plan. He explained to date it is not being fully utilized, it's not paying its fair share of costs that Public Works has incurred.

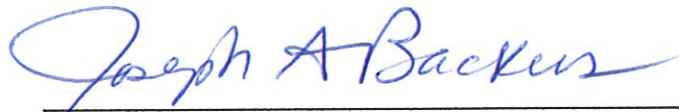
Councilor Santiago asked about the programmatic activities and are the consultants recommending implementing these programs and is that part of the cost of rates from scoring them? She also asked if we have something similar in place currently?

Amanda Wieland replied yes, the programs are a new cost and those costs have been reflected in the rate and SDC analysis that were presented.

Councilor Holmes stated fabulous job packaging this information. She explained three things really stood out to her in this report that she would like to see perhaps replicated in future reports that Council gets from consultants. She really appreciated the three levels of funding for the capital investments that would cover just basic level of service, the recommended level, and then aspirational level. She also like how the need for additional FTE was identified to be built into the budget. She stated the comparison to other cities is really, really helpful. She explained one thing that would be really helpful for her as a new Council person to understand is really what the results and benefits are that would come along with a rate increase and all of these projects that have been discussed. She feels if there is a way to demonstrate the impact of that, what that would look like, that would be really helpful, she thinks, in selling this to the community, if there's water quality improvements particularly for Scappoose Creek. She stated understanding what the risks of regulatory non-compliance would be if these projects don't go into place, would also be really helpful because she thinks we are going to have to package every increase to the community. Then just lastly to staff, we have been talking about a lot of different fee increases for services and they're all justifiable, if Council could get maybe a bigger picture of understanding of where we are talking about fee increases. She is looking for what are the rates that have been increased or the fees that have been increased the last year and what are we talking about potentially increasing in the next year or two, that way Council can consider all of these in a bigger context.

Adjournment

Mayor Backus adjourned the work session at 7:00pm.



Mayor Joseph A. Backus

Attest:



City Recorder Susan M. Reeves, MMC