



**SE BEND SEPTIC TO SEWER
ADVISORY COMMITTEE MEETING**

THURSDAY, SEPTEMBER 7, 2017

**WELCOME &
INTRODUCTIONS**

AGENDA 

- Solutions in Peer Communities: Expert Panel
- Report on Initial Public Outreach
 - Door-to-Door Canvass
 - Focus Groups
- Committee Q&A
- Look Ahead: *Preliminary Engineering I*
- Public Comment

PEER COMMUNITIES 

Spokane County, WA

Shawn Koorn
HDR Engineering

Mid-Multnomah County (Portland)

Dan Vizzini

Wenatchee, WA

Gordon Wilson
FCS Group

SEPTIC-TO-SEWER LESSONS LEARNED

- Conversion can be successfully implemented
- A variety of approaches can work
- Sewers and treatment capacity must be available
- It takes time to develop and implement successful programs
- Successful programs begin with proactive extension of sewer lines into target areas



CASE STUDY: SPOKANE COUNTY, WA SEPTIC TANK ELIMINATION PROGRAM



OVERVIEW OF SPOKANE COUNTY PROGRAM



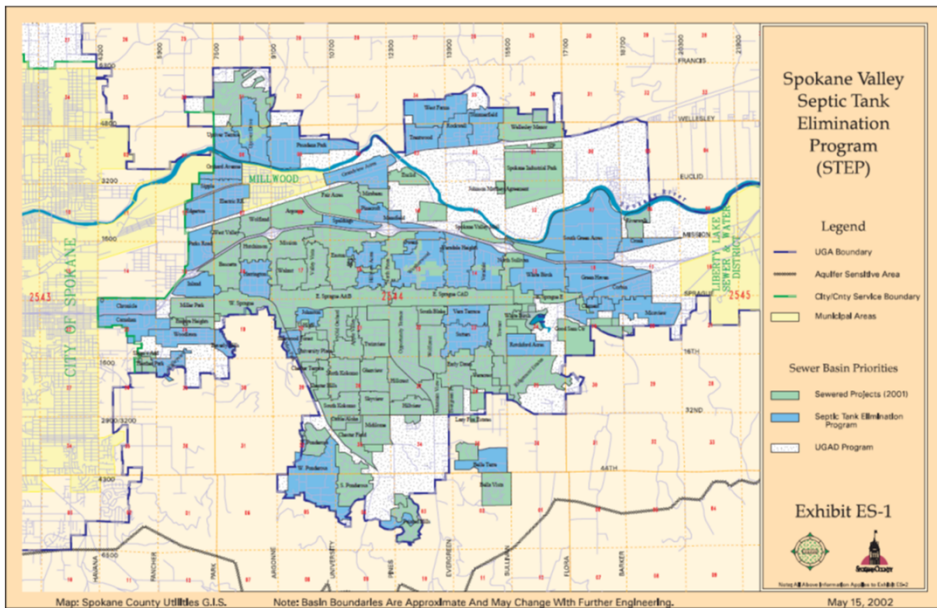
Program driver: protection of the sole source aquifer

Began extending sewers in 1984

- Provided service to 10,750 customers by 1996
- Funded by 24 Utility Local Improvement Districts (ULIDs) with County participation
- Unable to extend sewers throughout the priority area

1996 plan included more unsewered areas to meet State Health concerns

- Moved away from ULIDs to County revenue bond funding
- Process streamlined
- Funded through rates and capital facilities rates with limited County participation
- 9,350 more customers sewered by 2001



OVERVIEW OF SPOKANE COUNTY PROGRAM



2001 planning brought more changes

- Final plan to complete the STEP
- Maintained County long-term debt funding
- Initiated connection fees with limited County participation
- Goal: connect the remaining 18,500 customers by 2015

2014 – program changed again

- Almost complete: connecting customers in the STEP area
- Simplified connection fees



SPOKANE COUNTY STEP FUNDING APPROACH



STEP program financing based on:

1. General Facilities Charge (GFC)
 - Proportional share of wastewater treatment facilities, interceptors, and pump stations
 - Customers eliminating septic systems receive subsidy in form of GFC credit
2. Capital Facilities Rate (CFR): construction cost of local sewer pipeline
3. Special Connection Charge (SCC): construction costs of pipeline outside of area (developer credits apply)
4. Trunk Charge: for sewer trunk extensions into undeveloped areas



SPOKANE COUNTY STEP FUNDING APPROACH



STEP connection charges vary by location and funding approach

- Inside vs. outside STEP area
- ULID vs. no ULID
- County vs. developer funded

Area/Funding	Connection Charges
STEP Area w/ULID	GFCs
STEP Area w/o ULID	GFC + CFR
Outside STEP Area and Sewered	GFC + SCC
Outside STEP Area and Unsewered	GFC + TC

Customer options

- Pay in full at connection
- Finance over 20 years, with interest
- Pay over 2 years, without interest
- Connection timelines/funding set to sunset

Upon STEP completion (2015) County converted connection fees to GFC and Uniform Collection charges



SPOKANE COUNTY STEP SUMMARY



Plan evolved over time

- County funding participation
- Funding approach
- Incentives for sewer connections

Fee structure provided ways to fund improvements for various customers

Financing incentives (0% for 2 years, and 20-year option) lessened customer impacts





CASE STUDY: MULTNOMAH COUNTY (PORTLAND), OR



MID-COUNTY – 1985



Demographics

- 22,300 acres (including areas to be served by Portland and Gresham)
- A fully developed (unincorporated) “city”: homes, schools, shopping centers, hospitals
- 65,000 households and more than 166,000 residents
- Predominately middle class; 65% of households with incomes between \$13,600 and \$54,400 (1980 dollars); Median income (\$23,000) close to countywide average
- Average single family home 20-30 years old, valued at \$58,550; 60% are owner-occupied.
- Average residential lots exceed 7,000 square feet



MID-COUNTY – 1985



Environment

- Geology: thick layers of porous gravel (90 to 600 feet deep); drains rapidly
- Nine public water systems (including Portland’s supplemental source) draw drinking water from the aquifers
- 14 million gallons of sewage discharged daily into the ground – 87% of the total for Mid-County; sanitary sewer systems (Portland, Gresham, Multnomah County) serve 13% of the total
- Wells tested in Mid-County show increased nitrate contamination
- Portland and Gresham have excess treatment capacity to serve the area



PRELUDE TO MANDATORY SEWER CONSTRUCTION



- 1971–1974 Oregon DEQ conducts ground water studies in Mid-County
- 1978-1982 Environmental Quality Commission adopts rules to prohibit on-site disposal for new development in unsewered areas
- 1982-1986 Local jurisdictions form Consortium to plan for sewers. The EQC reviews their plan for voluntary sewers and directs the Consortium to modify the plan to make it mandatory.
- 1986 -1987 Multnomah County/Portland/Gresham adopt the Mid-Multnomah County Sewer Implementation Plan, with citizen input. EQC issues Order directing Portland and Gresham to carry out the sewer plan. Portland and Gresham develop Sewer Safety Net programs to assist low-income property owners.



SAFETY NET PROGRAM



1987 Oregon Legislature authorized and funded Portland's Sewer Safety Net Program:

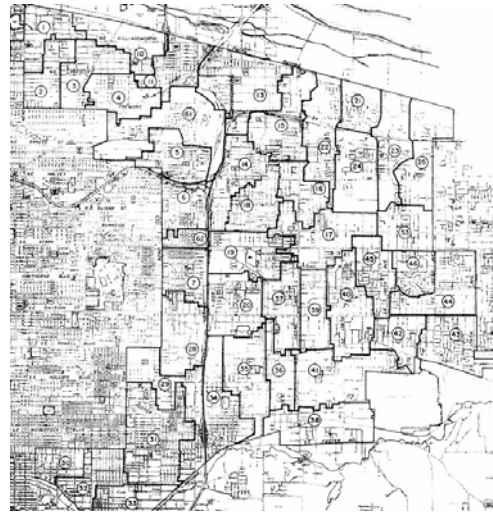
- Portland's Citizens Sewer Advisory Board (CSAB) given a formal role to advise/guide safety net program implementation
- Non-construction project costs limited to 20%
- Residents granted one-time \$500 income tax credit
- DEQ provided low-interest long-term financing for sewer assessment loans, and assessment deferrals.



ORIGINAL PLAN – 44 LIDS



Project No.	Project Name	Released	Vacant Lots	Developed Lots	Total Properties
Previously Served Properties					
15	Kearf Park	3/1/90	336	1456	1792
05	Madison	9/1/90	63	1195	1258
21	Luby/Strathmore	1/1/91	108	1031	1139
19	Flood Light	9/2/91	57	1979	2036
35	Boyles	9/2/91	158	1044	1202
36	Richardson	10/2/91	134	1167	1301
01	Englewood	9/1/92	131	882	1013
06	Montevilla	9/1/92	117	1177	1294
20	Adventist	9/1/92	173	1370	1543
39	Linn Park	9/1/92	101	870	971
02	Irvington	8/1/93	104	914	1018
37	Mill Park	8/1/93	52	1093	1145
14	Woodland	12/1/93	95	980	1075
18	Burnside West	3/1/94	123	873	996
538	Burnside East/South	3/1/94	55	1159	1214
587	Madison Trunks	3/1/94	15	197	212
07	Berrydale	6/1/94	0	2	2
28	Marshall	6/1/94	81	1274	1355
51A	Burnside East-North	6/1/94	173	818	991
25	Robinsbrook	8/1/94	52	376	428
46	Parklane	8/1/94	117	1221	1338
63	Foster Road	9/1/94	40	804	844
03	Rose City	11/1/94	25	119	144
23	Summer Place	12/1/94	85	1146	1231
38	Gilbert	7/2/95	101	919	1020
11	Summer	9/2/95	190	663	843
41	Powell Village	11/2/95	65	1247	1312
17	Burnside Central	1/2/96	220	1255	1475
24	Cidgate	6/1/96	128	1353	1481
31	Woodmere	6/1/96	46	817	863
34	Bloomington	7/1/96	327	3149	3476
16	Windmere	8/1/96	214	1301	1515
04	Wellington	9/1/96	53	758	811
29	Ebene	11/1/96	197	2855	3052
13	Parkrose	12/1/96	162	1531	1693
33	Flavel Park	2/1/97	152	1265	1417
32	Derington	4/1/97	101	923	1024
30	Brentwood	9/1/97	112	1440	1552
10	Sageview	10/1/97	71	814	887
45	Robin Wood	11/1/97	81	535	616
40	Lincoln Park	12/1/97	73	1092	1213
44	Fairfield	1/1/98	153	1520	1673
43	Eastmont	2/1/98	73	1480	1553
42	Lynnmark Park	6/1/98	93	987	1080
			66	1039	1105
Totals - Mid-County Sewer Project			5113	50110	55223



1992 – A MAJOR RESET



Precipitated by grassroots citizen campaign

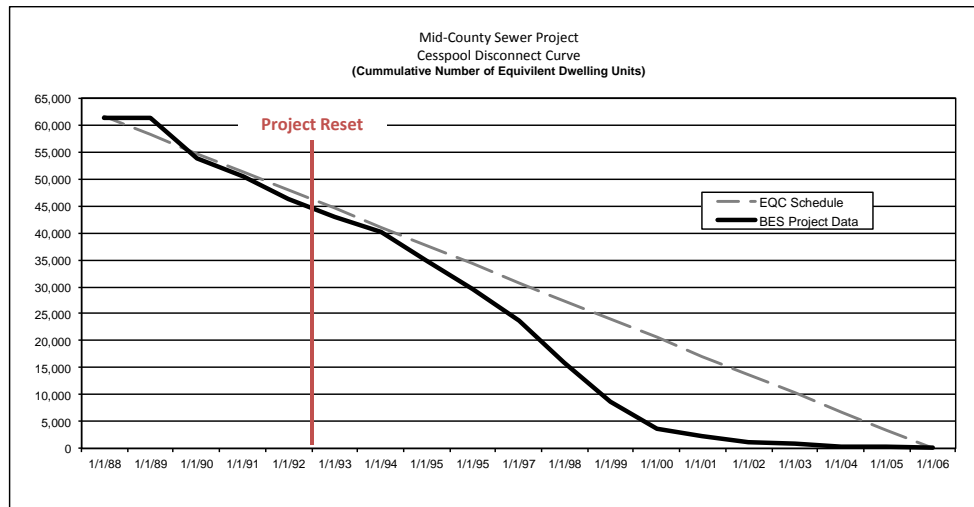
Leveraged Portland mayoral election to win substantive policy changes and financial concessions

Reset transformed every aspect of the project:

- Transitioned from LID-based strategy to City-financed CIP program.
- Project construction schedule accelerated to take advantage of bidding climate and scale economies
- Property owner financing accelerated, with price guarantees and assessment discounts (typically 40%-50%)
- Safety Net program expanded to include additional financing tools for large lots and private plumbing charges



RESET ACCELERATED CONSTRUCTION AND CONNECTIONS



MID-MULTNOMAH COUNTY SEWER PROJECT – PORTLAND COMPONENTS



Project Characteristics

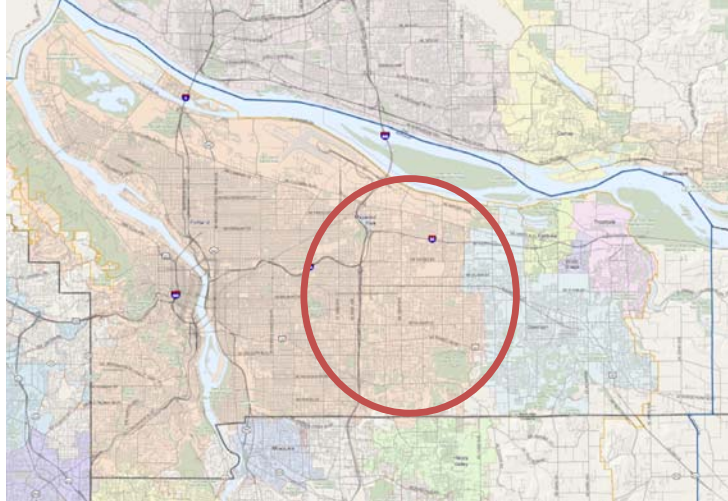
- Project Area - 28 Square Miles
- Number of Properties – 55,223
- Developed Properties – 50,110

Construction Characteristics

- Sewer Collectors – 394 Miles of Pipe
- Sewer Interceptors – 16
- Pump Stations – 6
- Construction Packages – 41
- Prime Contractors – 29

Project Costs

- Total Construction Costs - \$255 Million
- Federal Grant Contributions - \$26 Million



FINANCIAL IMPACTS ON RESIDENTIAL PROPERTY OWNERS



- Average Sewer Cost per Single Family Residence - \$4,100
- Average Cost of Private Sewer Connections - \$1,500 to \$2,500
- Safety Net Loans – 1,585 totaling \$4.4 Million
- Private Plumbing Loans – 393 totaling \$789,804
- Sewer Connection Deferrals Granted – 3,153



PROGRAM ACCOMPLISHMENTS



Project completed six years early and 16% under budget, fully sewerage every neighborhood and sub-basin.

Halted environmental degradation of the groundwater aquifer (a critical drinking water source) and protected adjacent streams.

Installed stormwater drainage systems in areas not previously sewerage.

Utilized many local contractors – 29 prime contractors and 120 private sewer connection contractors.

Placed a high importance on community relations from the earliest stages of the project, training all project staff in customer service.

Achieved a near-perfect safety record.

Significantly increased property values.

Accommodated a 30% population increase to more than 170,000 today (in Portland's neighborhoods).



CASE STUDY: CITY OF WENATCHEE, WA



BACKGROUND

- Population 34,000 in central Washington
- “Strong Mayor” form of government
- Currently has some of the state’s lowest sewer rates, thanks to a large industrial base
 - \$29.50 per month residential (2017)
- Adequate wastewater treatment capacity (with \$11 million planned improvements over next 20 years)
- Major issue: unsewered areas next to City constricts future growth



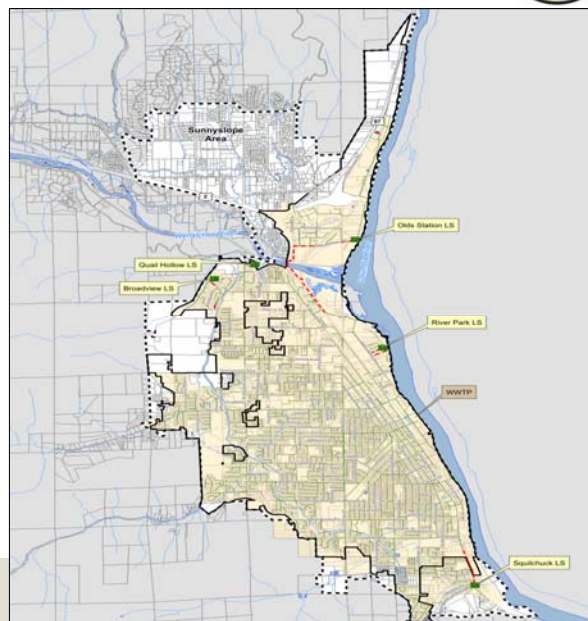
UNSEWERED AREAS

Sunnyslope – large Urban Growth Area (UGA) north of city

- Large: 20% of the acreage of the City
- Growing mostly single-family residential
 - 1,200 existing septic systems
 - Lack of sewer service limits density potential
 - Sewers would allow 3,500 more Equivalent Residential Units (ERUs)

28 smaller “infill areas”

- Unserved islands are unincorporated
- 400 septic systems (potential for 960 ERUs including new development)
- Consent to annex is a condition of sewers



PAST FAILURES

- 2008 Sewer Plan assumed developer-driven sewer service for Sunnyslope
- That didn't happen...
- Needs identified:
 - Major trunk lines to get within range
 - Initial investment from City sewer system

Existing Gravity Main Replacement	
G1: Olds Station - 1,300 LF 12" main	
G2: Easy St. - 500 LF 12" main (60' radius)	Cost: \$251,000
G3: Penny Rd. - 305 LF 12" main	Cost: \$248,000
G4: Penny Rd. - 305 LF 12" main	Cost: \$191,000

Future Gravity Mains	
FG1: Easy St. Trunk - 3,000 LF 8" / 1125 LF 12" main	Cost: \$1,700,000
FG2: Chatham Hill Trunk - 6,110 LF 12" main	Cost: \$2,228,000
FG3: South Sunnyslope Trunk - 5,760 LF 12" main	Cost: \$1,769,000
FG4: North Sunnyslope Trunk - 4,105 LF 12" main	Cost: \$1,281,000
FG5: Heron Rd. Trunk - 1,340 LF 12" main	Cost: \$209,000
FG6: Sunnyslope Sewer Ext. - 36,000 LF 12" main	Cost: \$23,492,000

Existing Lift Station Upgrades	
LS1: Olds LS - increase to 1,000 gpm pump/box	Cost: \$695,000
LS2: Breakview LS - Replace 250 to 500 gpm	Cost: \$738,000

New Lift Stations	
FLS1: Sunnyslope LS and FM - 670 gpm, 1,100 gpm	Cost: \$4,300,000
FLS2: Warm Springs LS and FM - 62 gpm, 125 gpm	Cost: \$1,491,000
FLS3: Olds LS and FM - 60 gpm	Cost: \$1,184,000

CITY OF WENATCHEE
SEWER COMPREHENSIVE
PLAN AMENDMENT
Figure 9-1
CIP Projects
(Sunnyslope)
Chow & Chalmers, Inc.

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WHY IS IT SO HARD TO CONVERT?

“Piecemeal Problem”

- Both sewer extensions and septic systems cost property owners thousands of dollars— they don't want to pay twice
- To be economical, sewer extensions must be done in batches, but septic systems fail one by one
- Without City leadership and ratepayer investment, the cycle stays negative:

Single septic failure

Neighbors think their own septic systems are fine

Property owner invests in new septic system

Neighbors don't support sewer extension

Property owner requests permit to replace single septic system

Neighbors don't support sewer extension

Unlike some problems, this one doesn't improve over time by itself.
Every new septic system in an urban growth area makes the problem worse.

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ADOPTED SEWER EXTENSION PROGRAM

Wenatchee Sewer Extension Program relies on both ratepayers and property owners for funding.

- Ratepayers will see an extra 3% per year rate increase over the next six years
 - \$41.84/month instead of \$35.22 by 2022 – \$6.62 per month higher
 - Ratepayer contribution funds:
 - Initial capital investment
 - Timing risk with new connections
 - Program administration costs



PROPERTY OWNER COSTS

Property owners will still bear the primary cost burden

- New citywide *Local Facilities Charge* (LFC) of \$6,140, takes place of LIDs or earlier front-footage charges (except where sewers are built by developer)
- New *Sunnyslope Area Fee* - \$3,810 if in Sunnyslope
- Existing *System Investment Fee* increased from \$570 to \$1,500 (could have been \$3,710)

Property owners will have some **control over timing** and can get some **help with up-front charges**

- They can choose to wait until septic system fails
- But those who connect within 2 years of sewer availability receive 30% discount on LFC and Sunnyslope Area Fee

Up-front charges total \$11,000 in infill areas, \$13,700 in Sunnyslope

- A Sunnyslope property owner who finances up-front charges as part of 30-year mortgage at 6% will pay \$82/month
- With added sewer rates, monthly costs would increase by \$113/month (minus septic system costs)



CHANGES TO PROGRAM DESIGN

City Council took action to “balance the pain” between property owners and ratepayers:

- Adopted 6% limit on annual sewer rate increases
- Dropped 15-year time limit for connection, but reduced 50% hookup discount to 30%
- Dropped requirement to connect upon sale of property
- Added Sunnyslope Area Charge: \$3,810 for Sunnyslope properties
- Reduced System Investment Fee to \$1,500 from recommended \$3,710
- Rejected inflation based schedule for development charges in favor of 1% annual increases

Regulations for new development still being negotiated with the County



CURRENT STATUS

- Sewer extension program approved by City Council in June 2017, along with new Sewer Plan and five-year rate schedule
- Program developed over the previous 14 months, including four briefings to City Council
- All citizens who addressed the Council meeting in June were *in favor* of the plan.
- City now issuing Requests for Proposals for design of capital projects.



SEPTIC-TO-SEWER SUCCESS FACTORS

- ✓ Policy commitment to take action: to protect public health, environment, economy, quality of life
- ✓ Regulatory pressure (mandate) combined with incentives to connect
- ✓ Multiple funding strategies/options include system-wide investment
- ✓ Implementation planned in stages
- ✓ Branded program with effective public engagement
- ✓ Partnerships with local – state – federal agencies
- ✓ Program changes increase success rate



OTHER COMMUNITIES

- Redmond
- Sisters
- Madras
- La Pine
- Tigard

COMMITTEE Q&A

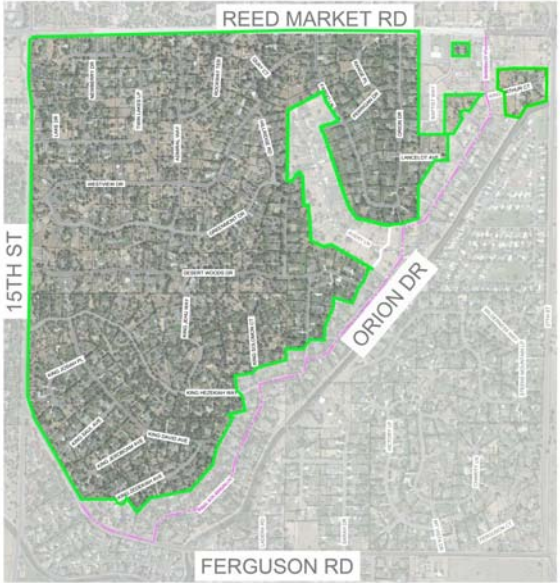
FIELD OUTREACH



- Overview
- Demographics
- Contrast
- Communication recommendation
- Summary

FIELD OUTREACH - OVERVIEW

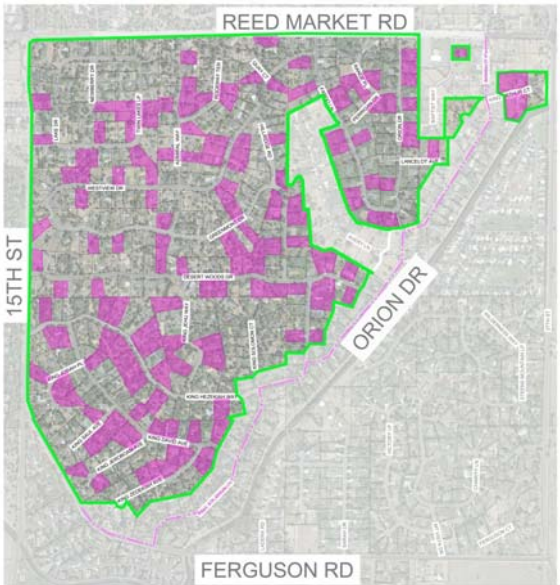
- Current Outreach Area
- Visits
 - Up to 3 attempts
 - 508 residences



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FIELD OUTREACH - OVERVIEW

- 168 Responses (33%)
 - In-person
 - Mailer
 - Online survey



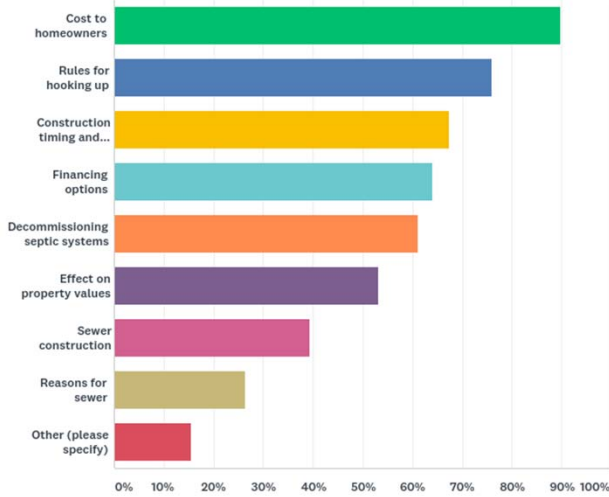
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FIELD OUTREACH - DEMOGRAPHICS



- Demographics
- Who we met
 - Long-time residents ↔ newcomers

FIELD OUTREACH - QUESTIONS



- Areas where more information is needed

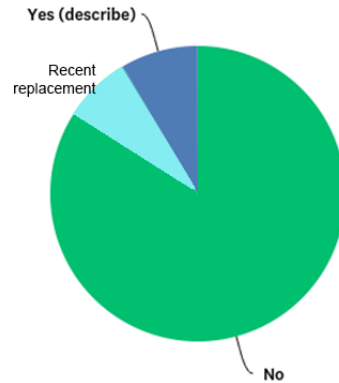
FIELD OUTREACH – CONTRASTING STORIES



“We don’t want it. We don’t need it”

“We need it now – when will it be here??”

Are you currently experiencing problems with your septic system?



FIELD OUTREACH – CONTRASTING STORIES



Line Recently Installed Tom Income Noise Timeline LID
 Owners Disabled Pumped Sand Filter
 Cost to Homeowners City Limits Septic
 Steel Tank Replaced **Sewer** Property Values
 Hook Up Bought Pay 12K Street Access
 System Works Happen Road Price

FIELD OUTREACH - RECOMMENDATIONS



Plan Community Fair Up-to-date Hook Phone Pay Struggle
 Construction Trust **Communication**
 Reed Market **Sewer** Income **Cost** Traffic Flow
 Home Owner Nice **Neighborhood** Notice
 Septic Systems Support **Street** Problem **Ago** Orion
 Optional

FIELD OUTREACH - RECOMMENDATIONS



- Multiple modes
 - Quarterly newsletter
 - Website
 - Meetings

- Consistent purposeful outreach

FIELD OUTREACH - SUMMARY



- Spectrum of concerns:



FOCUS GROUPS – AUGUST 12, 2017



- “Qualitative” research to explore solutions for SE sewers
- Two groups:
 - #1 – Kings Forest property owners (9)**
 - #2 – Kings Forest (4) plus citywide sewer customers (4)**
- Written exercises followed by discussion



FOCUS GROUP HIGHLIGHTS



1. There is a general understanding and **reluctant acceptance the area will be sewerred.**
 - *“I understand it's coming, so somehow we need to find a solution.”*
2. The shared conclusion is **the price tag will be unaffordable** (\$40k-\$90k).
3. Participants report **good experiences with septic systems.**

- A few acknowledge septic systems don't last forever and they worry about the eventual failure:

“When septic systems fail, they don't fail over time – it's all at once.”



FOCUS GROUP HIGHLIGHTS



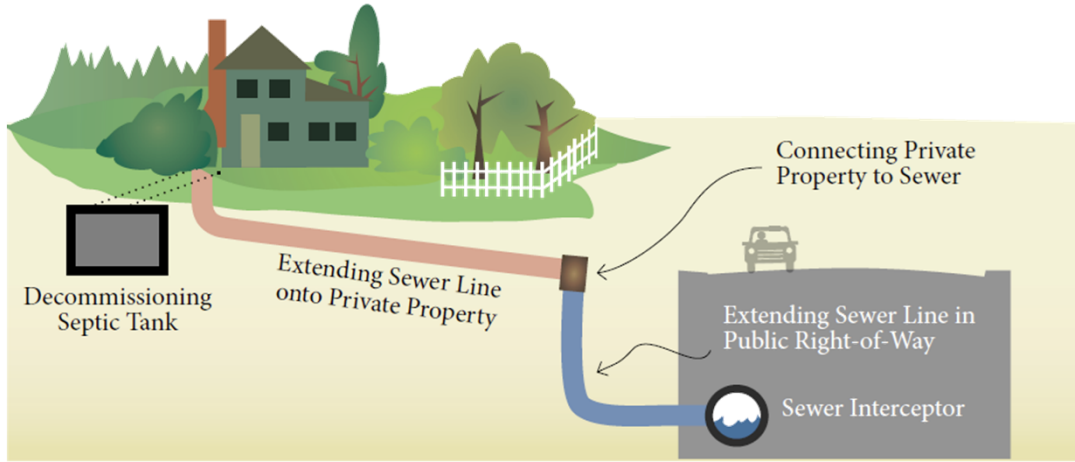
4. A deeply held **suspicion: the City has a plan** but hasn't announced it.
 - Some think the City appears to be withholding information.
 - Longtime area residents recall being offered sewer service as part of Bend's annexation package.
5. All agree **the City and homeowners should share the costs** of installing sewers.
 - *“All the people in Bend should help pay.”*

6. **Citywide sewer customers are willing to contribute** to solving this community-wide problem.





What Percentage Should be Paid by Area Property Owners?

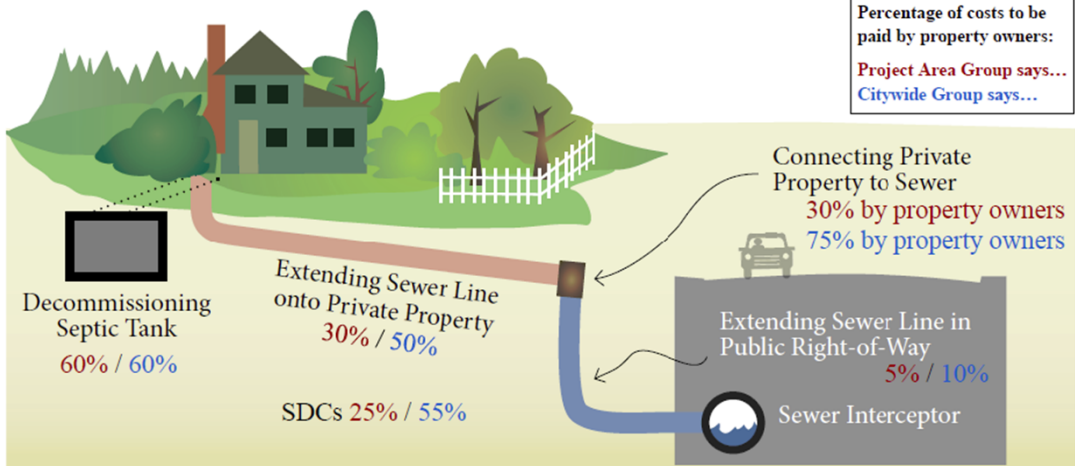


Consensus: Costs Should be Shared

Percentage of costs to be paid by property owners:

Project Area Group says...

Citywide Group says...



FOCUS GROUP HIGHLIGHTS



7. Giving homeowners a way to pay their share over time is much more acceptable

- \$100 per month over many years, or paying off the whole thing when the house is sold.

8. Homeowners prefer options that give them choice: on financing methods, timing to hook-up, homeowner contractor selection, and where the connection to their property is situated.



FOCUS GROUP HIGHLIGHTS



9. People are split on “go it alone” versus an “areawide” approach, both scenarios have some appeal.

- *“Why should you replace something that works?”* (favors Scenario 1)
- *“I’d like more control. I’m getting stressed by it.”* (favors Scenario 2)
- *“One-time construction is going to be less expensive.”* (favors Scenario 2)



FOCUS GROUP HIGHLIGHTS



10. **Concerns about construction impacts are limited** to the loss of shrubs and trees.

- The recent sewer work in Kings Forest was well managed by the contractor and neighbors experienced few/no problems.



11. An **unanticipated benefit for hooking up** to sewer is gaining the full use of their property.

ADVISORY COMMITTEE PRELIMINARY VALUES (6/20/17)



- Timely solutions (finished within 10 years)
- Solutions property owners understand and support
- Durable solutions: good for 50-100 years
- Equitable, fair, affordable
- Financially feasible
- Shared responsibility
- Reasonable, practical
- Replicable

ADVISORY COMMITTEE PRELIMINARY VALUES CONFIRMED 

- ✓ Timely solutions (finished within 10 years)
- ✓ Solutions property owners understand and support
 - Durable solutions: good for 50-100 years
- ✓ Equitable, fair, affordable
- ✓ Financially feasible
- ✓ Shared responsibility
- ✓ Reasonable, practical
 - Replicable

COMMITTEE Q&A

PUBLIC COMMENT



- 5 minutes
- Time divided among speakers
- Comment cards available



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UPCOMING ADVISORY COMMITTEE MEETINGS



Thursday, October 5

Preliminary Engineering I

Thursday, November 2

Four Ingredients of Affordability

Interim Policies

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THANK YOU!