

Board Work Session Minutes
September 4, 2018

WORK SESSION – 6:00 PM

CALL TO ORDER

Commissioners Present: Bernice Bagnall; Jim Doane, PE; Jim Duggan, PE; Todd Sanders; Dick Schmidt

Staff Present: Mark Knudson, PE, Chief Executive Officer; Clark Balfour, General Counsel; Paul Matthews, Chief Financial Officer; Andrew Carlstrom, Customer Service Manager; Carrie Pak, PE, Chief Engineer; Dave Kraska, PE, Water Supply Program Director; Nick Augustus, PE, Engineering Division Manager; Debbie Werner, District Recorder

ANNOUNCEMENTS

Mr. Matthews presented the Safety Minute on school zone safety.

Mr. Knudson provided schedule and Board Communications Log updates (see attached memo). The Board expressed a preference to hold the November 6 work session as scheduled and cancel the work session on December 4.

1. DISCUSSION ITEMS

A. Overview of Options for Development Fees

Mr. Matthews gave an overview of development fees (see attached presentation). In response to questions, staff said:

- Fire flow rates vary depending on the location within the system, with a typical rate of at least 1,800 gallons per minute (gpm) in residential areas and 3,500 gpm in commercial areas. Fire flow tests are performed prior to development design to enable developers to build appropriate fire suppression systems.
- Historically, development fees have not attempted to capture a greater portion of staff costs as an incentive for developers in order to promote community growth.

Ms. Pak described development review services and posed questions for the Board to consider during the presentation.

Mr. Matthews provided revenue perspective and answered a question, stating approximately \$260,000 of inspection costs and \$300,000 in plan review costs were not recovered in the previous fiscal year.

Ms. Pak highlighted historical plan review and system development charge (SDC) revenue and outlined the development process from start to finish. Mr. Matthews displayed estimated developer fees in neighboring jurisdictions.

In response to questions, staff said:

- Many agencies also charge a percentage of the value of the asset.
- Tigard, Beaverton and Hillsboro were chosen to compare developer fees given the District serves parts of each community.
- The alternative District fees proposed include capturing 100% of plan review and inspection costs and are less than neighboring jurisdictions since those agencies assess fees related to development of more than just water infrastructure.
- The potential increased costs to developers would be negligible compared to SDCs.

Commissioner feedback included:

- When straying from cost-of-service models, customers then subsidize developers; growth should pay for growth.
- Raising SDCs did not discourage development.
- Smaller developments can require greater staff oversight than larger subdivisions.
- The desire to recover 100% of costs, rounding the numbers while doing so.
- The desire to adequately provide notice to the development community.

Ms. Pak said staff would bring any significant developer feedback to the Board at the October 2 work session, anticipating formal Board action at the October 17 meeting.

Mr. Matthews wrapped up the presentation by describing next steps.

B. Evaluation of Changing Customer Classification of Duplex Customers

Mr. Matthews described the history, overview, potential changes and impacts, findings, communication strategy and proposed next steps (see attached presentation).

In response to a question, he said some customers would see such high increases for unique reasons. He suspects some of those units may have been vacant for a period of time, lowering the average consumption level, which corresponds with higher rates when water use increases following new tenant move-in. These customers likely have smaller water bills to begin with, so a larger percentage increase likely would not have a large monetary impact.

Commissioner feedback included:

- If 69% of customer bills would remain unchanged, it appears most duplexes do use less water.
- The desire to review the methodology behind block rates. Staff will provide an overview for the Board at an upcoming work session.

- The desire to provide simple and clear information to affected customers; perhaps providing individualized bill comparisons of 2017 bills to projected new bills, if that would not cause a great deal of staff work.

C. TVWD Capacity Share in the Willamette Water Supply System (WWSS)

Mr. Knudson described the scope of the WWSS; key terms regarding system ownership, capacity and capacity shares; and described benefits and limitations of choosing three different share amounts (see attached presentation).

In response to Commissioner questions, he said:

- He discussed the potential for the District's modified share with the Hillsboro Water Department Director.
- Staff developed estimated needs based on a median forecast; climate change, regional growth, partner fluctuation and other variables may affect actual needs.

The Board expressed a preference for the 59.1 million gallons per day share. Mr. Knudson said he would bring the item back for Board action at the September 19 Board meeting.

D. Draft Board Action Plan for 2018-19

Mr. Knudson asked the Board for feedback on the draft Board Action Plan included in the meeting packet materials. The Board said they would like to strive to reach the specific goals listed. Mr. Knudson said staff will assist the Board in achieving goals.

ADJOURNMENT

There being no further business, President Bagnall adjourned the meeting at 7:43 p.m.

Bernice Bagnall, President

Todd Sanders, Secretary



MEMO

Date: September 4, 2018
To: TVWD Board of Commissioners
From: Mark Knudson, CEO
Re: CEO Announcements

I will cover the following items during the CEO's Announcements at the work session:

1. **Be Sure to Use Microphones** – Just a reminder to please be sure to use your microphone whenever you are speaking during the work session this evening. Also, please be sure to turn off your microphone when you are not speaking.
2. **Safety Minute** – Paul Matthews, the District's Chief Financial Officer, will present the safety minute this evening.
3. **Schedule Updates** – We have three anomalies in the schedule for TVWD Board meetings this fall:
 - a. The November work session would typically be held on Tuesday, November 6. That is the same day as the general election. In the past, the Board has at times rescheduled the work session to avoid conflicts with election events. We currently have one topic scheduled for the November work session. Do the Commissioners wish to hold the November work session as scheduled on November 6, or do Commissioners prefer to reschedule the meeting?
 - b. A brief reminder that the November Board meeting is scheduled for Wednesday, November 28. This is a week later than the typical schedule to avoid conflicts with the Thanksgiving holiday.
 - c. The December work session would typically be held on Tuesday, December 4. Since that is the week immediately following the November Board meeting, are there any objections to moving the agenda items that were planned for the December work session to the Board meeting on November 28 and cancelling the December work session?
4. **Board Communications Log** – There is one update to the Board communications log this month. Commissioner Doane requested an opportunity to review the Basis of Design and Project Phasing Technical Memorandum for the WWSS. Due to the size of the tech memo (131 pages, 20 MB), if other commissioners are also interested in reviewing the document, please email Debbie Werner and cc: me.

2018 Board Communications Log

Commissioner Questions/Topics: (includes research requests directed to staff via email or at Board meeting)

- Initial request sent to Mark (copy Board President)
- Mark responds with projected timeframe for response and any other logistical info
- Answer shared with the full Board during work sessions

Item Number	Requestor	Subject	Date Submitted	Response Date	Date Information Shared with Full Board
01-18	Doane	Overall percentage rate increases	3/21/18	3/23/18	April 3
02-18	Doane	Proposed connection of WWSS to Metzger	7/20/18	7/25/18	August 7
03-18	Doane	Copy of WIF Draft Basis of Design and Project Phasing Technical Memo	7/25/18	9/10/18	Made available September 4

Board Committee Information:

- Meeting notes/handouts shared with the full Board during work sessions

Meeting Date	Notes	Date Information Shared with the Full Board
Finance Committee		
March 9	Meeting synopsis prepared by Katherine DeSau	April 3
May 24/June 5	Individual Commissioner briefings covered the same topics as the May 22 Water Supply Committee meeting	N/A
Policy and Board Development Committee		
Strategic Planning Committee		
Water Supply Committee		
April 23	Meeting synopsis prepared by Debbie Werner	May 1

May 22	Meeting synopsis prepared by Katherine DeSau	June 5
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Development Services Fees

Plan Review and Inspection

Board Work Session

September 4, 2018



Development Fees

- Plan Review Costs
 - Costs of reviewing drawings and plans for local assets that typically serve a new subdivision
- Inspection Costs
 - Costs of inspecting new assets to accept them into the District
 - District assumes responsibility for operating and maintaining the assets
 - Must comply with District's *Water System Design and Construction Standards*
- Fire Flow Testing
 - Costs to field-verify local fire flow capacity

Providing Development Review Services

Engineering is Lead Department

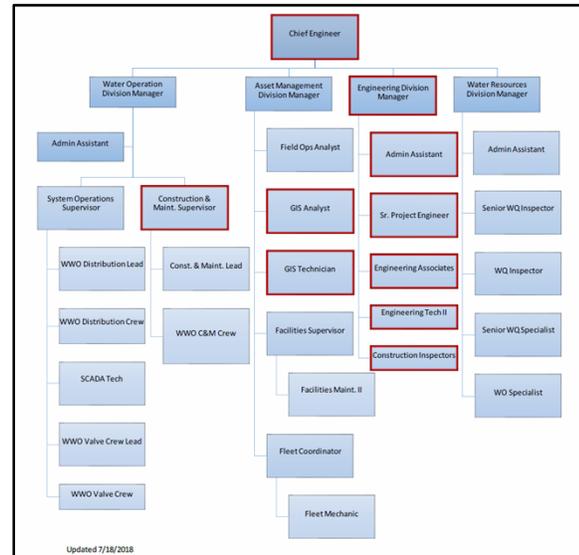
- Significant effort by Engineering Department to review new development

Purpose

- Provide quality service to new and existing customers
- Manage future O&M (operations and maintenance) costs

Other Growth-Related Costs

- SDCs (system development charges) pay for growth-related costs outside of development (e.g., source, treatment, storage, pumping, major transmission)



Question for the Board

- Should developers reimburse the District for:
 - Plan review costs?
 - Inspection costs?
 - Both?
- Currently only plan review costs are recovered
- Neighboring utilities recover both costs

Perspective on Revenue

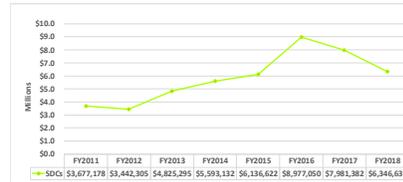
Plan Review Fees recover plan review cost only

- Cost of inspection currently not recovered from development

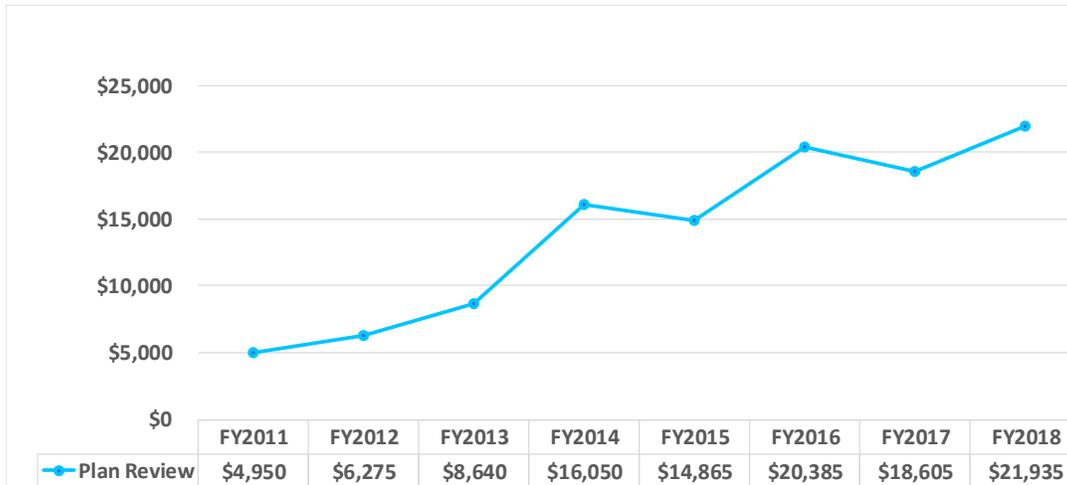


SDCs provide significantly more revenue

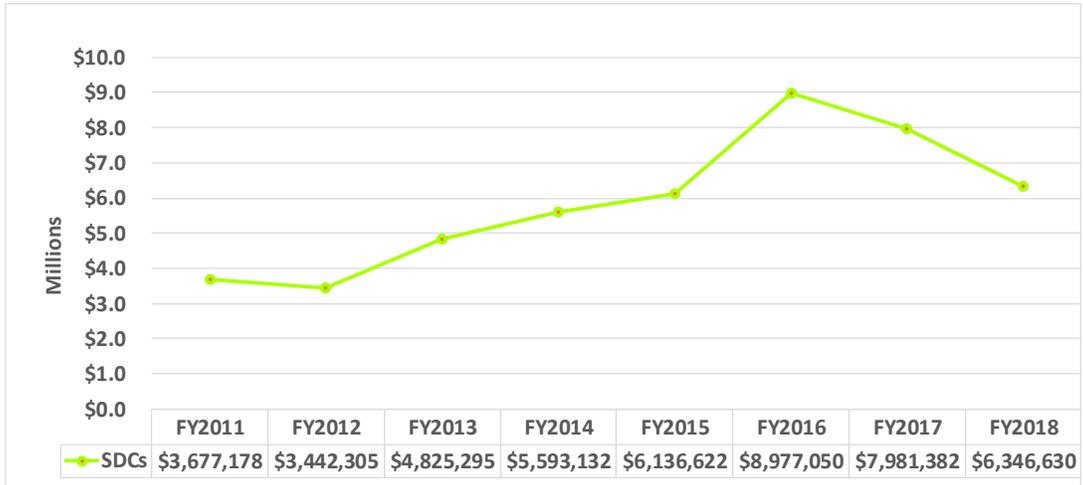
- SDCs pay for infrastructure
- Plan review fees reimburse for operating expenses incurred to accept new infrastructure



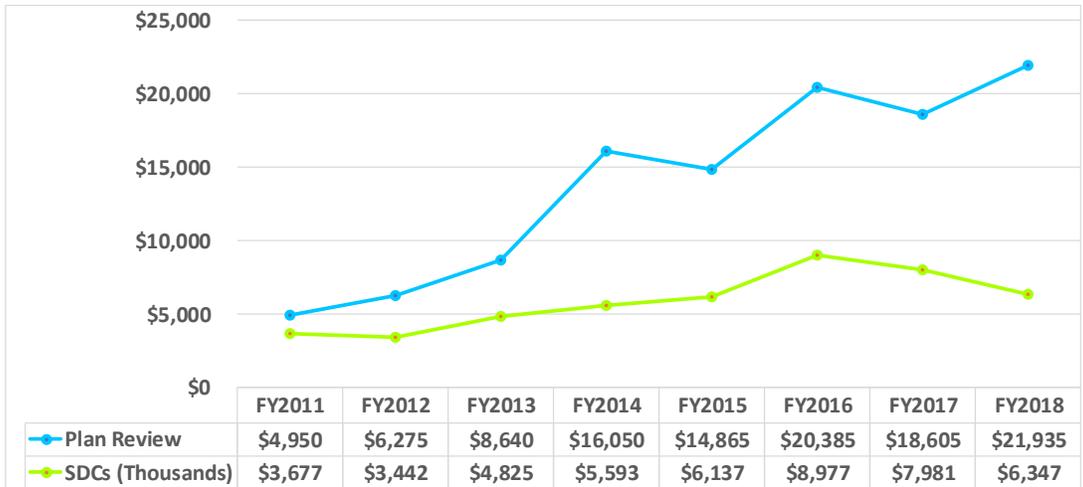
Historical Plan Revenue



Historical SDC Revenue



Plan Review and SDC Revenue



Policy Implications

Cost-of-Service Policy	Role in Regional Development	Beaverton Withdrawal
<ul style="list-style-type: none"> • Suggests developers pay full cost imposed on the District • Equity for new and existing ratepayers 	<ul style="list-style-type: none"> • Achieve economies of scale • Provide service to newly urbanized areas to support regional development 	<ul style="list-style-type: none"> • May affect pace of future growth • Infill may be more prevalent in the future • New greenfield development likely localized in the northwestern area of the District

Delivering the Best Water Service Value

9

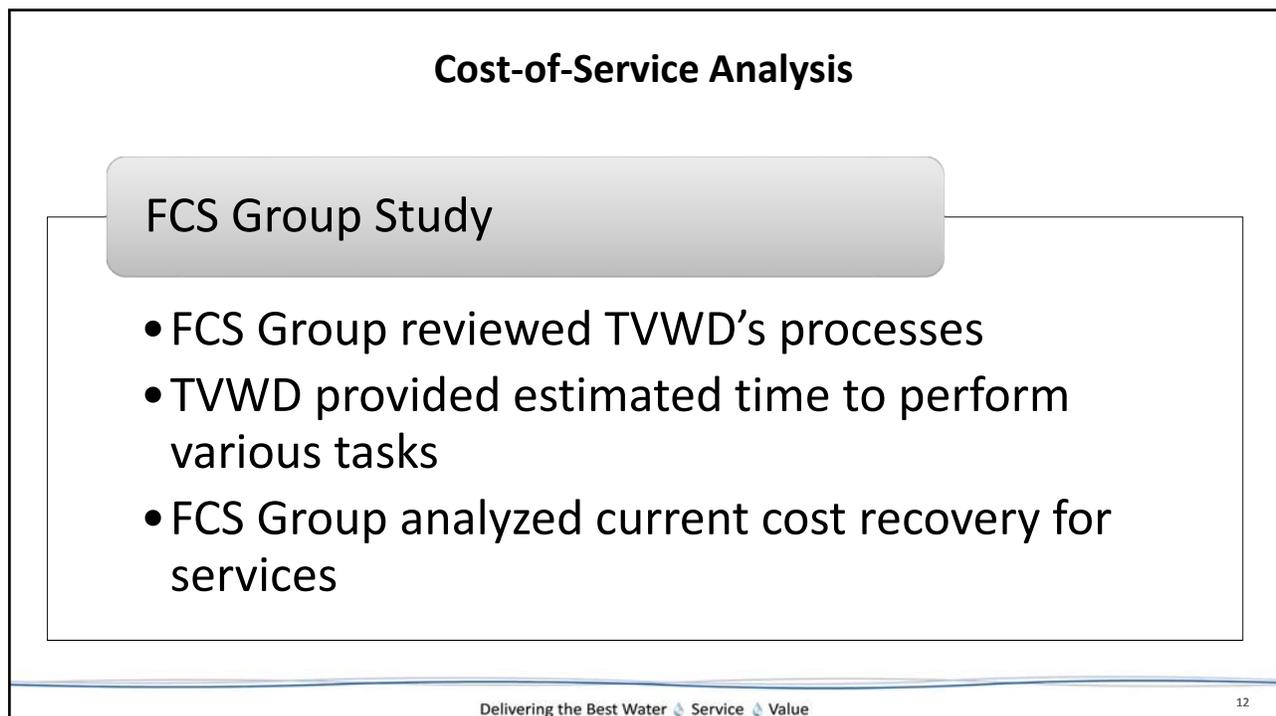
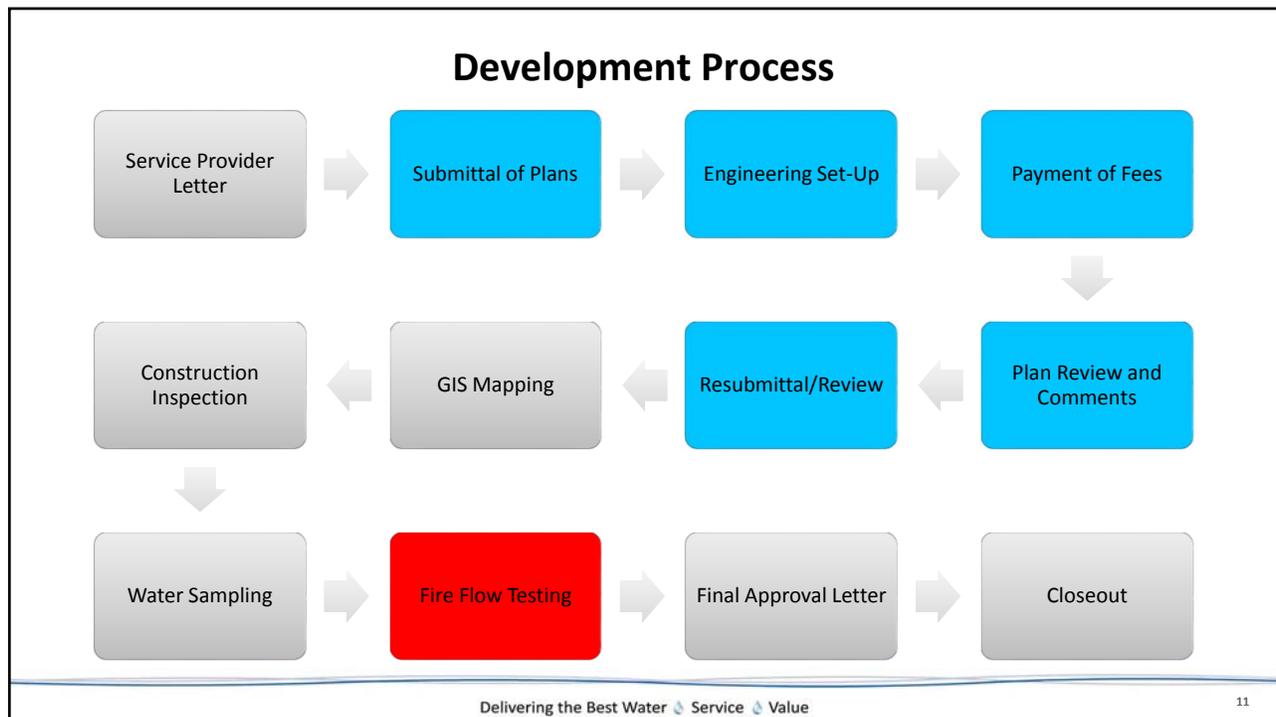
Development Process

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      A[Service Provider Letter] --> B[Submittal of Plans]
      B --> C[Engineering Set-Up]
      C --> D[Payment of Fees]
      D --> E[Plan Review and Comments]
      E --> F[Resubmittal/Review]
      F --> G[GIS Mapping]
      G --> H[Construction Inspection]
      H --> I[Water Sampling]
      I --> J[Fire Flow Testing]
      J --> K[Final Approval Letter]
      K --> L[Closeout]
  
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10



Comparison of Developer Fees

Engineering Development Fee	TVWD		Beaverton	Hillsboro ¹	Tigard ¹
	Current Fee	Alternative			
Plan Review & Inspection - 1-10 lots	\$185	\$2,647	\$10,066	\$2,720	\$8,160
Plan Review & Inspection - 11-50 lots	\$265	\$4,414	\$33,929	\$11,900	\$40,800
Plan Review & Inspection - 51-100 lots	\$420	\$5,747	\$58,459	\$23,800	\$81,600
Plan Review & Inspection - More than 100 lots	\$475	\$8,710			
Plan Review & Inspection - Commercial Development, Meter smaller than 2"	\$340	\$1,002			
Plan Review & Inspection - Commercial Development, Meter 2" or larger	\$475	\$6,363			

¹ Inspections are paid on an hourly basis.

Assumptions:

- Waterline cost for each lot is estimated at \$6,800 (50-ft main extension, service lateral and meter installation)
- Largest number of lots selected (e.g., 1-10 lots was calculated as 10 lots)

Questions

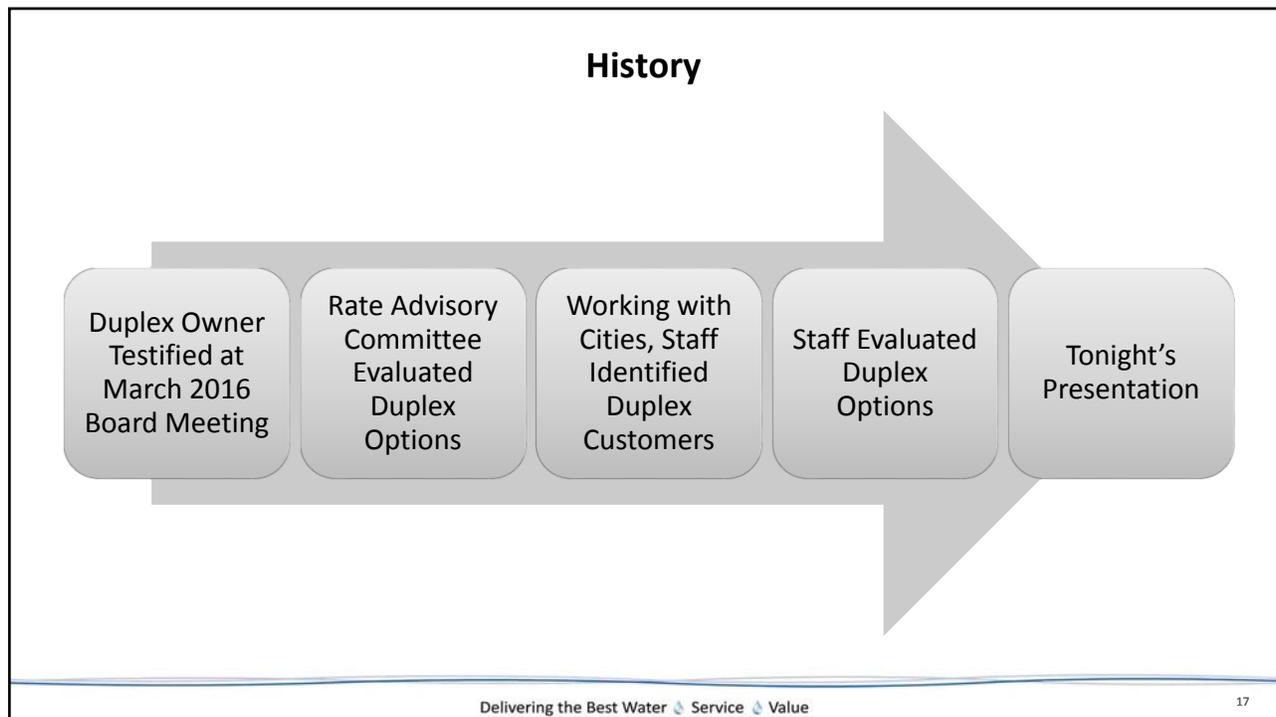
- What costs should TVWD recover from development projects?
 - If less than full cost, what is a reasonable percentage of cost recovery?
- If an increase in development costs is anticipated, should it be phased-in?
 - If yes, over what period?

Next Steps

- Depending on discussions with the Board:
 - Present information to the development community
 - Look at methods of recovering fee (e.g., per acre, lot, as percentage of donated assets)
- Present information gathered from development community to the Board at a future work session

Classification of Duplex Customers

September 4, 2018 Work Session



Overview of the Issue

- Duplex customers are classified as single-family residential customers
- Triplex and larger complexes are classified as multifamily residential
- Differences in Block Rate thresholds:
 - Single-family residential (including duplex) are provided up to 28 CCF per bi-monthly billing cycle in block 1
 - Multifamily residential are provided up to 140% of their 12-month rolling average in block 1

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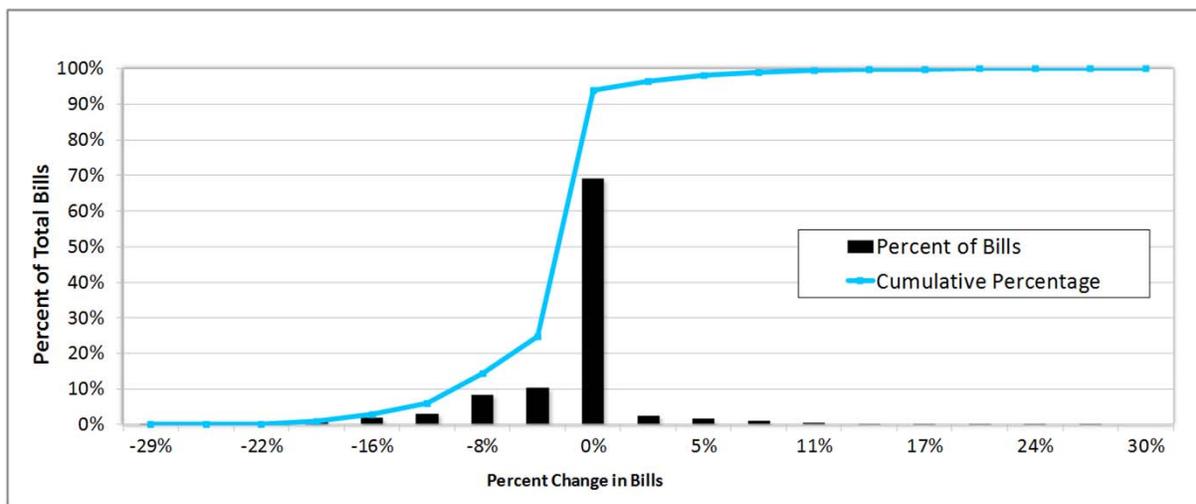
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Changing Classifications

Findings from Analysis

- Approximately:
 - 25% of duplex customers' bills would go down.
 - 6% of duplex customers' bills would go up.
 - 69% of duplex customers' bills would remain unchanged.
- Reduction in annual revenue to the District of approximately \$15,000.

Impacts of Changes on Bills

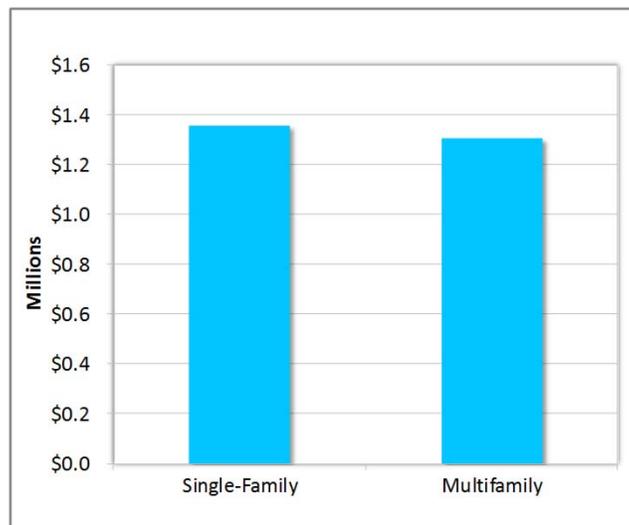


Differences in Consumption by Block

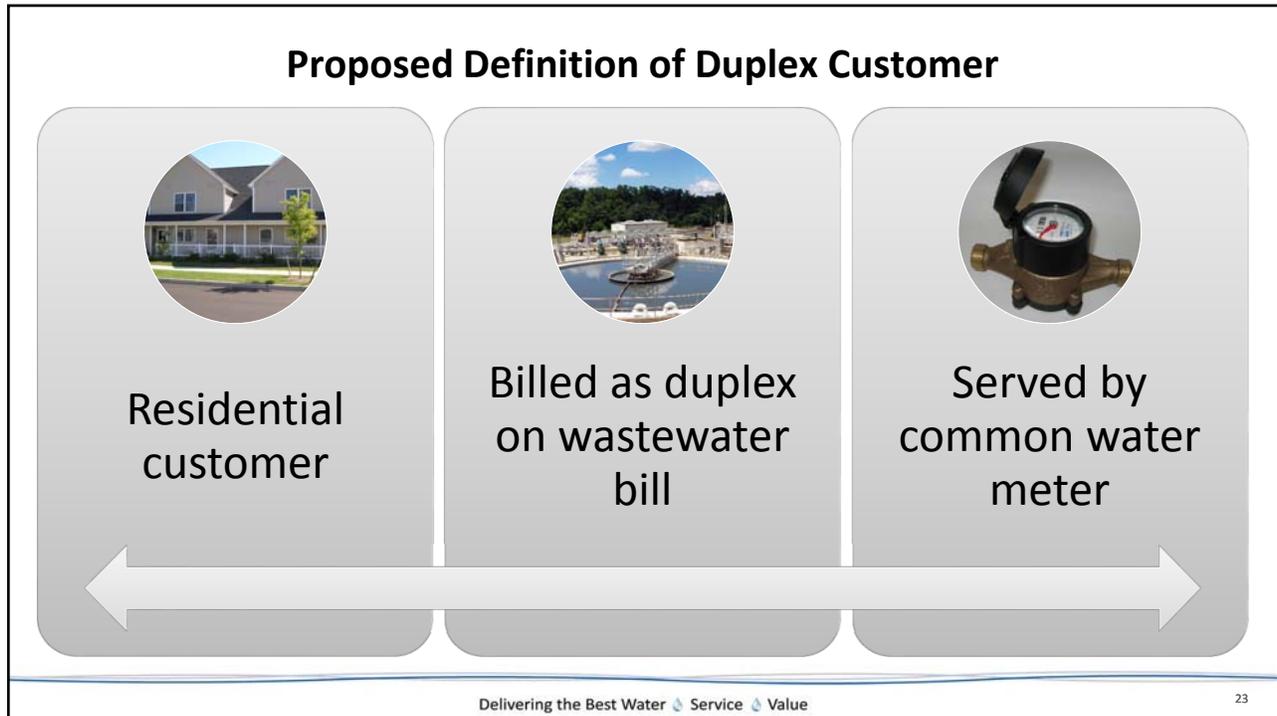
Block	Hundreds of Cubic Feet (CCF)	
	Existing	Alternative
Block 1	178,750	203,250
Block 2	34,750	10,250
Total CCF	213,500	213,500

Note: One hundred cubic feet equals 748 gallons.

Estimate of Revenue Impact



Note: Estimated revenue FY2015 through FY2018 for 441 duplexes at today's rates.



Findings

	<p>Wastewater bill used to identify duplexes</p> <ul style="list-style-type: none"> TVWD bills for Clean Water Services and Beaverton Separate inquiries from Tigard and Hillsboro 	
	<p>Potential changes in customer bills</p> <ul style="list-style-type: none"> About 69% see no change About 25% would see a reduction About 6% would see an increase 	
	<p>Minimal financial impact to the District of making the change</p> <ul style="list-style-type: none"> \$12,000 to \$15,000 per year 	

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Customer Communication Strategy

- Develop talking points for Customer Service staff
- Place the proposal and analysis on the website
- Mail a letter to the duplex owners which outlines the proposal and opportunities to provide feedback via email/computer and/or in-person meetings
- Set up an email notification system for duplex owners who want to receive follow up
- Mail duplex owners notifying them of the official rate change, if approved

Proposed Next Steps

1. Notify affected customers by mail:
 - Describing the proposed change
 - Meet legal requirement of noticing public hearing to adjust rates
2. Hold public hearing to adopt resolution to adjust customer classification for duplex customers
3. Implement change effective after first full bill after November 1, 2018

How Much Capacity Should TVWD Acquire in the WWSS?

Planning the Willamette Water Supply System for Future Generations

TVWD Board Work Session
September 4, 2018

Mark Knudson, P.E.

Tualatin Valley Water District

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Overview

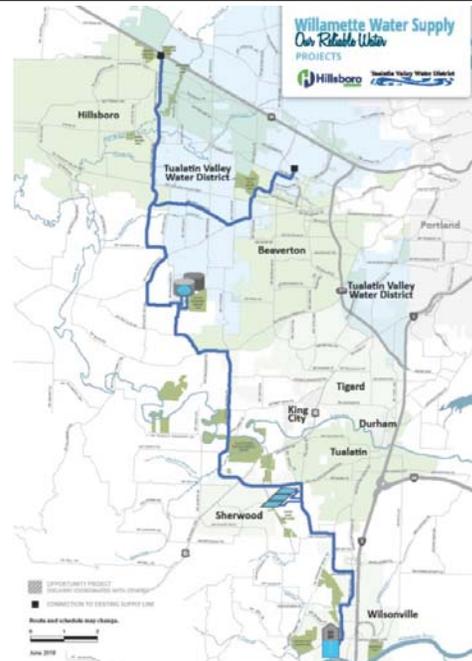
- Scope of the WWSS
- Key terms: Ownership, Capacity and Capacity Shares
- Options for TVWD Capacity Share in WWSS
- Board Discussion and Next Steps

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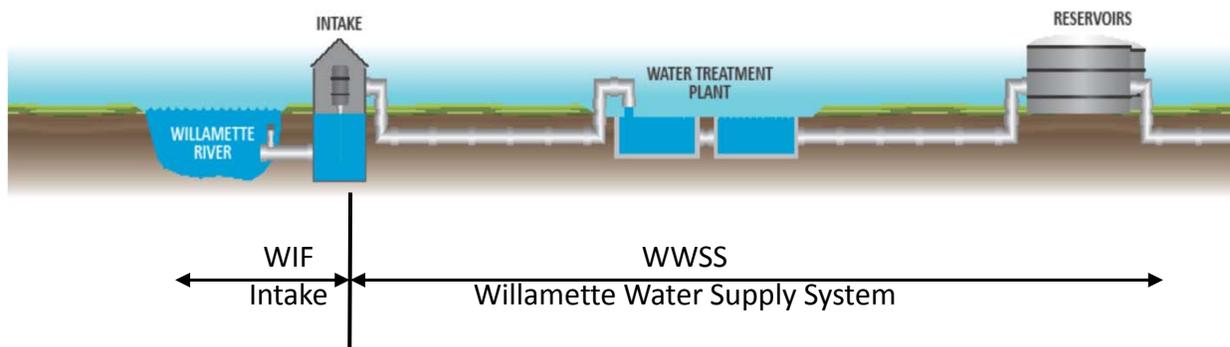
28

Scope of the WWSS

- What does the Willamette Water Supply System (WWSS) include?
 - Intake (excluding Willamette Intake Facilities assets)
 - Raw water pipeline
 - Water Treatment Plant
 - Finished water pipelines
 - Reservoirs
 - Turnouts at points of delivery



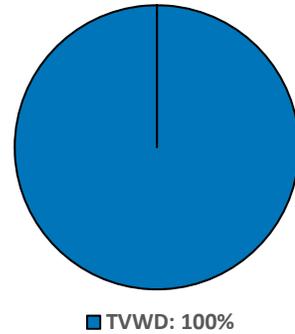
Scope of the WWSS



Key Terms: Ownership, Capacity and Capacity Shares

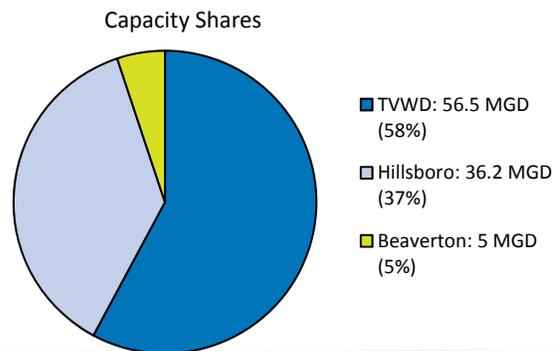
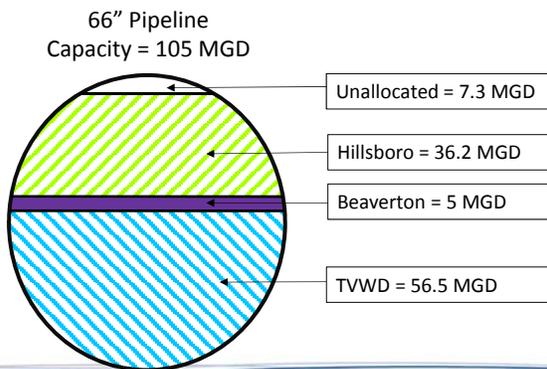
- In an ideal world:
 - One owner
 - All system components have the same capacity
 - We know exactly how much water is needed and when it is needed
 - Asset constructed to have capacity equal to projected demand

Investment=Capacity=Demand=Capacity Share



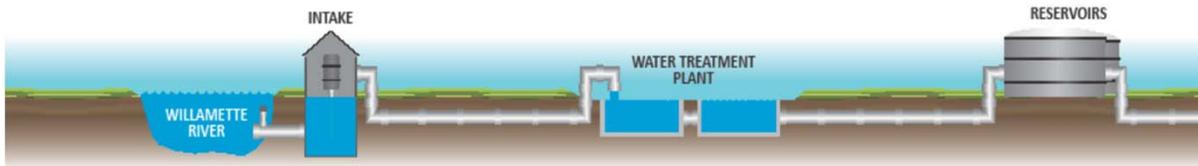
Key Terms: Ownership, Capacity and Capacity Shares

- But it's complicated ...
 - Multiple owners
 - Different components have different capacities
 - Different ownership capacities
 - Uncertain water demand
 - Capacity doesn't equal demand



Key Terms: Ownership, Capacity and Capacity Shares

- And it gets more complicated – capacity ownership varies by asset



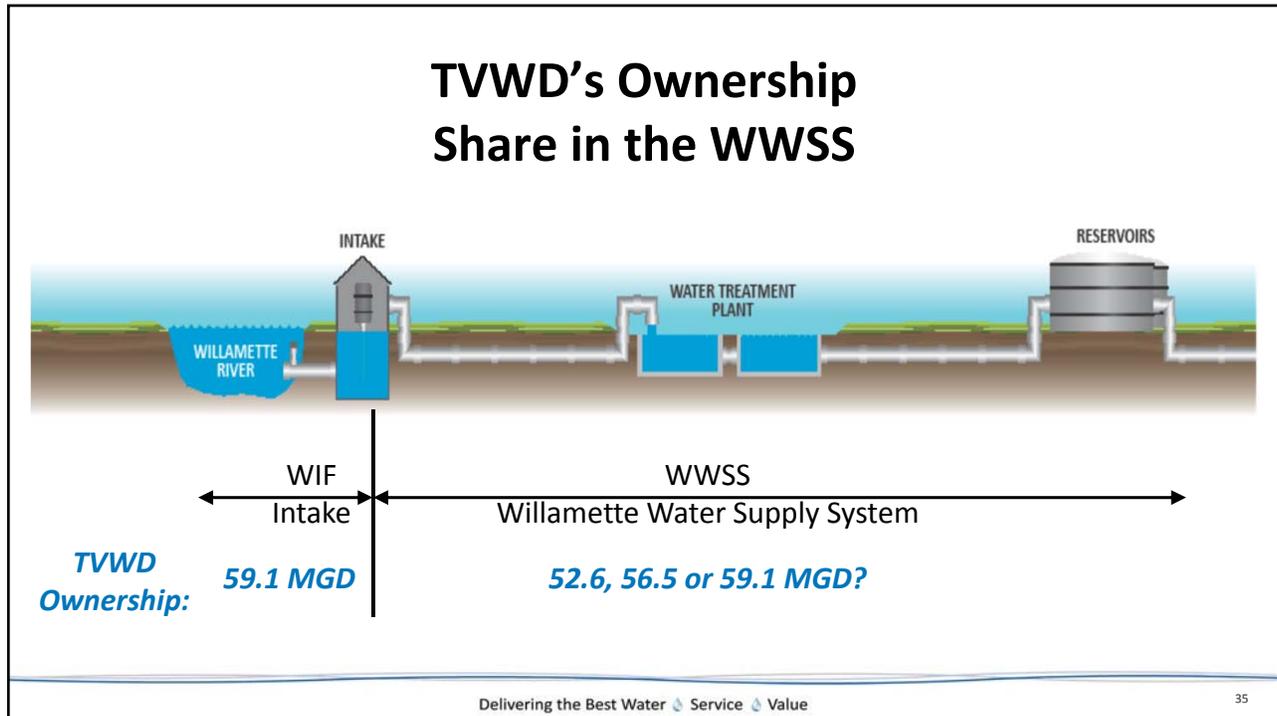
Partner	Intake	Raw Water Pipeline	Treatment Plant	Finished Water Pipeline	Reservoirs
TVWD	59.1	?	?	?	?
Hillsboro	36.2	36.2	36.2	36.2	36.2 + 10
Beaverton	5.0	5.0	5.0	5.0	5.0

Key Terms: Ownership, Capacity and Capacity Shares

- And it gets even more complicated – water demand forecasts and ownership interests have changed

Option	TVWD's WWSS Demand* (MGD)
1. Original Forecast (before Beaverton IGA)	56.5
2. Updated Forecast (after Beaverton IGA)	52.6
3. Willamette Intake Ownership (after WIF IGA)	59.1

* Assumes 14 MGD from Joint Water Commission (JWC) and no Aquifer Storage and Recovery (ASR)



Options for TVWD Capacity Share in WWSS

Option	TVWD's WWSS Capacity Share* (MGD)	TVWD Cost Share+ (\$)	TVWD Cost Difference (\$)
1. Original Forecast	56.5	\$ 726 million	\$0 (baseline)
2. Updated Forecast	52.6	\$ 692 million	- \$34 million
3. Intake Ownership	59.1	\$ 747 million	+ \$21 million

* Intake Capacity = 59.1 MGD in all options
 + Cost estimates do not include revised PLE

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36

Benefits and Limitations

- **Original Demand Forecast (56.5 MGD)**
 - No change in infrastructure or Program cost
 - No change in TVWD cost share
 - No change in Hillsboro and Beaverton cost shares
 - Likely that TVWD will have future capacity to sell, lease or wholesale
 - No change in TVWD revenue share from future leasing, wholesale sales
 - No change in TVWD share of fixed operations and maintenance (O&M) costs
 - No change in TVWD proportionate gain of future capacity increase
 - No change in TVWD voting weight (if weighted voting is adopted)

Benefits and Limitations

- **Updated Demand Forecast (52.6 MGD)**
 - No change in infrastructure or Program cost
 - Decreases TVWD cost share
 - Increases Hillsboro and Beaverton cost shares
 - Unlikely that TVWD will have future capacity to sell, lease or wholesale
 - Reduces TVWD revenue share from future leasing, wholesale sales
 - Reduces TVWD share of fixed O&M costs
 - Reduces TVWD proportionate gain of future capacity increase
 - Reduces TVWD voting weight (if weighted voting is adopted)

Benefits and Limitations

- **Intake Ownership Share (59.1 MGD)**
 - No change in infrastructure or Program cost
 - Increases TVWD cost share
 - Decreases Hillsboro and Beaverton cost shares
 - Highly likely that TVWD will have future capacity to sell, lease or wholesale
 - Increases TVWD revenue share from future leasing, wholesale sales
 - Increases TVWD share of fixed O&M costs
 - Increases TVWD proportionate gain of future capacity increase
 - Increases TVWD voting weight (if weighted voting is adopted)

Benefits and Limitations

- **Other Considerations**
 - Hillsboro demand projections assume full production capacity of JWC
 - Tigard is not purchasing any capacity in WWSS but owns 15 MGD in WIF
 - Tualatin is not buying any capacity in WIF or WWSS
 - Willamette River Water Coalition water right of 130 MGD exceeds initial combined capacity shares of TVWD, Sherwood and Tigard
 - Beaverton has 5 MGD of WWSS but holds 22 MGD water right
 - Other providers have expressed interest in future capacity from WWSS

Board Discussion and Next Steps

- Should TVWD acquire a 56.5, 52.6 or 59.1 MGD capacity share in the WWSS?
 - Board Questions, Comments and Discussion
- Final decision and direction at September 19, 2018 TVWD Board meeting