

**MONDAY, JULY 16, 2018
CITY COUNCIL WORK SESSION**

WATER MANAGEMENT & CONSERVATION PLAN, 6:00PM - 6:45PM

Mayor Burge called the Work Session to order at 6:00 p.m.

Present: Mayor Scott Burge, Councilor Patrick Kessi, Councilor Megan Greisen, Councilor Natalie Sanders, Councilor Joel Haugen, Councilor Josh Poling, City Manager Michael Sykes, Treatment Plant Supervisor Darryl Sykes, City Recorder Susan Reeves, Legal Counsel Peter Watts, and Consultant Dan Reisinger with Carollo Engineers.

Also present: City Engineer Chris Negelspace, City Planner Laurie Oliver, and Chamber Executive Director Simon Date.

City Manager Sykes explained we are in the midst of updating our Water Master Plan and as part of that we developed the Water Management and Conservation Plan which we would like to share with you tonight. He stated as you well know water is one of our big issues.

Consultant Dan Reisinger explained we are going to go over this plan, and really this is a regulatory required plan. He went over his power point presentation.

Water Management and Conservation Plan
City of Scappoose
City Council Meeting
7/16/2018

Agenda

- Review Water Management and Conservation Plan
- Present Future Demand Projections
- Discuss Water Supply Analysis
- Review Conservation
- Recommended Water Curtailment Changes

What is the Water Management and Water System Plan?

- Plan for managing water supplies
 - Demand
 - Water Rights / Supply Sources
 - Water Conservation
 - Water Curtailment
- It is NOT focused on financial implications
 - Water System Master Plan update addresses financial

Why are we updating the WMCP?

- Update required as a condition of the Dutch Canyon Well #2 water right
- Required by OAR 690-086 (administered by OWRD) every 10 years.

WATER MANAGEMENT AND CONSERVATION PLANS

A Guidebook for Oregon Municipal Water Suppliers
MAY 2015 107 Pages



Water System Overview

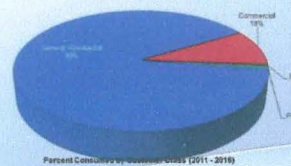


Agenda

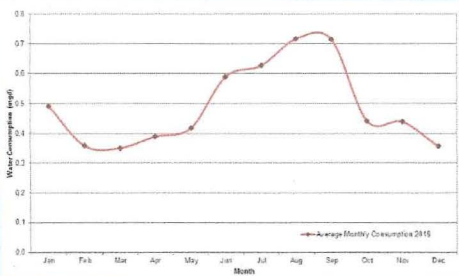
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Who uses water in the City?

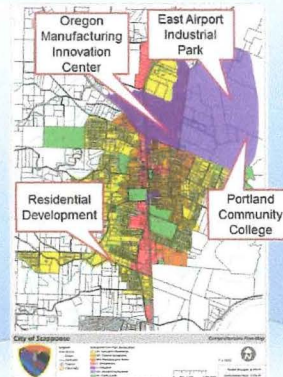
Historical Water use from 2011 to 2016



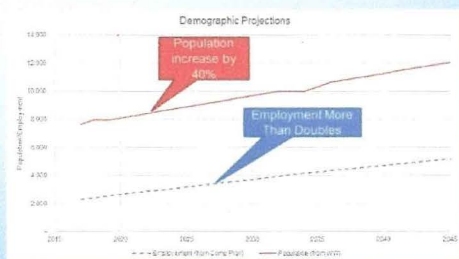
Summer use is nearly double of winter use



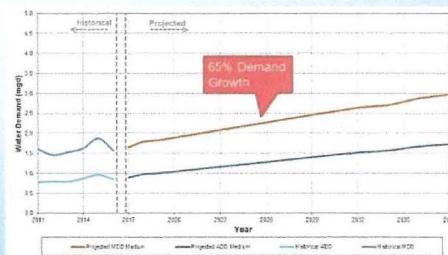
How will the water system grow in the next 20 years?



Strong population and employment growth in next 20 years



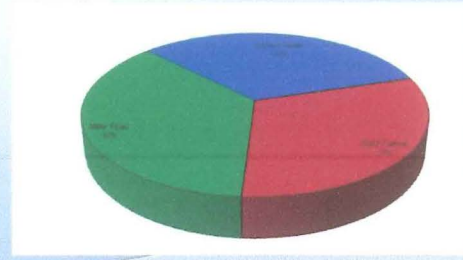
Water use and demographic growth were used to project future demands



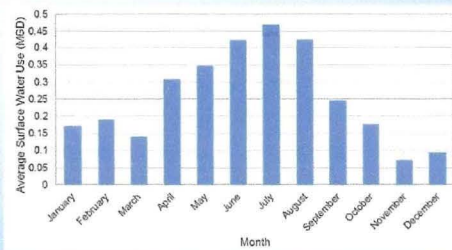
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Water is supplied evenly between three sources

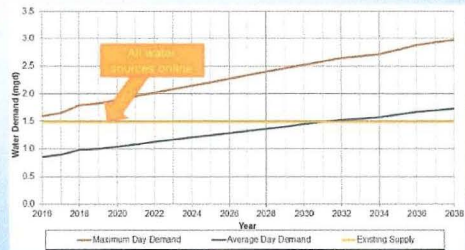


Surface water is used for summer peaking when stream flows are lowest

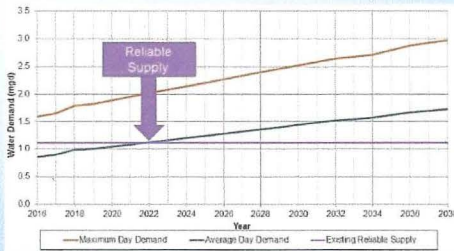


DRAFT

More supplies are needed to meet summer demand

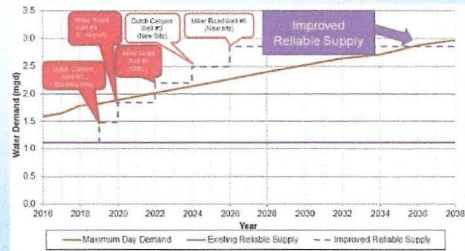


Summer demands cannot be met without the surface water source (reliability)

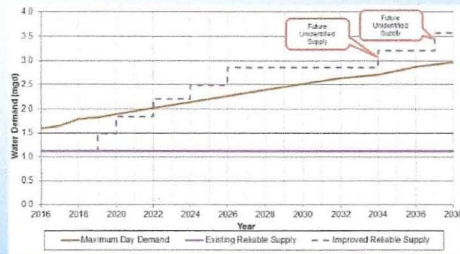


* Assumes Surface Water Treatment Offline

Two additional wells maximize the use of existing City treatment plants



Cost-effective investigation is needed to better understand future supplies



Long-term supplies

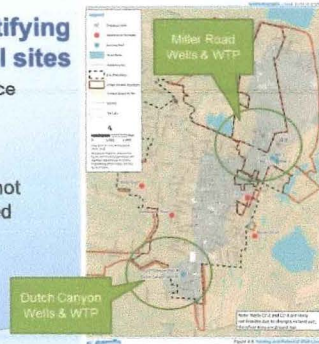
- Increased Surface Water Use
 - Streamflow monitoring (2018/2019)
 - Investigate condition of raw water line
- New Miller Road Wells
 - Drill test wells (2019/2020)
 - Acquire property, if needed
- New Dutch Canyon well
 - Acquire property, if needed

Quantify available streamflow at surface water intakes



Staff identifying future well sites

- ¼-mile surface water buffer very limiting (tan areas)
- Historically, not all wells drilled were usable (red dots)



Councilor Kessi asked is there a way to use the surface supply for industrial uses, and the well supply for drinking/residential use, is there a way to divide that?

Darryl Sykes replied the water is all combined.

Councilor Kessi asked if staff has looked at the Chapman Landing supply at all?

Consultant Dan Reisinger replied we did as part of the Water System Master Plan and it was definitely a potential.

Darryl Sykes replied the difficulty with that is we would have to do a feasibility study and then pilot work to determine if it would work, and none of that is cheap.

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City accomplishes all required Water Conservation Measures

Water Conservation Measures	Status
Annual Water Audit	2017 Complete
Full Metering of the System	Complete
Meter testing and maintenance program	Complete, as needed
Conservation Rate Structure	Complete
Leak Detection	Complete
Public Education	Complete

Enhanced Conservation Measures are now needed due to population growth

Water Conservation Measures	Status
Reduce Water Loss to 10%	Staff Focus -> Calculated water loss >25%
Technical and Financial Assistance Program	Complete
Retrofit/Replacement of Inefficient Fixtures	Faucet aerators and toilet leak detection tabs to be available
Rate Structure / Billing Practices for Conservation	Complete
Leak Detection	Complete
Reuse, Recycling, Non-potable	None planned. City reuses water in plants to extent possible
Other Measures	Not pursued

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Water loss is a combination of real losses and measurement error

Real Losses

- Aging Distribution System
 - Ongoing leak detection and repair
- Non-billable water tracking
 - Working with fire department to track water use
- Water theft
 - City requires hydrant meters for construction

Measurement Error

- Meter Accuracy
 - Ongoing Meter Replacement Program
 - Plant Meter Maintenance

Four tier water curtailment is recommended to replace existing policy

Tier	Reduction Goal
Voluntary	5%
Tier 1 - Mild	10%
Tier 2 - Moderate	15%
Tier 3 - Critical	20%

Voluntary Tier is general; allows staff to prioritize customers for voluntary curtailment

Curtailment Tier	Trigger	Usage Reduction Goal	Restriction Measures
Voluntary	Projected supply limitations	Awareness and 5 percent reduction in daily demand	<ul style="list-style-type: none"> • Implement Curtailment Plan • Public notification and awareness • Personal water conservation measure education • Voluntary irrigation reduction <p>Prioritized Notification Methods:</p> <ul style="list-style-type: none"> • 8th stuffers/Webpage/Social Media

Tier 1-Mild has mandatory reductions that largely impact the City

Curtailment Tier	Trigger	Usage Reduction Goal	Restriction Measures
Tier 1 Mild	Use reaches 85 percent of capacity of three consecutive days and/or state drought declaration affecting service area	10 percent reduction in demand	<ul style="list-style-type: none"> • Continue all Voluntary measures • Stop system flushing except for essential needs • Reduce municipal irrigation and aesthetic uses and post information explaining reduction • Restrict landscape watering to evening hours • Restrict pavement washing to needs related to health • Prohibit un-vehicled vehicle washing • Prohibit building cleaning <p>Prioritized Notification Methods:</p> <ul style="list-style-type: none"> • Posters/Sandwich boards/Web page/Media

Tier 2-Moderate restricts customer irrigation and prohibits non-essential outdoor water use

Curtailment Tier	Trigger	Usage Reduction Goal	Restriction Measures
Tier 2 Moderate	Use reaches 90 percent of capacity for two consecutive days	15 percent reduction in demand	<ul style="list-style-type: none"> • Continue all Tier 2 measures • Prohibit landscape watering between 7 am - 11 pm • Restrict landscape watering to every 9th day on an alternating schedule • Cease municipal water uses such as street cleaning, flushing (unless health related), park and landscape irrigation • Prohibit vehicle washing outside of commercial facilities • Prohibit non-irrigation outdoor water use except when required for public health • Request businesses reduce demand by 10% <p>Prioritized Notification Methods:</p> <ul style="list-style-type: none"> • Media/Door hangers/Posters/Sandwich boards/Web

Tier 3-Critical prohibits irrigation and vehicle washing

Curtailment Tier	Trigger	Usage Reduction Goal	Restriction Measures
Tier 3 Critical	Use reaches 95 percent of capacity for one day	20 percent reduction in demand	<ul style="list-style-type: none"> • Continue Tier 2 measures • Prohibit landscape watering except for hand watering of new trees and shrubs • Prohibit vehicle washing with City supplied water <p>Prioritized Notification Methods:</p> <ul style="list-style-type: none"> • Media/Door hangers/Posters/Sandwich boards/Web

Next Steps

- Staff and Engineering is creating a Agency Review Draft
- Agency Review Draft will be sent to Council for approval to send to regulatory review
- Regulatory review
- Council to approve plan after regulatory review

QUESTIONS

Councilor Kessi stated he is wondering if there is a way to reuse water for industrial use versus drinkable water. He asked is there a way to do that when we are planning industrial growth, so we can conserve our water?

Consultant Dan Reisinger replied there is, but he can't actually speak to that.

Council thanked Dan and Darryl.

Mayor Burge adjourned the Work Session at 6:49 p.m.

INTERVIEW FOR ECONOMIC DEVELOPMENT COMMITTEE

Present: Mayor Scott Burge, Councilor Patrick Kessi, Councilor Megan Greisen, Councilor Natalie Sanders, Councilor Joel Haugen, Councilor Josh Poling, City Manager Michael Sykes, Police Chief Norm Miller, City Recorder Susan Reeves, and Legal Counsel Peter Watts.

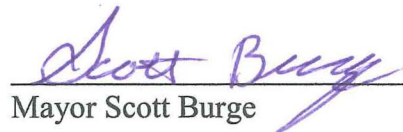
Also present: Treatment Plant Supervisor Darryl Sykes, City Engineer Chris Negelsbach, City Planner Laurie Oliver, RARE AmeriCorps Participant Garrett Peterson, Chamber Executive Director Simon Date, and Courtney Vaughn with the Spotlight.

Mayor Burge explained Council will be interviewing for an Economic Development Committee member.

Susie Wilson introduced herself to Council, and then Council interviewed her.

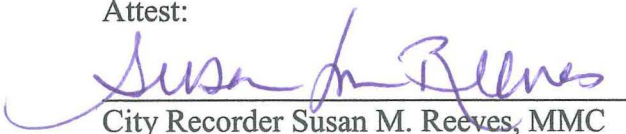
Council thanked Susie.

Interview adjourned at 6:59 pm.



Mayor Scott Burge

Attest:



City Recorder Susan M. Reeves, MMC