



Good afternoon, My name is Tom Hubbard I am the Utilities Division Manager.

The purpose of our presentation is to provide you with some back ground information on the water system and to **brief** you on the Public Works Water Master Plan project.

I would like to take this time to introduce you to the Water Master Plan Team:

- Libby, she is our Public Engagement expert with Barney and Worth.
- and
- Adam Steele Public Works Project Manager

For the next few slides I will be providing you background information on the water system then Adam will walk you through the Master Plan project plan.

Let's get started

The Water System

- 2 water treatment plants — produce about 2.8 billion gallons
- 8 finished water reservoirs — 21 million gallons (MG)
- 1 raw water reservoir (100 MG)



The City operates two water treatment plants and obtains raw water from the Willamette River and the Rock Creek Watershed on the east side of Marys Peak.

The Taylor water treatment plant is located along the Willamette River and was constructed in 1949 with the most recent expansion in 1996 with a treatment capacity of 21 million gallons per day and is operated 10 hours per day 7 days per week.

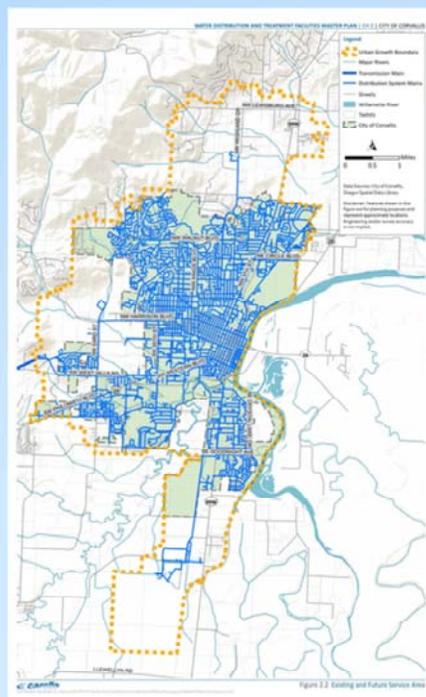
The Rock Creek watershed has provided water to the community since 1906 and in 1958 the Rock Creek Treatment Plant was constructed and provides 2.5 million gallons per day and is operated 24 hours per day 7 days per week.

Finished water from both plants is pumped into the distribution system, and is stored in 8 water tank reservoirs that are located throughout the community for a combined storage of 21 million gallons. These eight reservoirs provide critical water storage for when the Taylor Treatment plant is not operating, Emergency water supply, and for fire fighting.

Next we will take a look at the distribution system

The Water System

- 252 miles of water distribution pipe
- 10 Pump stations
- 2,150 fire hydrants
- 16,000+ water meters
- System value of over \$350M



The other major component is the distribution system, which consists of pipes, valves, pumps, and meters.

The distribution pipes range in age from 1930 to present day and range in size from 2 inch to 36 inch in diameter.

Due to the City's hilly terrain, to supply water to community members in these areas, pump stations are used to get water to higher elevations.

Fire hydrants are strategically placed throughout the distribution system to meet fire-fighting and community fire insurance requirements, also known as ISO.

Now that you have some background and system value information, I will provide you a brief overview of the Master Plan.

Current Corvallis Water Master Plans

Plan	Year Completed
Water Distribution	1998
Rock Creek Treatment Plant	2000
Taylor Treatment Plant	2002

This Water Master Plan project updates the three current master plans into one comprehensive plan. It includes both treatment plants and the entire distribution network.

Water Master Plans are required by the State and are designed to address the needs of the water system while following State and Federal drinking water standards, and are generally considered 20 year plans.

Now that we have an understanding of combining of the current Master Plans in to one comprehensive plan, lets take a brief look at the State requirements.

State of Oregon Requirements

Oregon Health Authority Drinking Water Services

- Sets requirements for what must be included in a water master plan.
- Reviews final plan and ensures it complies with OHA and OAR 333-061 (public water system rules) requirements.

The Oregon Health Authority has specific regulatory requirements for developing Water Master Plans. These requirements are 90% engineering based and safe guard communities by providing water quality and level of service goals for the water system.

The OHA has very specific requirements for meeting the Federal Clean Water Act and Drinking Water Regulations for providing clean drinking water and fire protection to the community.

After the Master Plan is drafted, we will send it to the Oregon Health Authority who will do a comprehensive review and approve our plan.

Finally, we will adapt the plan into the City's Comprehensive Plan following DLCDC review for State wide planning goal compliance.

At the end of the presentation you will receive a hand out that shows the Oregon Health Authorities Regulatory requirements for developing a Water Master Plan.

Specific Evaluations Being Performed

- Disaster resiliency of the water system
- Optimize the Rock Creek water rights
- Taylor supply water intake options
- Climate change effects on the water system

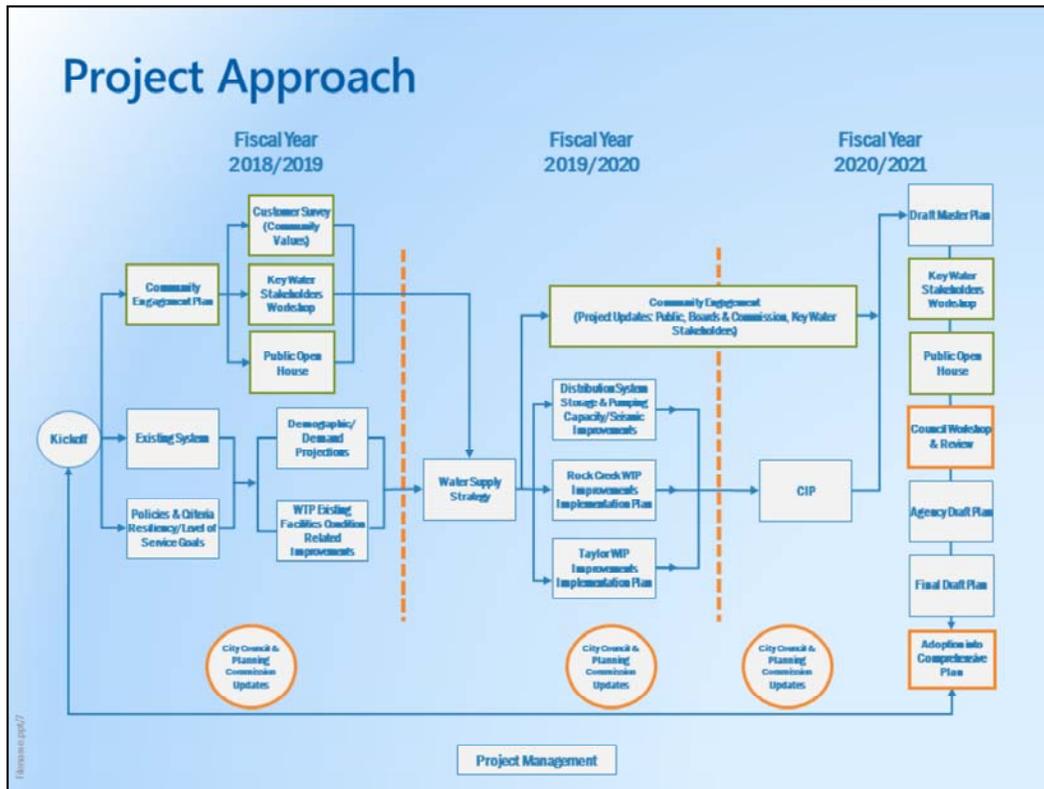


In addition to the State requirements, we identified a few specific areas that should be expanded on for our community. The Water master Plan team felt that additional evaluations and recommendations were needed based on previous operational experience and City policies.

The disaster resiliency is a seismic risk assessment and mitigation plan that focuses on the damage potential for a Simulated Magnitude 9 Cascadia Earthquake. The plan will identify critical facilities for community needs and emergency response.

An evaluation of the Taylor Treatment Plant water supply will consist of a supply strategy to mitigate the gravel that is migrating down river and being deposited in front of the intake structure. The evaluation will also incorporate climate change and the associated risks.

I am now going to turn the presentation over to Adam where he will walk you through the Master Plan project approach.



ADAM

This planning effort is expected to take 2-3 years. The City went through a rigorous Request for Proposals process to select a professional engineering firm to lead the master planning effort. Carollo was selected.

Portions of the planning effort will be subcontracted through Carollo to industry experts in water distribution, seismic resiliency, geotechnical, permitting and water rights, and climate change implications.

As you can see from the schedule, we're currently working on evaluating the system, gathering data, working through the planning assumptions, and community engagement.

In the next fiscal year, that background material will be used to develop a water supply strategy and subsequent distribution and treatment plant plans.

Year three involves rolling the plan outcomes into the CIP for future improvements and taking the master plan through the adoption process.

This project is funded only by the City and has a \$1.8M budget.

Public Engagement Objective



Establish a public outreach process that establishes and maintains key stakeholder support throughout the planning project.

<https://www.corvallisoregon.gov/publicworks/page/water-master-plan-update>

ADAM

One of our primary objectives is public engagement.

Our outreach will be driven by a combination of staff and Libby.

Now Libby is going to discuss our engagement plan.

Upcoming Public Outreach

Date	Task
March 6	CIDAB presentation
Week of March 18	Launch customer survey
April 3	2019 Water Forum Stakeholder Meeting
TBD	Public Open House
April 8 & 9	OSU Water Symposium
April 15	Close customer survey
April 29	Customer survey summary
May	Share customer survey results: website, Corvallis e-News, Facebook, Twitter

LIBBY

What groups or stakeholders do you think will be interested in providing input into the water system master plan update?

Groups to target out to?

LIBBY

Questions?



LIBBY/PATRICK/ADAM/TOM