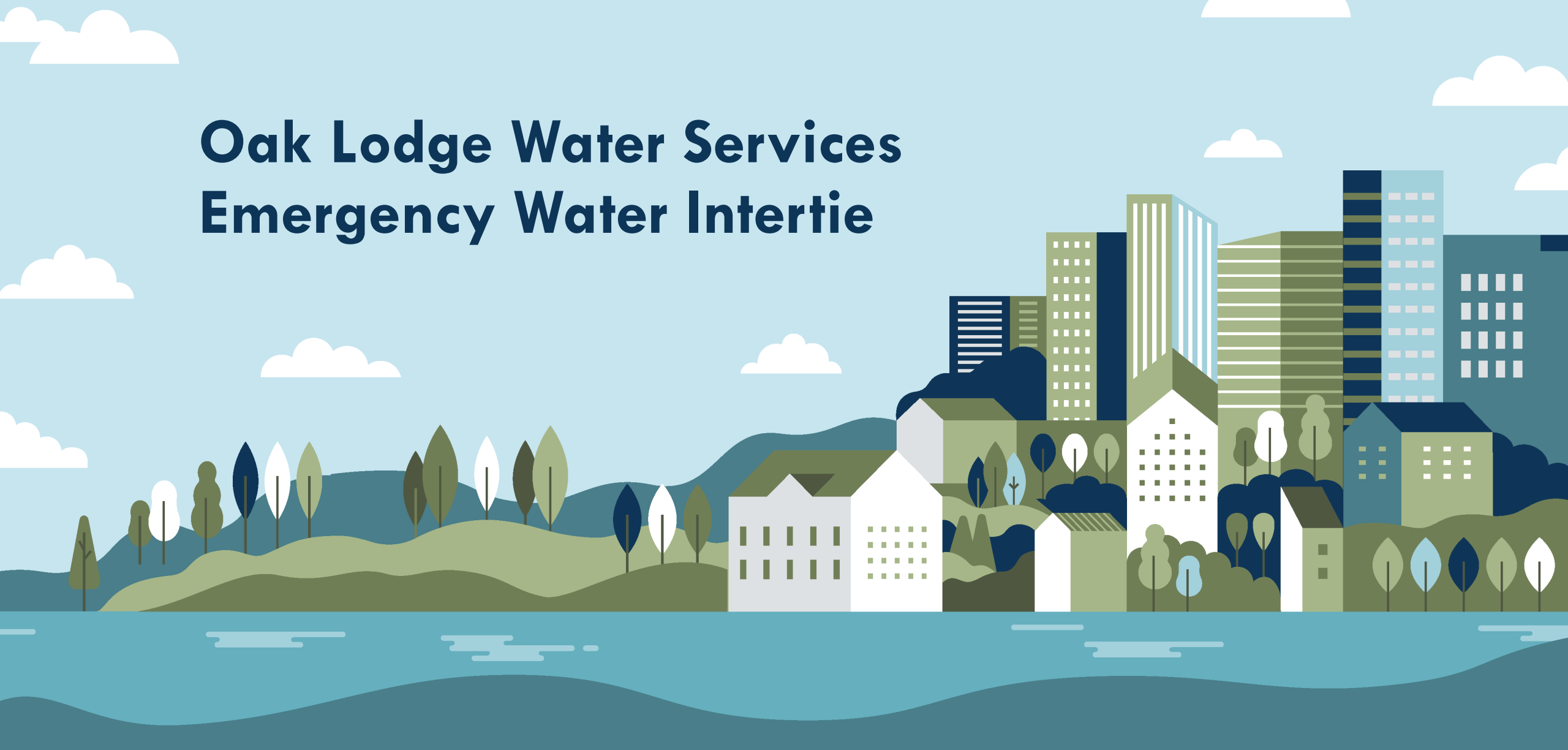


# Oak Lodge Water Services Emergency Water Intertie



November 21, 2023



# Agenda

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Project Purpose  
&  
Design Criteria

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Pump Station  
Siting

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# Project Purpose & Design Criteria

Based on the findings of 2020 OLWS Water Master Plan:

- An Emergency Water Intertie was prioritized as the single most important project to complete for the water system.
- The Emergency Intertie should seek a connection that can provide 2.7 MGD (1,875 gpm) to meet emergency demands through 2037.
- A connection to Clackamas River Water and/or Milwaukie would benefit OLWS the most.



# Pump Station Siting – Alternative 1





# Pump Station Siting – Alternative 2





# Pump Station Siting – Alternative 3



# Pump Station Siting

Item	Alternative 1	Alternative 2	Alternative 3
<b>BPS Location</b>	Island Station	Island Station	4267 SE Bowman Street
<b>BPS Landowner</b>	City of Milwaukie	City of Milwaukie	Oak Lodge Water Service
<b>BPS Suction Zone</b>	City of Milwaukie's Zone 1	City of Milwaukie's Zone 2	City of Milwaukie's Zone 2
<b>Milwaukie's Pipeline Length</b>	950 feet	4,200 feet	1,800 feet
<b>Milwaukie's Alignment</b>	In ROW – Land Acquisition not Required	Needs additional land acquisitions	Needs additional land acquisitions
<b>BPS Discharge Zone</b>	OLWS Lower Zone	OLWS Lower Zone	OLWS Upper Zone
<b>OLWS's Pipeline Length</b>	2,650 feet	1,600 feet	4,700 feet
<b>OLWS's Alignment</b>	In ROW, Land Acquisition not Required	Needs additional land acquisitions	Needs additional land acquisitions
<b>Available Flow @ MDD in City of Milwaukie's System @ Reservoirs ¾ full</b>	469 gpm @ 18-hrs (0.9 MGD)	2,430 gpm @ 18-hrs (2.6 MGD)	2,640 gpm @ 18-hrs (2.8 MGD)



# Preliminary Design Elements – Existing Site Conditions



Poor internal access

Missing Motor

Aged electrical components, no VFD or SCADA equipment

Pipe sizing does not meet current needs



Access from park side (poor).



# Preliminary Design Elements – Existing Site Conditions



# Preliminary Design Elements – Existing Site Conditions

Facilities	Description	Potential Conflicts/Considerations
Grading	Will Match Existing Grade	City is Unable to Share Proposed Park Storm Water Swale
Site Security	Block Wall with Retaining Wall or Chain-Link Fence	Does not Fit with Proposed Park Aesthetic and Reduces Site Access
Site Drainage	The building will be equipped with scuppers and discharge to the north towards the City's proposed park storm water swale. site drains will collect and drain to the storm water swale as well.	If the city is unable to share the proposed park storm water swale, site does not meet current stormwater requirements and retrofitting existing site may trigger stormwater bmps. There might not be sufficient room for stormwater bmps.
Site Access	Access from SE Bowman St. through 3,560 sf of Land Acquisitions	Existing private property owner(s) will not negotiate sell of property
Parking/ Crane Access	South of Existing Site	Existing private property owner(s) will not negotiate sell of property
Landscaping	Due to the size of the site no landscaping is recommended. The site is proposed to have concrete with site drains	Required to Install BMPs for Site Drainage



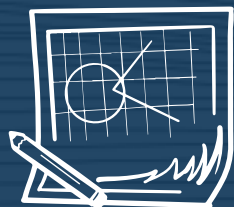
# Anticipated Costs

<b>Item</b>	<b>Cost</b>
Mobilization/Insurance, Permits and Bonds	\$ 590,000
Pump Station	\$ 1,740,500
City of Milwaukie Alignment (18" DIP) Pipeline	\$ 765,000
OLWS Alignment (16" DIP) Pipeline	\$ 1,880,000
Land Acquisition and Site Demo	\$ 405,600
<b>Total</b>	<b>\$ 5,321,100</b>
Contingency 30%	\$ 6,917,430
Engineering, Design and CM Services (20%)	\$ 1,399,000
<b>Subtotal</b>	<b>\$ 8,395,000</b>

# Next Steps



Negotiate terms of an Intergovernmental Agreement with the City of Milwaukie



Using the provided Preliminary Design Report, procure a qualified consultant and advance the project to Final Design





**Questions?**

Thank you from

