

A photograph of a forest stream with mossy rocks and a waterfall. The stream flows over several large, moss-covered rocks, creating small waterfalls and rapids. The surrounding forest is dense with tall, thin trees and a thick layer of moss on the ground and rocks.

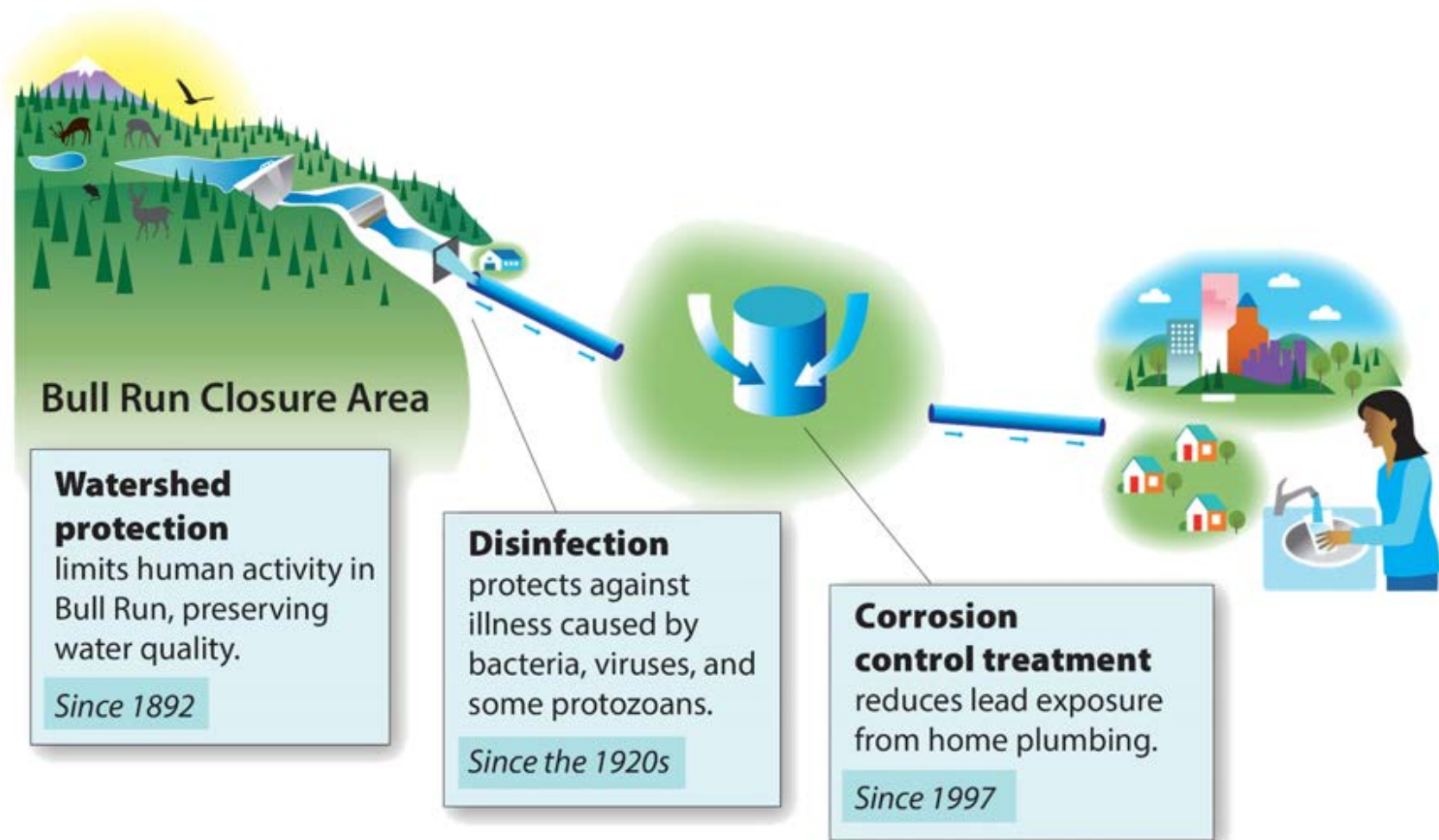
# Corrosion Control Improvements Project

Guaranteed Maximum Price (GMP)  
Report to Council

July 8, 2020

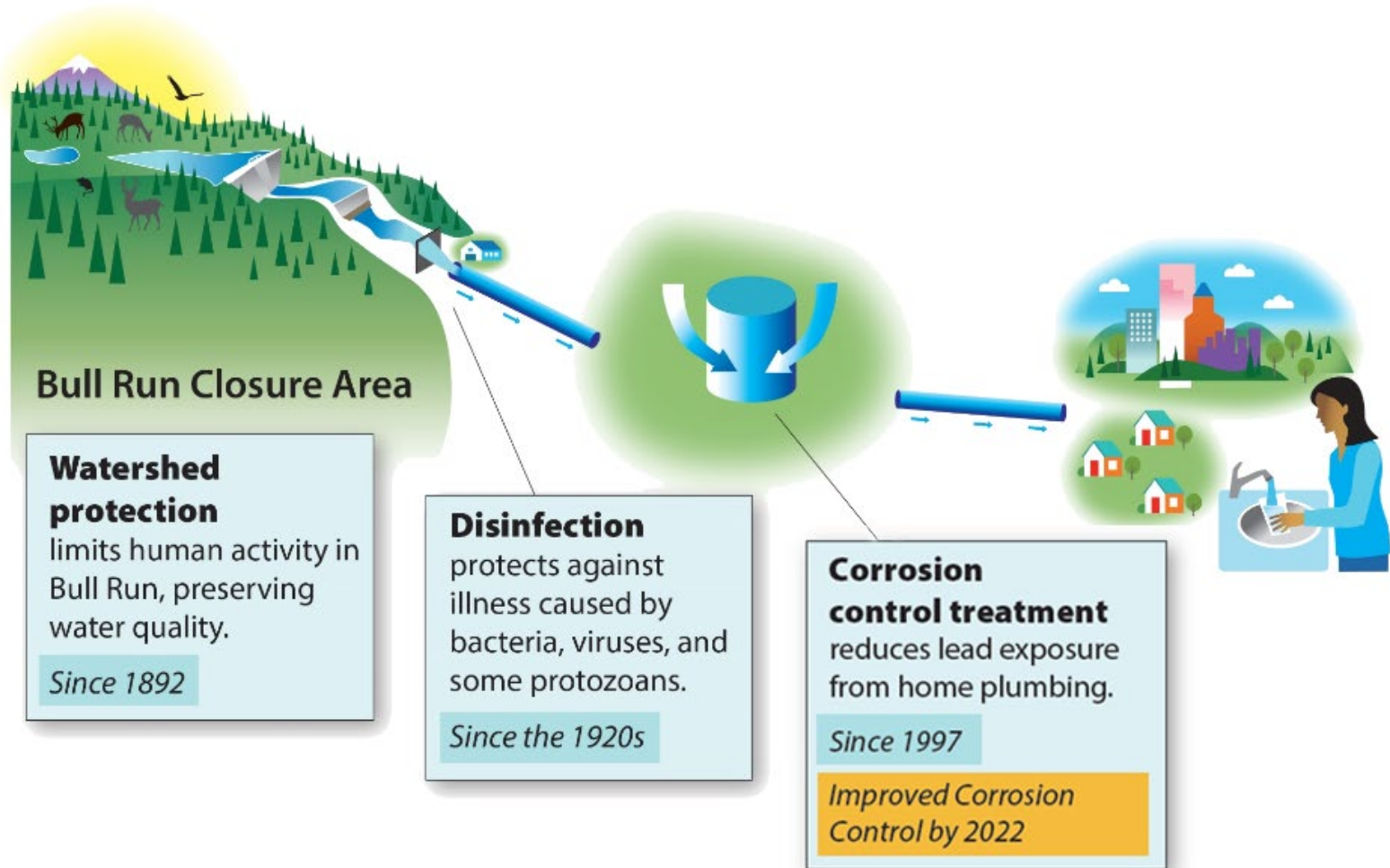


# How water treatment works today





# Improved Corrosion Control Treatment



# Corrosion Control Improvements Project

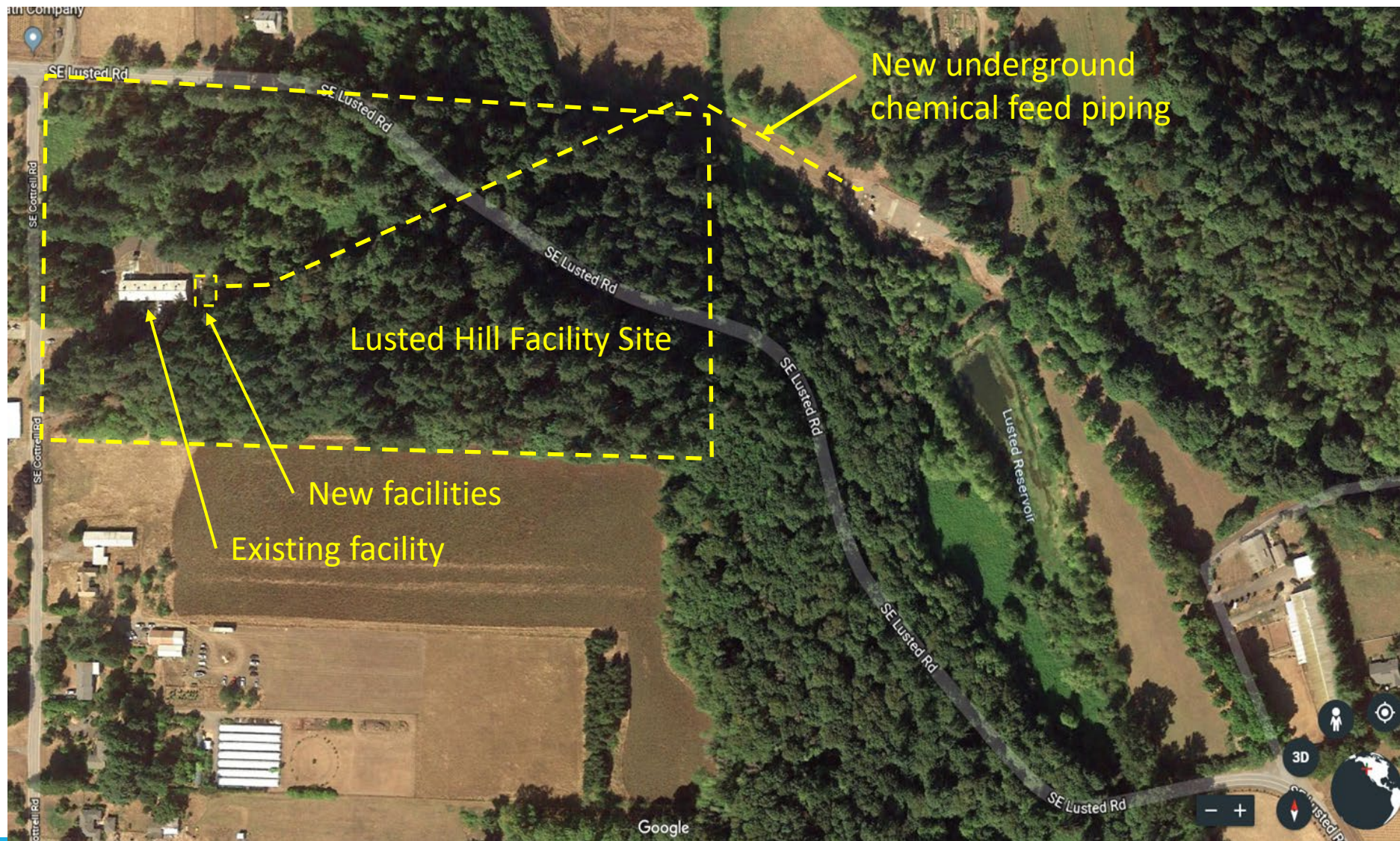
This project is being built to meet the requirements of the Environmental Protection Agency (EPA) Lead and Copper Rule (LCR). Oregon Health Authority has set a compliance schedule.

Improved Corrosion Control Treatment will adjust the chemistry of the water to reduce levels of lead at the tap.

Expansion of existing Lusted Hill facility will meet project objectives.

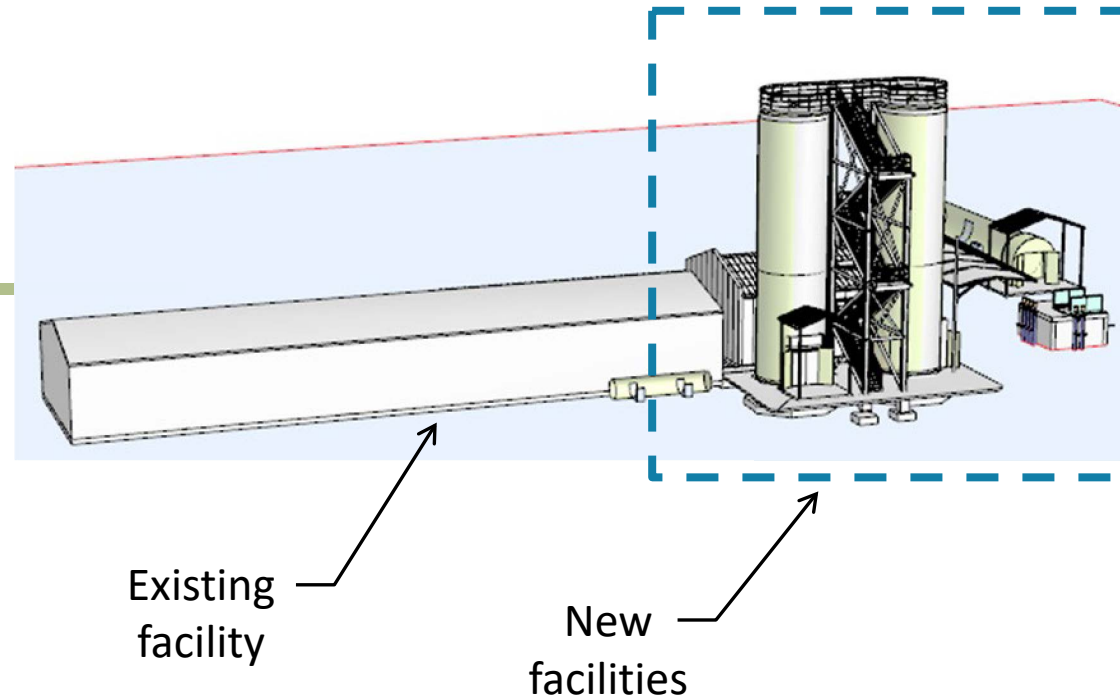


# Project Site



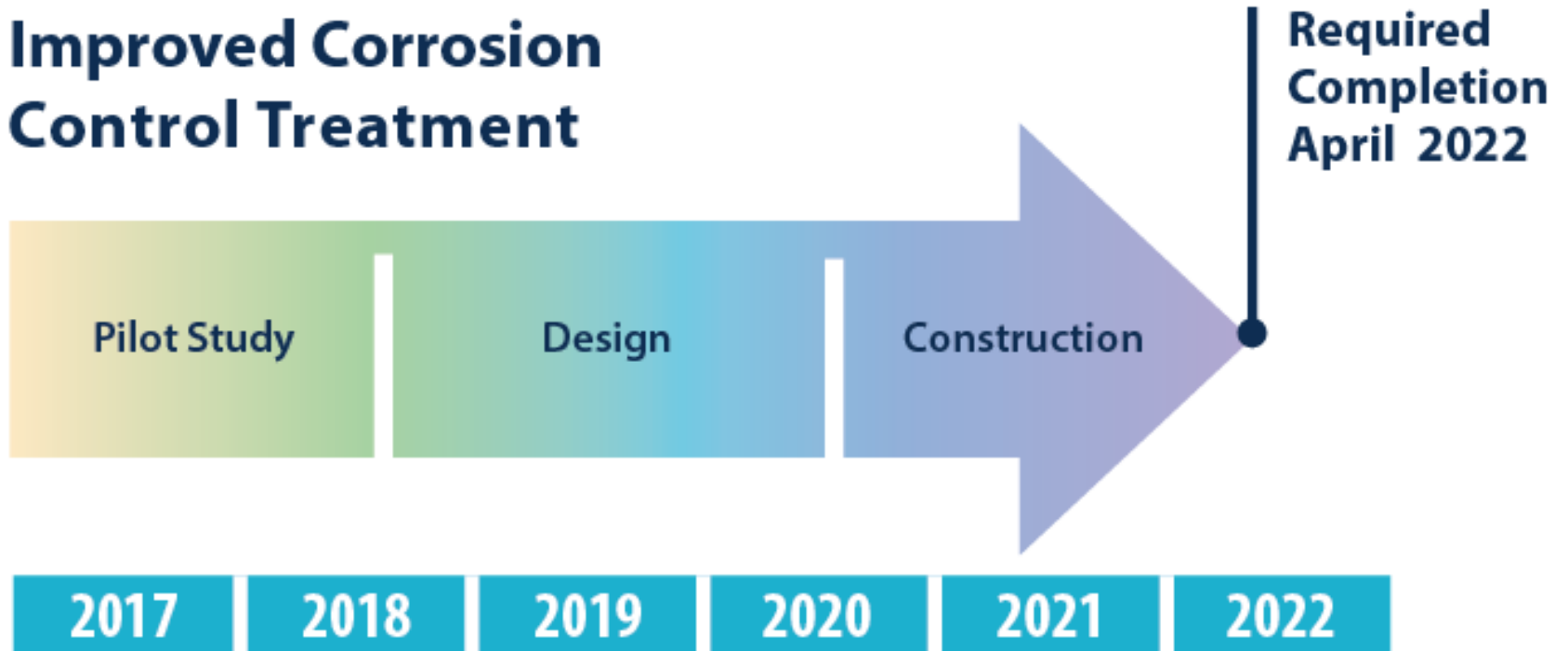


The improved corrosion control treatment facility will be located alongside the existing facility



# Project Schedule

## Improved Corrosion Control Treatment



# Project Schedule (cont)

- Ordinance Number 188621, authorized on September 27, 2017
  - Allows Procurement Services and the Water Bureau to use a Construction Manager/General Contractor (CM/GC) procurement method for the Project in lieu of the traditional low bid contracting method.
- CM/GC procurement method is a two-step procurement process
  - Begins with a Pre-Construction Services Contract followed by Construction Contract
  - Pre-Construction Services allows early involvement with the construction team and provides the following benefits:
    - Concurrent acquisition, design, and construction functions
    - Ability to acquire materials and order fabrication incrementally
    - Reduction of risk of construction delays and unanticipated costs
    - Evaluation of total project costs based on project design



# Project Schedule (cont)

- Procurement Services advertised the RFP on December 21, 2018, for pre-construction services and construction of the Corrosion Control Improvements Project.
- Three (3) proposals were received on January 29, 2019.
- The proposals were reviewed, evaluated, and scored by a five (5)-member evaluation committee consisting of representatives from PWB and one member from the Minority Evaluator Program.
- The evaluation committee selected MWH Constructors, Inc. as the highest scoring proposer.
- PWB entered into a Pre-Construction Services Contract with MWH Constructors, Inc. for a not to exceed amount of \$332,500.

# Project Benefits

- Improved Corrosion Control Treatment will adjust the chemistry of the water to reduce levels of lead at the tap.
- Construction of the Corrosion Control Improvements Project is anticipated to include:
  - 21 subcontract work packages
  - 4 equipment procurement packages
  - 25.91% of the hard construction costs for Disadvantaged, Minority-Owned, Women-Owned, and Emerging Small Businesses (DMWESB) firms.

# Project Benefits (cont)

- The City's Community Equity Inclusion Plan (CEIP) applies to this project.
- The purpose of the CEIP is to:
  - improve and increase construction contracting and employment opportunities for racial and ethnic minorities, women, and economically disadvantaged individuals on City projects;
  - ensure that the City is making conscious and specific efforts through its contracting processes to not discriminate or indirectly perpetuate the historic under-inclusion of racial and ethnic minorities, women, and economically disadvantaged individuals in the construction industry and trades; and
  - ensure that the City receives the benefit of a highly skilled and well-trained workforce and provides opportunities for firms that reflect the diversity of Portland in the Contractor and Subcontractor pools.



# MWH Constructors Contract Work

- The MWH CEIP requirements include the following workforce diversity construction aspirational goals for minority and women workers:

22% overall subcontracting (12% D/MBE, 5% WBE, 5% D/M/W/ESB/SDVBE)

31% of total apprenticeable labor hours by trade (22% for Minorities, 9% for Women)

28% of total journey level hours (22% for Minorities, 6% for Women)

- MWH's objective for this project is to use the goals as a beginning point and the spirit of the CEIP to maximize the utilization of certified contractors and suppliers, maximize the utilization of apprentices and encourage the highest possible participation of minorities and women in the workforce.

# MWH Constructors

## Guaranteed Maximum Price

<b>*MWH Constructors submitted the Guaranteed Maximum Price (GMP)</b> to complete the work shown on or in the 90% design	\$16,139,637
<b>Owner's Allowance</b> reserved for chemical feed piping which was not fully defined at the 90% design milestone	\$850,000
<b>~6% Owner Controlled Contingency</b> of the anticipated GMP value for unknown or unanticipated work be required	\$1,000,000
<b>Total Requested Contract Value</b>	<b>\$17,989,637</b>

\*Hard Construction Costs = \$14,118,944;  
MWH Contingency, Fees, Bonds, Taxes = \$2,020,693

# MWH Constructors Contract Work

- As the Prime Contractor, MWH Constructors, Inc. is required to:
  - Manage the project
  - Self-perform the procurement
  - Install and startup of the Soda Ash and Carbon Dioxide systems

This specialty work is excluded from the requirements of the Community Equity and Inclusion Plan (CEIP) and totals ~\$4.7 Million of the Hard Construction Costs.

- The remaining ~\$9.5 Million of Hard Construction Costs will be distributed through a subcontracting plan in accordance with the CEIP.



# MWH Constructors Contract Work

- Early procurements packages have been advertised for:
  - Equipment for the carbon dioxide storage and feed
  - Equipment soda ash storage and feed systems
  - Pre-engineered steel building equipment and installation
  - Tree removal

# MWH Constructors

## Plan Selected by Bid Selection Method

Packages Procured		Opportunity Tier	D/M/W/ESB \$	% of Package	% of Project
Informal Selection	\$282,460	1st/2nd	\$282,460	100%	2.97%
Best-Value Selection	\$5,678,595	1st/2nd	\$1,751,092	31%	18.44%
Price Based Selection	\$3,535,338	2nd	\$426,857	12%	4.49%
<b>Total</b>	<b>\$9,496,393</b>		<b>\$2,460,409</b>		<b>25.91%</b>

# MWH Constructors

## Project Bid Packaging Plan

**Hard Construction Cost = \$9,496,393; D/M/W/ESB \$2,460,409; D/M/W/ESB 25.91%**

Package No.	Package Description	Estimated Value	Opportunity (1st/2nd Tier)	Procurement Strategy	D/M/W/ESB (\$)	D/M/W/ESB (% Package)	D/M/W/ESB (% Project)
S-01	Site Conditions Survey	\$15,000	1st	Informal	\$15,000	100%	0.16%
S-01A	Construction Survey (Quality Assurance)	\$15,000	1st	Informal	\$15,000	100%	0.16%
S-02	Site Preparation	\$337,469	1st/2nd	Best-Value	\$253,102	75%	2.67%
S-03C	Site Earthwork and Demolition	\$368,283	1st	Best-Value	\$276,212	75%	2.91%
S-03D	Utility Water Pump Station Earthwork	\$570,934	1st/2nd	Best-Value	\$57,093	10%	0.60%
S-03E	Access Road and Staging Area	\$301,178	1st	Best-Value	\$225,884	75%	2.38%
S-04	Utility Water Pump Station Concrete	\$364,497	1st/2nd	Best-Value	\$36,450	10%	0.38%
S-05	Site Concrete	\$683,673	1st/2nd	Best-Value	\$68,367	10%	0.72%
S-08	Removal and Disposal of Contaminated Material	\$10,000	1st	Informal	\$10,000	100%	0.11%
S-09	PEMB and Metal Canopies	\$300,981	1st/2nd	Price-Based	\$15,049	5%	0.16%
S-10	Tensile Membrane Structure	\$225,000	1st/2nd	Price-Based	\$11,250	5%	0.12%
S-12	Painting and Coatings	\$134,560	1st	Informal	\$134,560	100%	1.42%
S-14	HVAC	\$205,000	1st	Best-Value	\$153,750	75%	1.62%
S-15	Electrical	\$2,056,269	1st/2nd	Best-Value	\$205,627	10%	2.17%
S-15A	Instrumentation and Controls	\$188,500	1st/2nd	Price-Based	\$9,425	5%	0.10%
S-16	Utilities Piping	\$395,967	1st/2nd	Best-Value	\$118,790	30%	1.25%
S-17	Process Piping	\$2,516,758	1st/2nd	Price-Based	\$377,514	15%	3.98%
S-18	Horizontal Directional Drilling	\$136,188	1st/2nd	Price-Based	\$13,619	10%	0.14%
S-19	AC Pavement and Base	\$158,030	1st	Best-Value	\$118,523	75%	1.25%
S-20	Chain Link Fencing	\$34,300	1st	Informal	\$34,300	100%	0.36%
S-21	Landscaping	\$237,295	1st	Best-Value	\$237,295	100%	2.50%
S-22	Tree Removal	\$73,600	1st	Informal	\$73,600	100%	0.78%
P-02	Pumps	\$121,086	-	Price-Based	\$0	0%	0.00%
P-03	Chemical Feed System	\$46,825	-	Price-Based	\$0	0%	0.00%
<b>Hard Construction Cost =</b>		<b>\$9,496,393</b>			<b>\$2,460,409</b>		<b>25.91%</b>