STMWRF Project Update December 2022

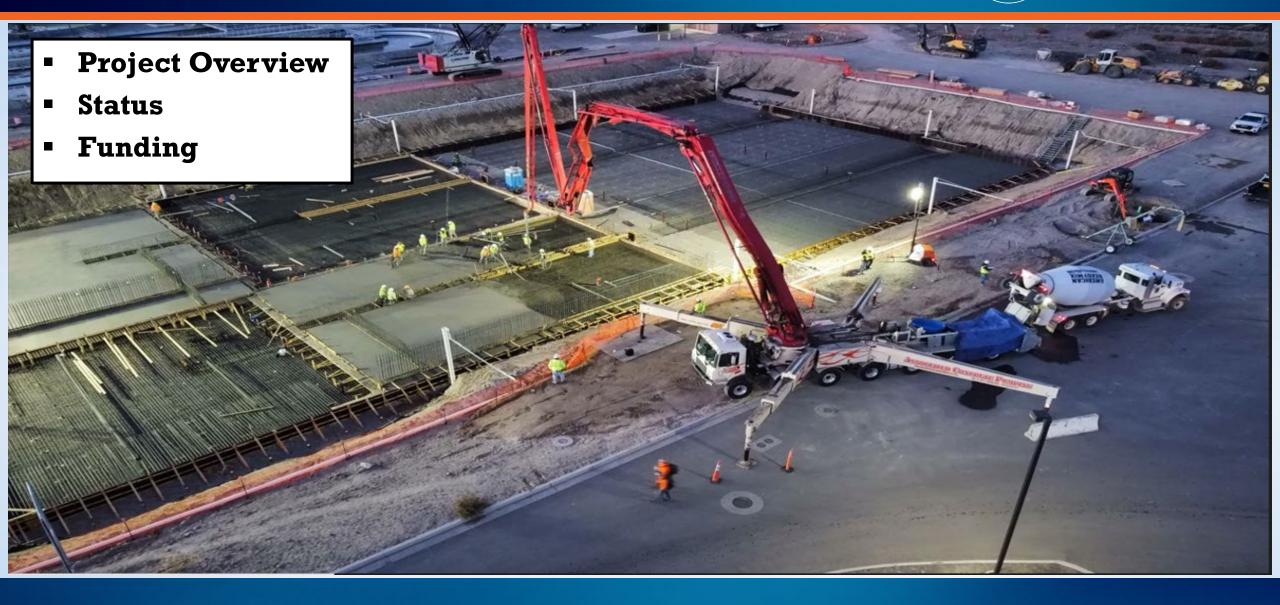
Dwayne Smith, P.E.



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Original Construction

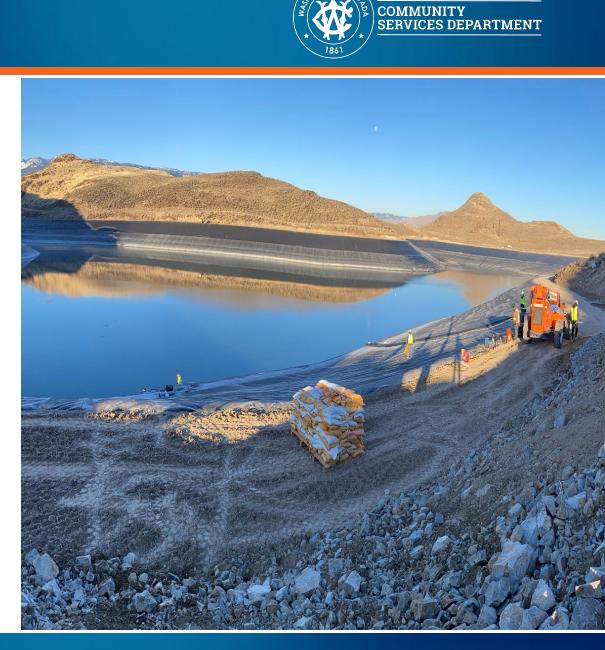
- 1991
- 1.5 MGD (avg day)
- Traditional aerobic/anerobic with coagulation-flocculation, TMWRF solids treatment

Major Improvements

- 2003 Capacity Expansion to 4.1 MGD (avg day)
- 2012 Headworks Reliability
- 2014 Access Road Safety Improvements
- 2014 Chemical Building Retrofit
- 2016 Biosolids Treatment

Current Project

- Capacity Expansion to 6.13 MGD (avg day)
- 5-Stage Bardenpho Process
- Grit Removal
- Headworks Expansion
- New Blower Building
- Huffaker Effluent Reservoir Lining



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Key Dates/Project Milestones 2017

Planning/Predesign

<u>2018</u>

 \$50M State Revolving Fund (SRF) Loan through State of Nevada Clean Water Fund

<u>2019</u>

- Construction Joint Venture with MWH and KGW (CMAR)
- Engineering design and oversite Jacobs Engineering Group

<u>2020</u>

Construction initiated

<u>2025</u>

- Substantial completion June
- <u>Closeout October</u>





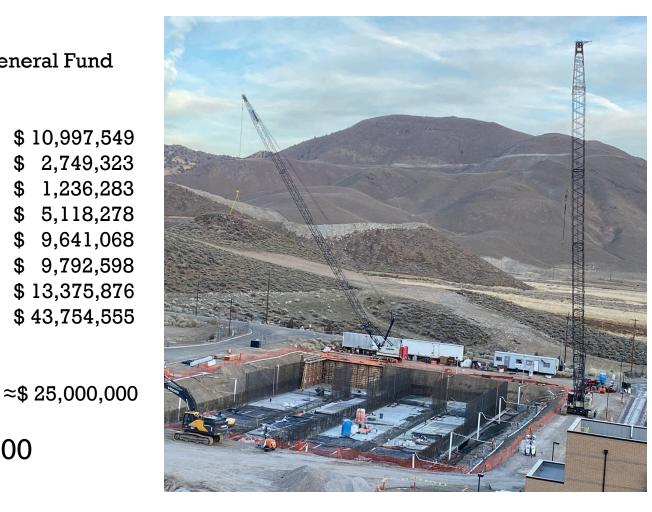
PROJECT FUNDING

Project is funded 100% through new and existing users – No General Fund Money

•	GMP #1 - Huffaker Reservoir Liner	\$	10,997,549
•	GMP #2 – Influent Pump and Screen	\$	2,749,323
•	GMP #2A – Equipment Procurement for GMP#2	\$	1,236,283
•	GMP #3A – Bioreactor Excavation and Slab Const.	\$	5,118,278
•	GMP #3B – Bioreactor Walls/Misc. Improvements	\$	9,641,068
•	GMP #3C – Early Equipment Procurement For GMP #4B	\$	9,792,598
•	GMP #4A – Headworks/Grit Removal/Blowers	\$	13,375,876
•	GMP #4B – Final Construction Package	\$ ·	43,754,555

 Planning, Design, Construction Management, C/O's Inspection, ICE, Geotechnical, Survey, Permitting

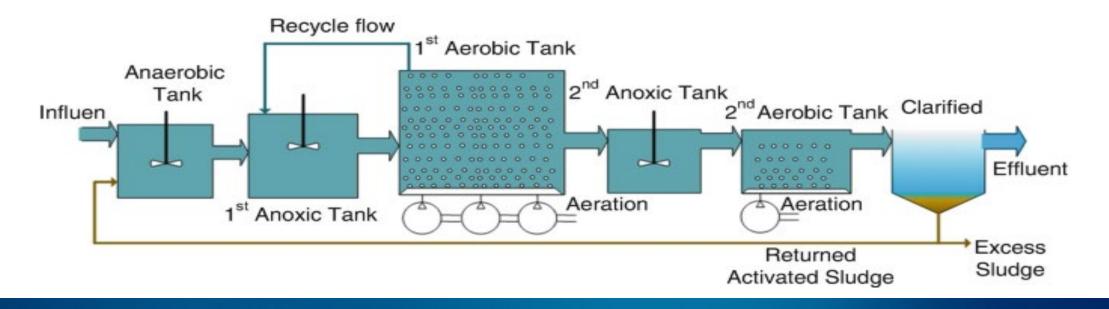
Total Project Estimate \approx \$122,000,000





<u>New Process: 5-Stage Bardenpho</u>

- 5 distinct bioreactors for enhanced nitrogen and phosphorous removal, reduces chemical and biological oxygen demand, total suspended solids, and viruses
- Highest nutrient removal, lower capital and operating costs/unit, flexible for future flow and load changes, easier to operate, lower impact to current operations, environmental compliance.



Thank

you



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> <u>Our Focus :</u> To Provide and Sustain a Safe, Secure and Healthy Community... Through Effective Wastewater Treatment and Reclaim Water Management