



Salt Lake City Water Reclamation Facility

Spring 2022 Open House



Welcome & Purpose

- Project overview
- Since Our Last Open House
- Schedule and budget
- Construction update
- Public access and education elements
- Get your input

About SLCDPU

- Established in 1876; oldest water provider in the West
- Long and successful history of protecting and managing our water supply
- Responsible stewardship of our waters all the way from the Wasatch canyons to the Great Salt Lake
- We live in a beautiful place that offers a fantastic quality of life
- We cannot take our water and our water infrastructure for granted



Why Engage The Public?

- Plant is owned by and benefits City residents
- Reflect community needs and values
- Create a legacy the community can be proud of
- Be a model, cost-conscious large infrastructure project
- Develop ongoing education about water and sustainability



Project Overview



- Only treatment facility serving the City
- Serves around 200,000 people
- Treats about 35 million gallons per day
- Need to rebuild it
 - New water quality standards
 - It's 55 years old; near end of its life

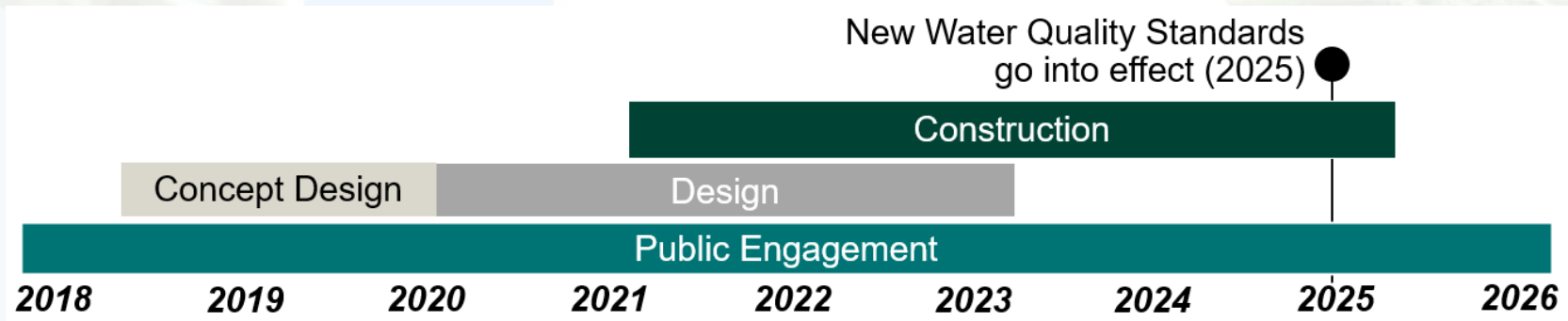
Looking at all our facilities and structures to make sure they operate without failure and can meet future needs.

Project Overview

- Water quality compliance
- Long-term reliability
- Continued operation throughout project
- Public engagement throughout

Our Guiding Principles

1. Treat wastewater
2. Cost and budget
3. Safety
4. Public engagement & education
5. Sustainability



Site Overview



Funding The Project

- Original estimated project cost \$700,000,000
- Current estimated project cost \$836,799,000
- Being cost-conscious
- Putting a lot of effort into managing the project costs
- Leveraging most favorable financing available – WIFIA loan
- Investigating applicable federal and state funding options
- Paid for slowly over time
- Customer rate increase as planned



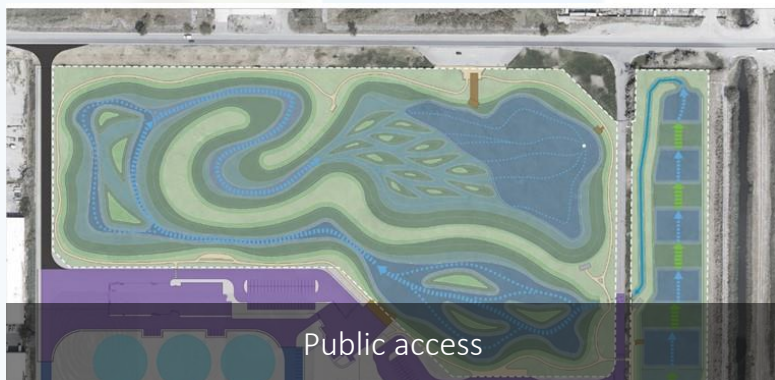
Incorporating Public Input

- Focus on functionality and project costs
- Reduction in odors
- Facility aesthetics
- Public access
- Landscaping
- Crime and vandalism
- Educational opportunities

Since Our Last Open House



What We've Addressed





Schedule & Budget

The past two years have been volatile for the construction industry:

- COVID situation
- Supply chain challenges
- Surging material costs
- Limited availability of skilled labor
- Large amount of construction work happening
- Impacts from conflict in Europe
- A lot of team effort directed at this

Working hard to keep the project on schedule and within budget

Savings to-date:
\$157,324,000



Managing Costs

Removal / Deferral

- Sewage collections pad
- Administration building
- Removal of the biological nutrient demonstration facility

Escalation mitigation

- Phased delivery
- Pre-purchasing equipment and materials

Shift In Approach

- Acquisition of Redwood Campus
- Keeping pump station at an off-site location
- Utilizing preload for ground improvement

Bilateral Infrastructure Bill

- Water Infrastructure Finance and Innovation Act (WIFIA) loan
- Actively pursuing additional funding opportunities

Facility Aesthetics

Incorporating our architectural vision with the understanding that our #1 guiding principle is to treat wastewater



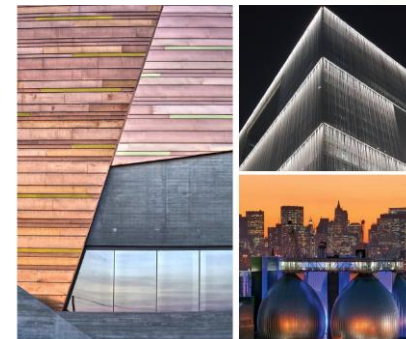
Mountain



Reclamation



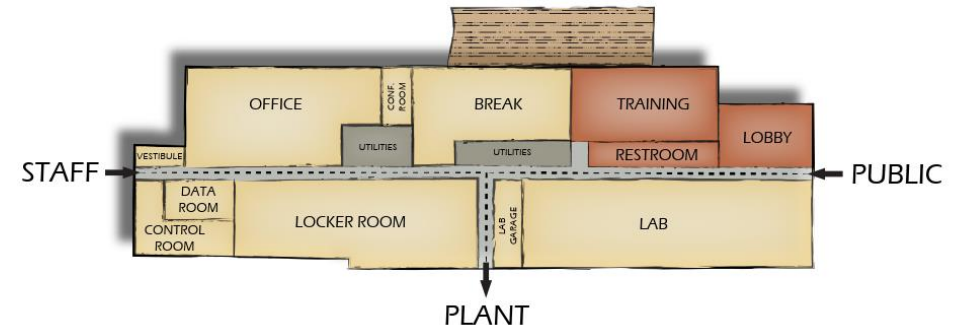
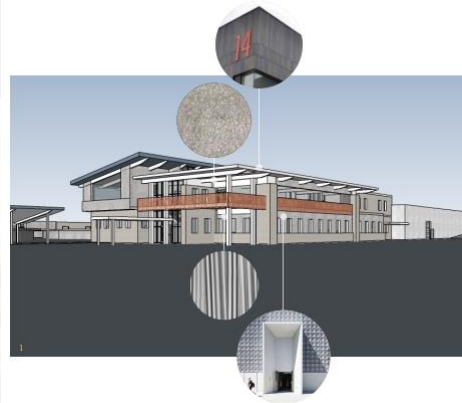
City



Lake



Access & Education



- Removed administration building from the project
- Updated the operations and maintenance building
 - Training room
 - Lobby
 - Restroom
 - Deck

Construction To-Date



Construction To-Date



De-watering Building Progress

This structure will provide the ability to de-water the bio-solids and control odors in the process.

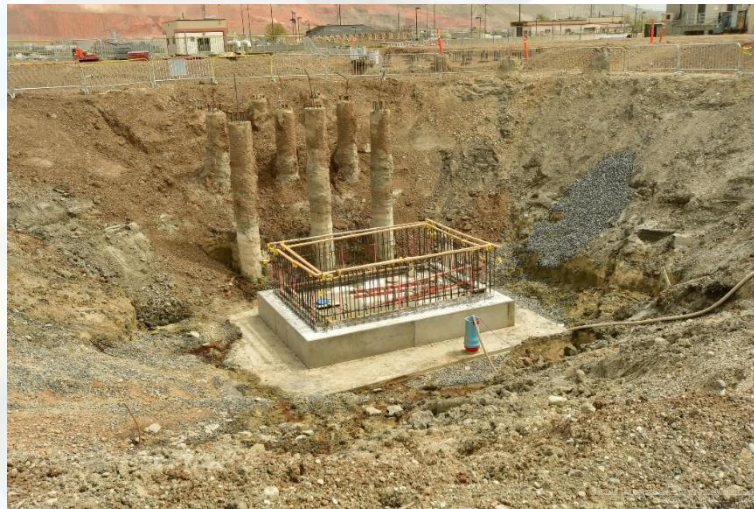
Construction To-Date



Pre-load Material

- 1.6 million tons
- 35 feet tall
- Covered 23 acres
- Compressed soil up to 6 feet

Construction To-Date



Disinfection Building

- Final treatment of wastewater
- Ultraviolet treatment will eliminate the need for onsite chlorine storage

Construction To-Date



Liquid Train Structural Excavation

This excavation will provide the space for the main treatment components including primary and secondary clarifiers and the biological nutrient reactor.

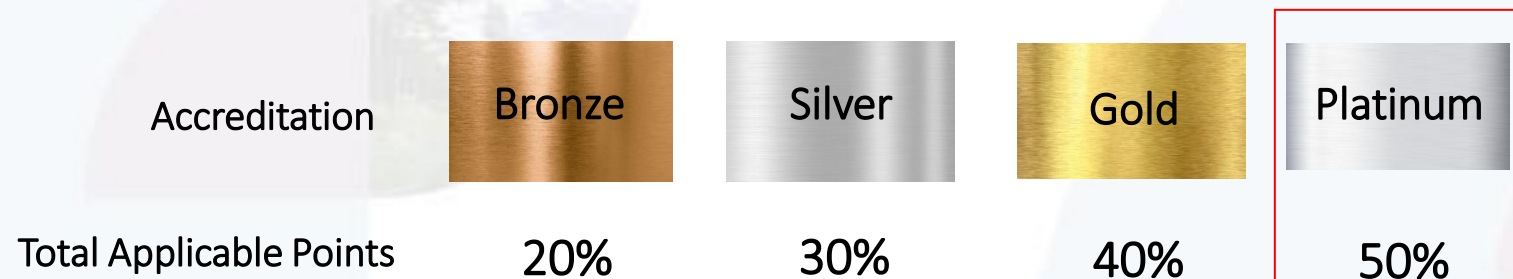
Sustainability As A Guiding Principle

Envision

Institute for Sustainable Infrastructure; Newer rating system (started in 2012) for assessing sustainability, resiliency, and equity in civil infrastructure

- Consideration of **life cycle costs**: planning, design, construction, and operation (accounting for resilience & sROI)
- **Public outreach** to focus on key issues that impact the community and consider equity
- Use of **local and recycled materials** in construction
- Pushing for higher levels of achievement when possible; **balancing with project costs**

- Currently on track for 67% of total applicable points
- Targeting a higher % than required to allow flexibility
- Submit for accreditation following 95% design completion



Sustainability

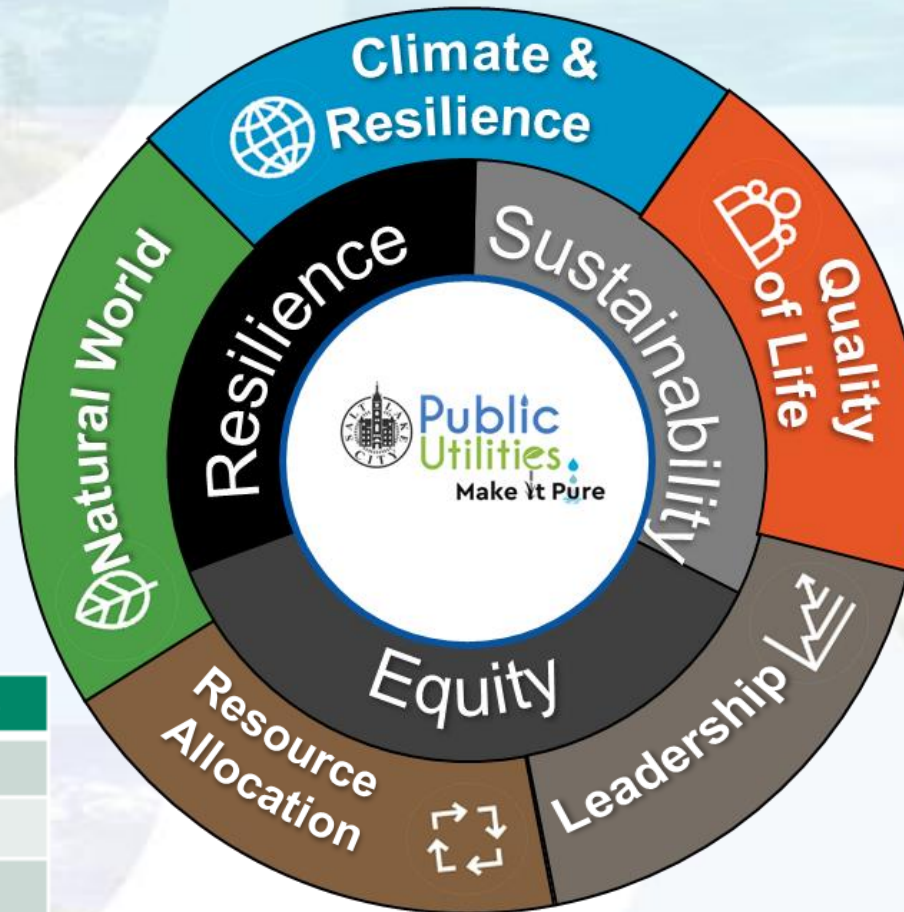
Reduce Embodied Carbon

Less materials, maintenance and transportation

Reuse of materials, buildings and infrastructure

Use Recycled Materials

Material	≈ Quantity	≈ Cost Savings
A-1-a	34,055 CY	\$810,522
Asphalt	4,060 CY	\$60,900
Concrete	27,521 CY	\$550,422
Surcharge	775,949 CY	\$9,795,549
	841,585	\$11,217,393



Waste Diversion

99% Waste Diversion Rate

Recycled: Asphalt, concrete, demolition of reinforced concrete drying beds, metals, surcharge material, plastics, cardboard

881,104 tons

Operator Wellness

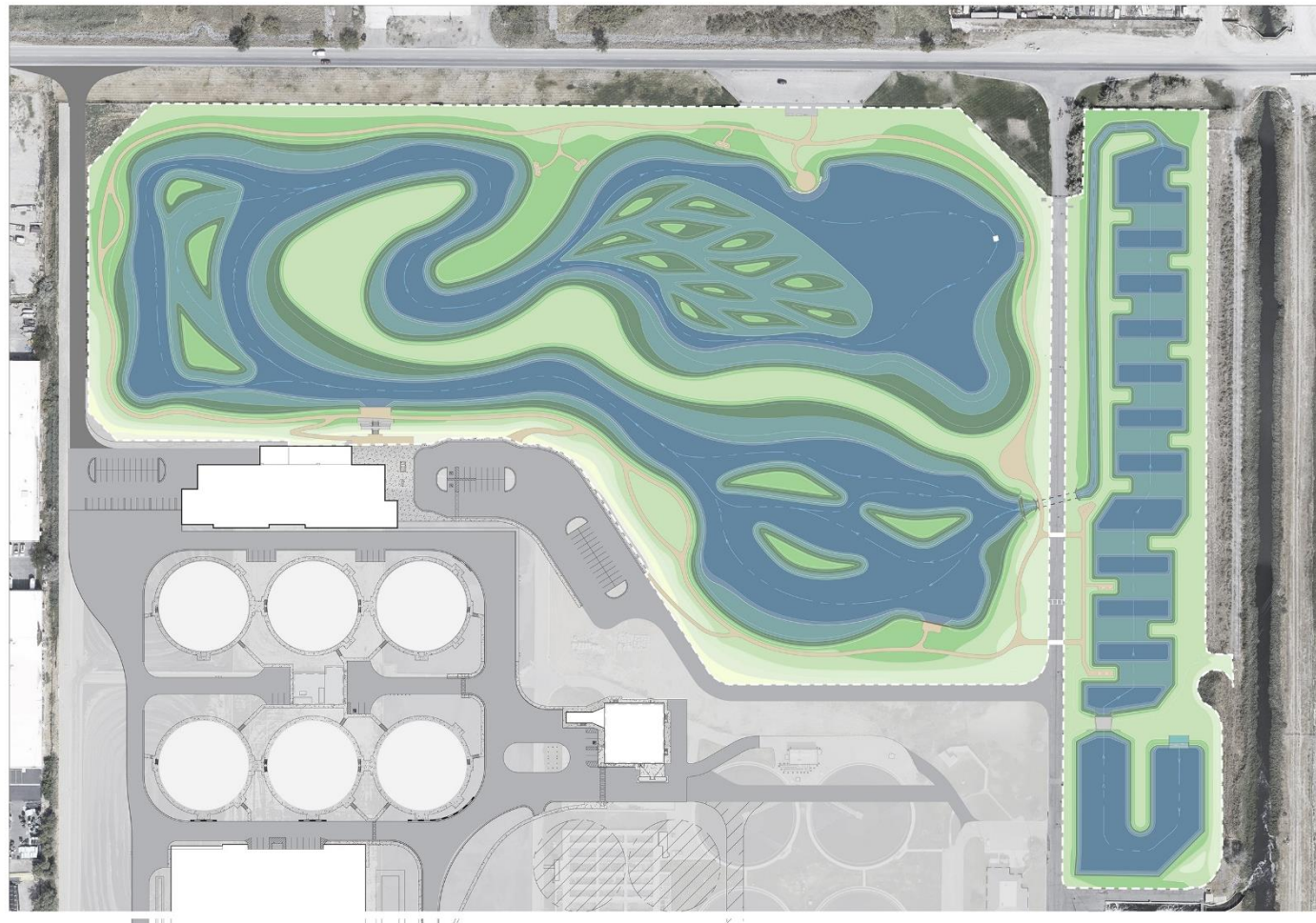
Best Value Approach

Stakeholder Engagement

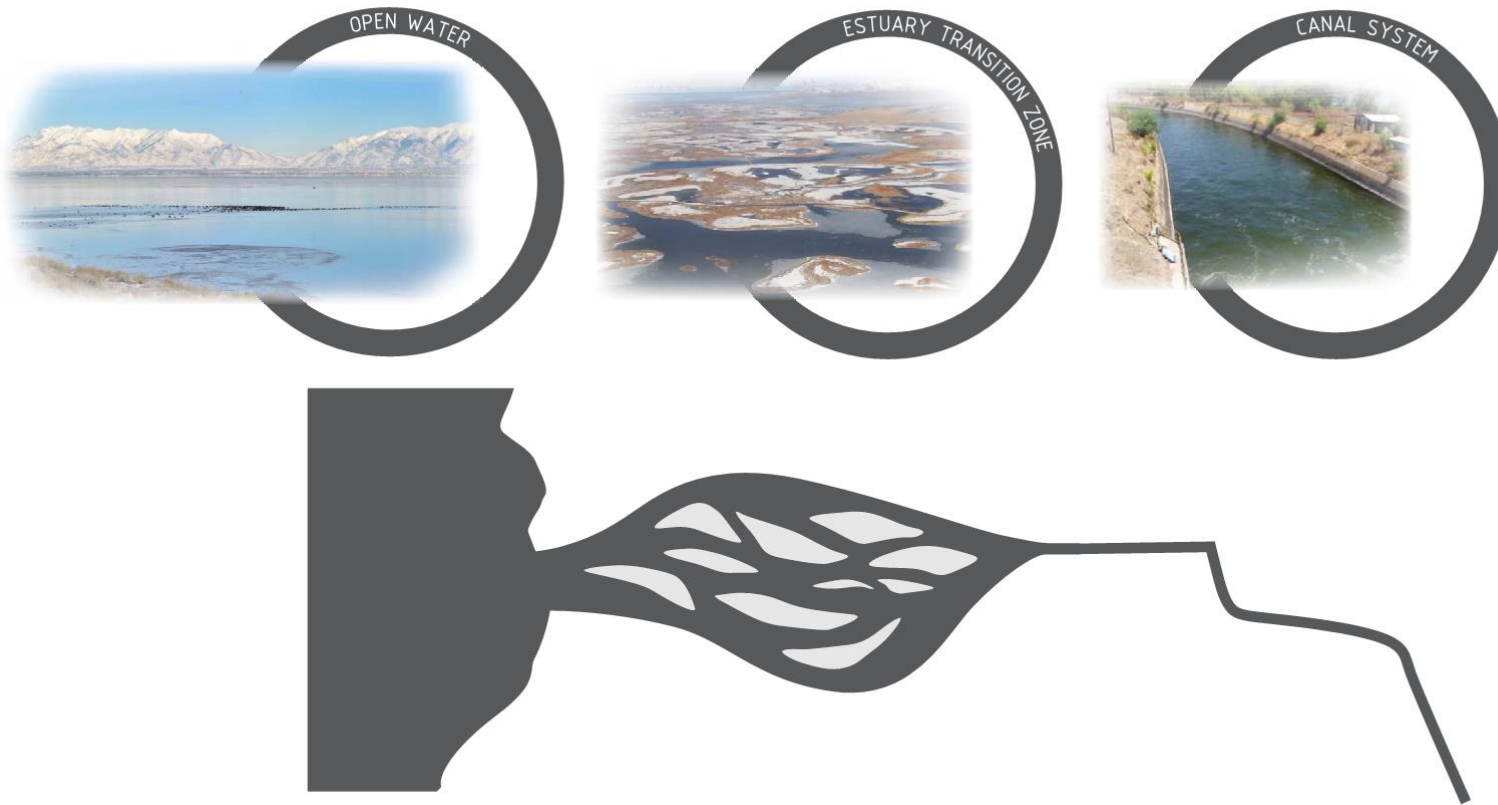
Byproduct Synergies

Plan for Long-Term
Monitoring & Maintenance

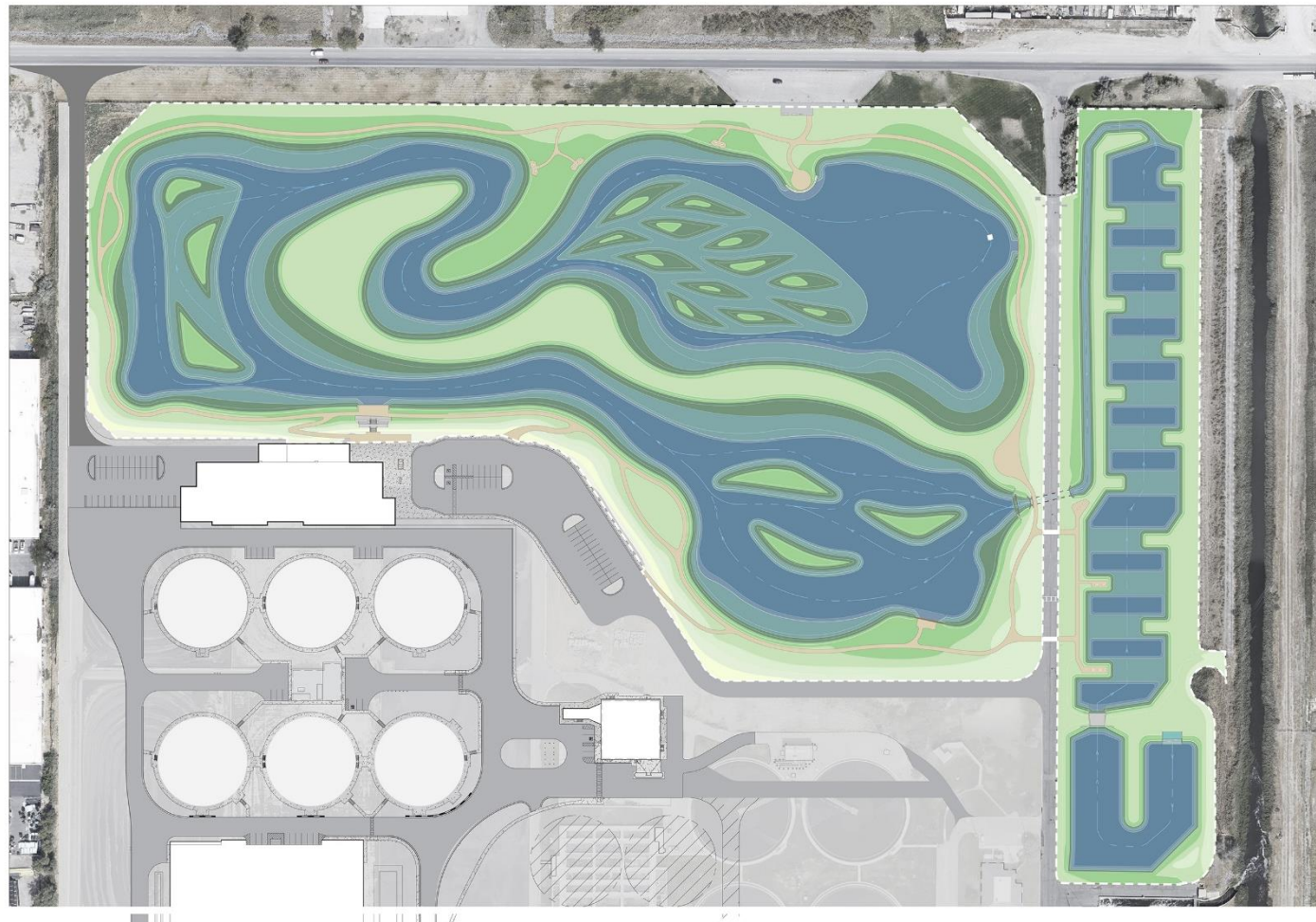
Wetlands – Overview



Wetlands – Matching Target Species To Habit



Wetlands – Local Elements Applied



Wetlands – Matching Target Species To Habit

UPLAND



DENSE
SHORELINE



OPEN WATER
ISLANDS



OPEN
SHORELINE



MUDFLAT



PLAYA



Relative
Maintenance
Effort



Long-Billed
Curlew



White-
Faced Ibis



Wilson's
Phalarope



Black-
Necked Stilt



American
Avocet



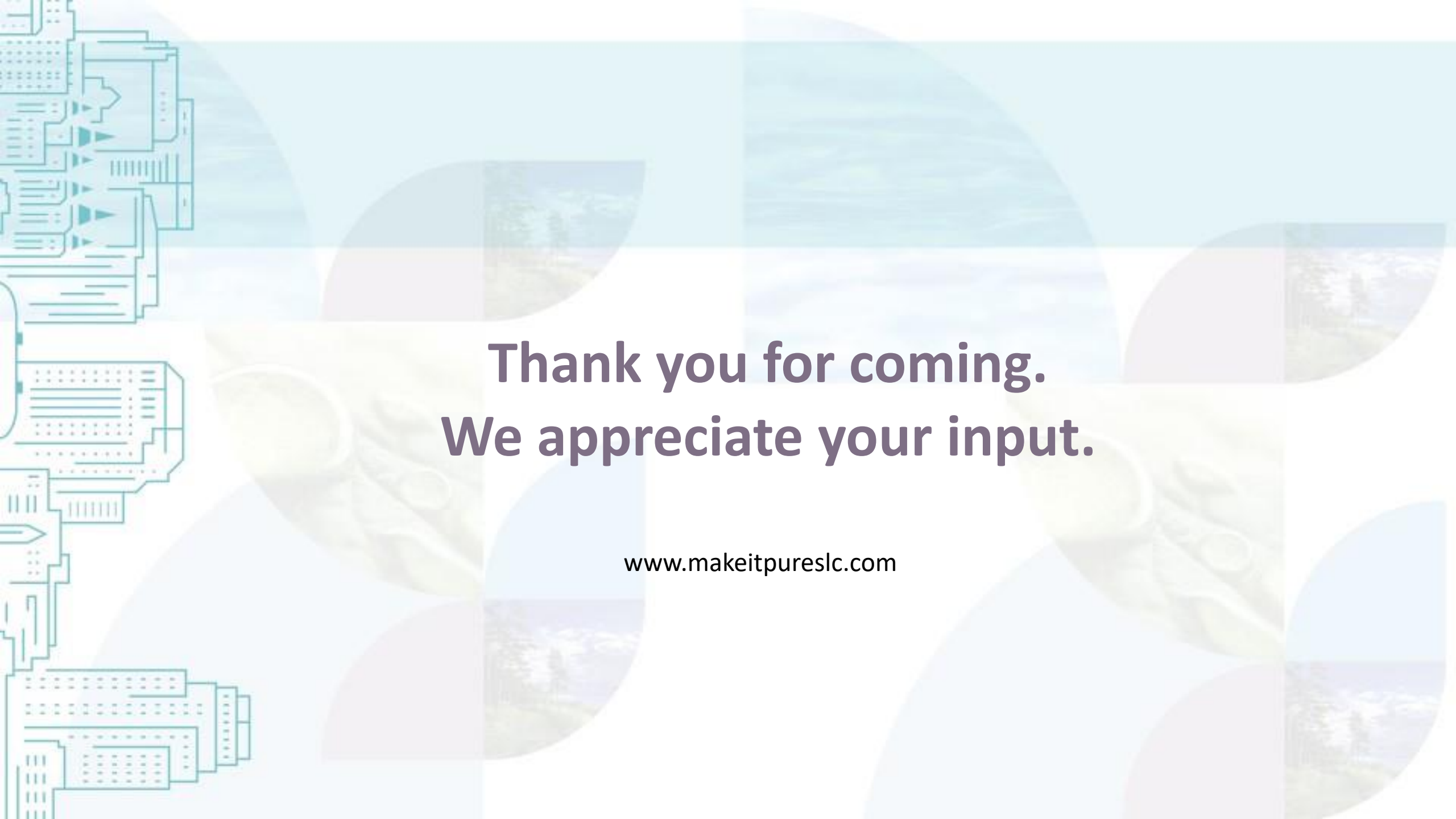
Western
Sandpiper



Snowy
Plover



Willet



**Thank you for coming.
We appreciate your input.**

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