



Wastewater Treatment Plant Master Plan

Consultant Task Order

Background



- ▶ The 2011 Master Plan had many recommendations that were successfully implemented:
 - ▶ IPS Expansion
 - ▶ Headworks Equipment Replacement
 - ▶ Aeration Basin Diffuser Replacement
 - ▶ Pond Aerators
 - ▶ Pond Transfer Structures Replacement
 - ▶ Phase 1 Recycled Water Expansion
 - ▶ Recycled Water Reservoir Liners and N/S Split



IPS Expansion



NapaSan Board of Directors Meeting



July 15, 2020

Headworks Equipment Replacement



Aeration Basin Diffuser Replacement



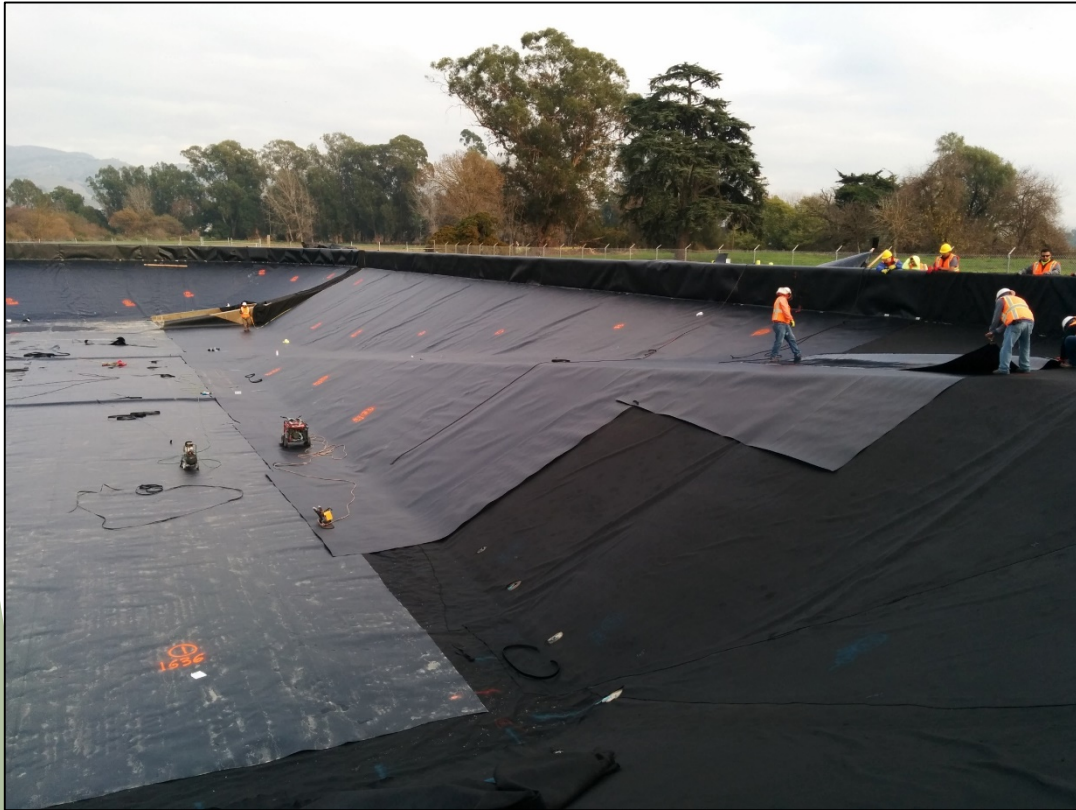
Pond Transfer Structures Replacement



Phase 1 RW Expansion



RW Reservoir Liners and N/S Split



Need for a new Master Plan



- ▶ Flow and loading projections have changed
 - ▶ Establish different planning assumptions and trigger points for expansion projects
- ▶ New technologies and evolving regulations
 - ▶ Recommended alternatives may be different
- ▶ Condition assessment to establish a prioritized CIP
- ▶ Industry practice is to update the master plan every 7-10 years.

Primary Goals of the Master Plan



- ▶ Facility Condition Assessment
- ▶ Provide updated flow and loading projections; evaluate trigger points for capacity upgrades
- ▶ Create a 10-Year CIP based on the condition assessment results and the need for capacity upgrades

Additional Goals of the Master Plan



- ▶ Renewable Energy Production & Energy Management
- ▶ Nutrient Management
- ▶ Biosolids Management
- ▶ Operational Vulnerabilities
- ▶ Recycled Water and Potable Reuse
- ▶ Capacity Analysis
- ▶ Evaluation of Alternatives
- ▶ Contaminants of emerging concern (CECs)

Consultant Selection



- ▶ Staff sent a formal Request For Proposals to 14 consultants, including local firms
- ▶ Staff received 3 proposals and interviewed all 3 teams
- ▶ Hazen and Sawyer (with Carollo as a subconsultant) was selected as the most qualified team

Budget



- ▶ Total budget: \$1,865,200
- ▶ Hazen and Sawyer Task Order: \$1,513,605

Anticipated Schedule



► Notice to Proceed: July 2020

► Board Intro/Kick-Off: September 2020

► Board Update: January 2021

► Board Update: June 2021

► Board Update: October 2021

Update
Presentations/
Workshops

► Approve Master Plan: December 2021

Staff Recommendation



- ▶ Authorize the Purchasing Agent to execute Task Order 9 with Hazen and Sawyer to prepare a Wastewater Treatment Plant Master Plan (CIP 20706) in the amount of \$1,513,605.