The Big Why

Protection of the Pacific Grove Area of Special Biological Significance (ASBS)

- PG ASBS is one of 34 in California
- PG ASBS extends 3.2 miles from Monterey Bay Aquarium to just before Point Pinos
- There are 500 ocean acres within the Monterey Bay National Marine Sanctuary (MBNMS)
- PG ASBS receives runoff from 1,106 acres in PG and 101 acres in Monterey
Presenters

KARI WAGNER/ WALLACEGROUP

DANIEL GHO/ CITY OF PACIFIC GROVE

City of Pacific Grove Urban Diversion
BACKGROUND

• Located on the Monterey Peninsula
• Surrounded by the Pacific Ocean, Monterey Bay, Pebble Beach, and City of Monterey
• Population – 15,000
• Primarily residential with pockets of commercial over 2.87 mi²
• High tourist population
ASBS are a subset of state water quality protection per the California Marine Management Areas Improvement Act.

State Water Resources Control Board (SWRCB) developed the Ocean Plan which prohibits discharge of waste to designated ASBS and includes municipal stormwater discharges.

The City of Pacific Grove and Monterey developed ASBS Compliance Plan to meet the SWRCB requirements.
TIMELINE OF REGIONAL EFFORTS

- 2001–2007 Phases 1 & 2 Urban Diversions (Clean Beaches Initiative Grants)
- 2006 Regional ASBS Alternatives Analysis
- 2011 Phase 3 Urban Diversion (Prop. 40 grant)
- 2012 SWRCB Approval – ASBS Special Protections
- 2013–2016 Central Coast Regional ASBS Monitoring Effort
- 2014–2016 Finalized ‘PG ASBS Compliance Plan’
- 2014 Completed a Comprehensive Sewer Collection System Master Plan
- 2021 Completed Phase 4 Urban Diversion
PHASE 4 URBAN DIVERSION

• In 2015 – City was awarded a grant from Monterey Peninsula Water Management District to complete engineering, design, and permitting for Sub-Project 3 of the Monterey-PG ASBS Stormwater Management Project (Urban Diversion Phase 4)

• City hired Wallace Group through a competitive RFP to design the project

• Applied for the Prop 1 Grant through the SWRCB
  • Submitted application in July 2016
    • Primary benefit: Protection of the ASBS, water quality
    • Secondary benefit: Water supply
The Proposed Project

Project Goals:
• Protect or improve water quality
• Help water infrastructure systems adapt to climate change
• Incentivize water agency collaboration and improve regional water self-reliance

Project Benefits
• Increase filtration and/or treatment runoff: The project will capture and send 40 acre-feet per year of water to M1W
• Increased water supply
• Public education
The Proposed Project

Grant Request
• Lover’s Point Diversion
• Sea Palm Diversion
• Greenwood, Eardley, David Ave. and Pine Street Diversion Analysis

Matching Funds
• In Kind Services
• Sewer Collection System Upgrades for City of Monterey
• Sewer Collection System Upgrades for Pacific Grove
• Public Education and Outreach
FINAL GRANT AWARD

- Proposition 84 – ASBS Grant Program (Not Prop 1)
- Grant Awarded in December 2016
- Agreement Signed December 1, 2017
  - Grant amount – $4,427,229
- Work Completion Date: March 31, 2021
  - Deviation Request #2 extended the deadline to September 30, 2021
    - Required due to delays in delivery of materials/parts from COVID
Lover's Point Diversion Project

- Watershed is 221.8 acres
  - Largest Watershed
  - Includes lands in the City of Monterey, Presidio and Pacific Grove

- 3.14 acre-feet (AF) of water diverted
  - 85 percentile storm

- Total Diverted:
  - 44.1 AF in an Average Year
  - 12.8 AF in Dry Years
  - 108.0 AF in Wet Years

- 430,000 gal Buried Storage Tank
  - Changed to 1,000 gpm LS midway through project

- Dedicated SW Main to LS 13

Sea Palm Diversion Project

- Watershed is 32.2 acres

- 0.43 AF of water diverted
  - 85 percentile storm

- Total Diverted:
  - 6.0 AF in an Average Year
  - 1.7 AF in Dry Years
  - 14.9 AF in Wet Years

- 50,000 gal Buried Storage Tank

- Joint Sewer/SW to LS 15
Sea Palm Diversion Project

Legend:
- 18" Inflow Diversion Line
- 18" Outflow Stormwater
- New 10" Sewer Main
- New 12" Sewer Main
- Existing 10" Sewer Main
- Existing 12" Sewer Main
- Underground Storage Tank

City of Pacific Grove Urban Diversion
Additional Studies (Grant)

• City of Monterey – Grant Partner
  • David Avenue Reservoir
  • Pine Street
  • Robert Down School
  • Greenwood
Urban Diversion Project

- Notice to Proceed: April 2018
- Bid the Urban Diversion Project in May 2019
  - Low Bid: $6,871,380
  - Grant: $4,427,229
Urban Diversion Project

- Re-designed the Lover’s Point Component of the Project
  - Eliminated the Lover’s Point Tank
  - Added a 1,000 gpm lift station

- Worked with the State to Obtain Authorization for the Design Change
  - Deviation Request was Granted
  - Had to demonstrate that the revised project provided similar benefits

- Re-bid the Urban Diversion April 2020
  - Low Bid: $3,585,260 – Monterey Peninsula Engineering (MPE)
  - Construction management and inspection provided by Wallace Group
Urban Diversion Project - Environmental

- City approved the Monterey-Pacific Grove Area of Special Biological Significance Stormwater Management Project Final Environmental Impact Report in 2014
- Prepared an addendum in July 2018 to update the project description
- Both the EIR and Update identified mitigation measures to reduce effects on the environment, Monterey Bay, and cultural resources
- Required Coastal Commission Permit
  - Obtained a Coastal Development Permit waiver on March 6, 2019
- Project had one opposition for potential impacts to the local Ohlone/Costanoan–Esselen Nation
  - Required full-time monitoring during construction
Lover’s Point Lift Station

Project Highlights

- 9-ft diameter wet well, 15.5 ft deep
- Two, 2.5 HP submersible pumps
- Rated at 1,000 gpm each
- Valve vault with check valves and flow meter
- Located adjacent to the curb line
Lover’s Point
Force Main

Project Highlights
- 8-inch C900 DR18
- 1,200 feet, Elevation 51 ft to 30 ft
- Groundwater and bedrock present
- Tied into M1W LS #13, with flap gate for odors
- High tourist road along the waterfront
Sea Palm
Underground Tank

Project Highlights
- 60,510 gallon, below tee box on hole #7
- Started design with a cast in place concrete tank
- Changed mid-design to a Pre-cast concrete modular SW Tank (Storm Prism System by Precon)
- Orifice plate controls flow at 180 gpm
Sea Palm
Sewer Upgrade

Project Highlights
• 1,420 lf of 10- and 12- sewer main replaced
• 14 manholes replaced or coated
• High tourist road along the waterfront
Urban Diversion Project – Final Thoughts

• The Project bid right as the pandemic started.
  • All construction meetings went to zoom
    • Saved costs as the project team did not have to travel
    • Lift station components were delayed, resulted in a delay in the project

• Project kicked off in May 2020 and final SCADA and start up of the LS occurred in October 2021

• Project bid: $3,585,260
  • One change order for $32,951 (less than 1% of the contract)
    • Additional landscaping and lining of two additional manholes

• Processed two deviation requests with the State
  • Amended budget and scope
  • Amended budget and schedule
Sewer Capital Improvement Projects (Matching Funds)

• City of Monterey had completed extensive rehab of sewers. Sewer mains that were tributary to the Lover’s Point watershed were included as matching funds.

• City of Pacific Grove, Rehabilitate or replace 4,700 lf of sanitary sewer mains and 35 manholes
  • Near-Term Projects #3 – Asilomar
  • Near-Term Project #4 – Crocker & Asilomar
  • Near-Term Project #5 – 14th Street from Sinex to Pine
  • Near-Term Project #8 – Carmel

• Project was bid April 2020
  • Low Bid: $3,176,507 – Ranger Pipeline, Inc.
  • Construction management and inspection provided by Wallace Group
City of Pacific Grove Urban Diversion

Sewer Upgrades
Near-Term Projects #3 – Asilomar

Project Highlights
- 2,100 lf of 15-inch to 18-inch HDPE, 17 ft deep
- Open Trench, CIPP, and Pipe Bursting
- New pipe constructed in same alignment
  - Bedrock surrounded existing sewer main
  - Slurry seal and grind & overlay, new striping
Sewer Upgrades
Near-Term Projects #4 – Crocker & Asilomar

Project Highlights
• Replaced or rehabilitated 19 manholes
• Replaced 850 ft of 8-inch sewer in easement with new 8-inch via pipe bursting
• Crossed abandoned RR ROW
Sewer Upgrades
Near-Term Projects #5 – 14th Street from Sinex to Pine

Project Highlights
• Replaced 725 lf of 8-inch pipe that was broken with 8-inch HDPE via pipe bursting on Robert Down Elementary
• Had to coordinate when school was out for the summer
Sewer Upgrades
Near-Term Project #8 - Carmel

Project Highlights
- 1,175 lf of 8-inch with new 8-inch SDR 35 due to sags in existing sewer main
- Remove and replace pavement, new striping
- New ADA curb ramps and sidewalk repairs
Sewer Upgrade Project – Final Thoughts

- The Project bid right as the pandemic started.
  - All construction meetings went to zoom
    - Saved costs as the project team did not have to travel
    - Did not have any delays due to COVID

- Project kicked off in June 2020, completed February 2021

- Project bid: $3,176,507
  - Ten change orders for $188,695 (5.9% of contract)
    - Changing method of construction for sewer upgrades
    - Additional road and storm drain improvements
• Be patient: Numerous State Employees that are not familiar with your project

• Provide adequate detail in reports

• Know what can be requested for reimbursements and what can’t

• Approval process
  • Approvals can take months
  • Receiving checks can take months after approvals
  • Be ready to have “cash on hand” to float project

• Stay on top of submittals
  • If you fall behind, catching up will be difficult
  • Keep a file with all submittals to State including emails
LESSONS LEARNED

• Construction Management and daily monitoring is key
  • This is critical for reporting requirements including final reporting

• Setup contractor invoicing like the approved budget sheets
  • This will make quarterly reporting much easier

• Photo document everything
  • Be sure to include date and location

• Properly track grant administration time
  • Consider setting up a tracking code with your finance team

• Signature authority
  • Be sure the person signing the reports knows about the project and is readily available

• Construction monitoring required during all excavations – gets costly
THANK YOU!

Questions?