

Public Meetings & Engagement

- ▶ Technical Coordination Meetings
 - ▶ TOP Staff – WWTP Siting, Vendors - Alternative Treatment Systems, City of Chico – Engineering Coordination, Butte County – WWTP Siting options and feedback, RWQCB – WWTP discharge requirements, Paradise Irrigation District
- ▶ Monthly PSG Meetings
 - ▶ May and June Meetings Completed
 - ▶ Next meeting: August 31, 2016
- ▶ Public Workshops
 - ▶ June 15, 2016 2:00 – 3:30 PM and 6:30 – 8:00 PM - Completed
 - ▶ August 22, 2016
 - ▶ October – TBD

Proposed Service Area
**TOWN OF PARADISE
SEWER STUDY**

Proposed Service Area

<http://paradisesewer.com/map/>

Flows and Loads Analysis
**TOWN OF PARADISE
SEWER STUDY**

Sewer Flow Analysis

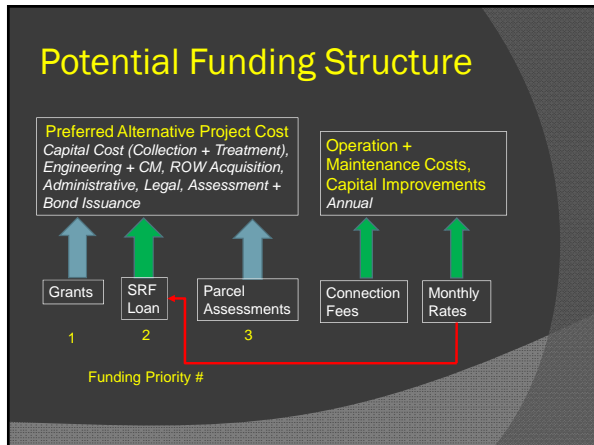
- Northern California Comparison
 - Sewer providers in the Northern California with historically proven design criteria were reviewed and compared
 - Population density of community and number of people per household were compared
- Town of Paradise has a below average population density resulting in a lower flow per land use than other communities

Sewer Flow Analysis

- ▶ Design Flows
 - Land Use Flow Generation
 - Flow per Single Family EDU = 230 gallons per EDU per day
 - Flow per Multi-Family EDU = 165 gallons per EDU per day
 - Non Residential Land Use = 1200 gallons per acre per day
 - Build-out Design Flows for 2040
 - Assume all residential land is built out to maximum density
 - Assume 5% increase for commercial growth and rezoning within the proposed service area
 - Assume the service area will not be changed
 - Average Dry Weather Flow (ADWF) = 1.4 MGD
 - Design Peak Wet Weather Flow (PWWF) = 3.24 MGD
 - Collection System and Treatment designed for PWWF

Funding Structure and Case Studies

TOWN OF PARADISE SEWER STUDY



- ### Financing
- ▶ Grants
 - Proposition 1 via SRF
 - Other grant sources are being investigated
 - ▶ SRF Loan requires minimum reserve and debt service coverage until paid off
 - Reserve = 1.2 X 1-yr of Debt Service
 - ▶ Assessment
 - Allocated to each parcel in service area proportionate to special benefits provided (sewer flow)
 - Vote for assessment also weighted

Applicable Codes for Assessments

- ▶ Municipal Improvement Act of 1913
- ▶ Special Assessment Investigation, Limitation and Majority Protest Act of 1931
- ▶ Property Value Assessment – California Streets and Highways Code section 2980

What's included in assessments?

- ▶ Treatment Plant Costs
- ▶ Collection System Costs
- ▶ Conveyance
- ▶ Easements/Rights-of-way
- ▶ Expenses
 - District Formation, Engineering, Permitting, Construction Management, Construction Period Financing, Bond Counsel, etc.

Case Studies – New Sewer Districts

	Case 1	Case 2	Case 3
Problem	GW degradation	GW degradation	GW degradation
Limitation	On-site system moratorium	On-site system moratorium	On-site system moratorium
Project Cost (\$)	61 M	150 M	<i>Phased over 20 years</i>
Included Reclaimed Water	Yes	Yes	Yes
SRF Loan	Yes	Yes	N/A
Grants	Yes - \$2M	TBD	TBD
Assessment (\$)	63 M	145 M	381 M
Connections	57	6,000	35,000
Result	in design / construction	in design / construction	40% + property value growth

Schedule Milestones

- ▶ Alternative Development and Public Engagement – May through October 2016
- ▶ Draft Report – November 2016
- ▶ Final Report – February 2017
- ▶ District Formation – March 2017
- ▶ Project Implementation Plan – June 2017

Questions/Comments?
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