



TOWN OF PARADISE **SEWER PROJECT**

Special Town Council Meeting

January 21, 2025





Meeting Overview

Part 1: Background

Part 2: Basis of Design Report
(Council Action Requested)

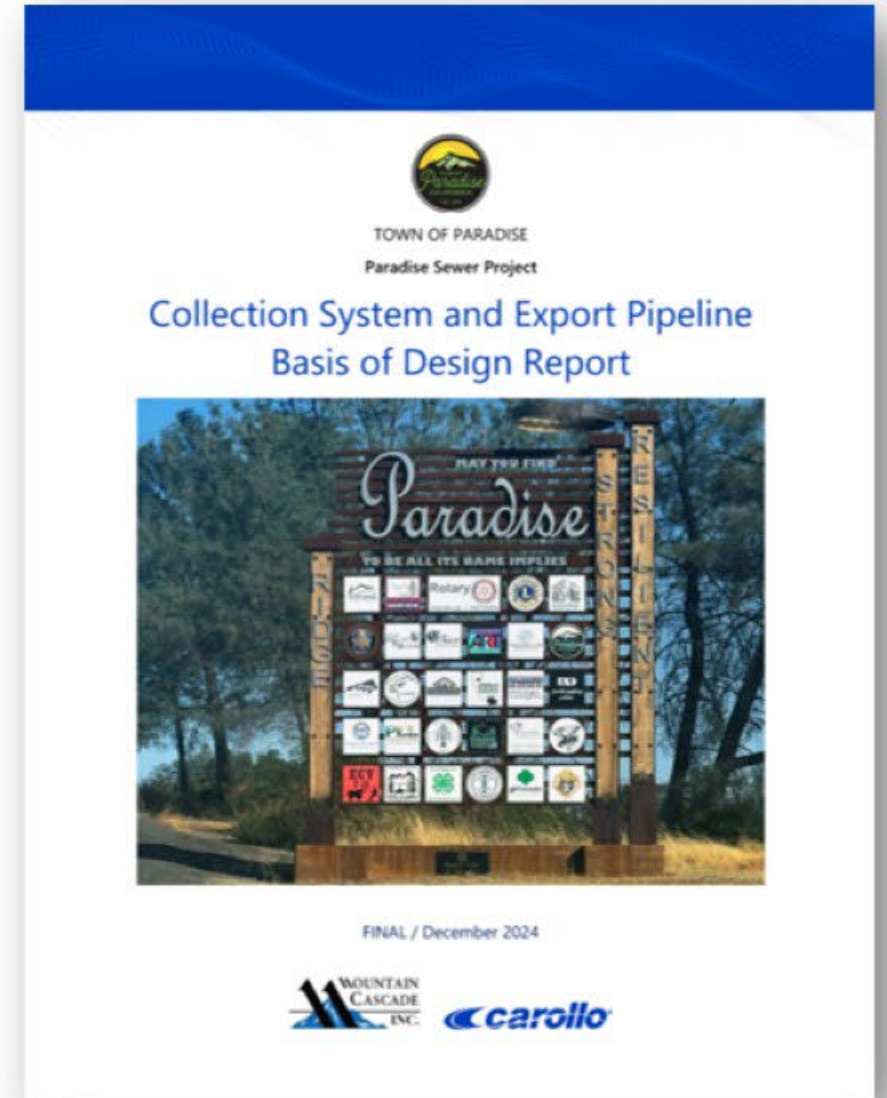
Part 3: Project Cost

Part 4: Funding Pursuits
(Council Action Requested)

Part 5: Revised Project

Part 6: Sewer Committee
(Council Action Requested)

Due to length of presentation, please reserve questions for the end.





Project Team

- Town of Paradise
 - Marc Mattox, Public Works Director/Town Engineer
 - Colin Nelson, Capital Projects Manager – Paradise Sewer Project
 - Guy Voss, HDR, Town of Paradise Owner's Agent
 - Allison McReynolds, HDR, Town of Paradise Deputy Owner's Agent
 - Randy Buckman, PDB MCI Design-Build Project Manager
 - Beverly Hahn, PDB Carollo Design Deputy Project Manager
 - Darren Baune, PDB Carollo Design Engineer
- Central Valley Regional Water Quality Control Board
 - Clint Snyder, Assistant Executive Officer



TOWN OF PARADISE
SEWER PROJECT



Part 1: Background



Background





Expanded Background



HISTORY

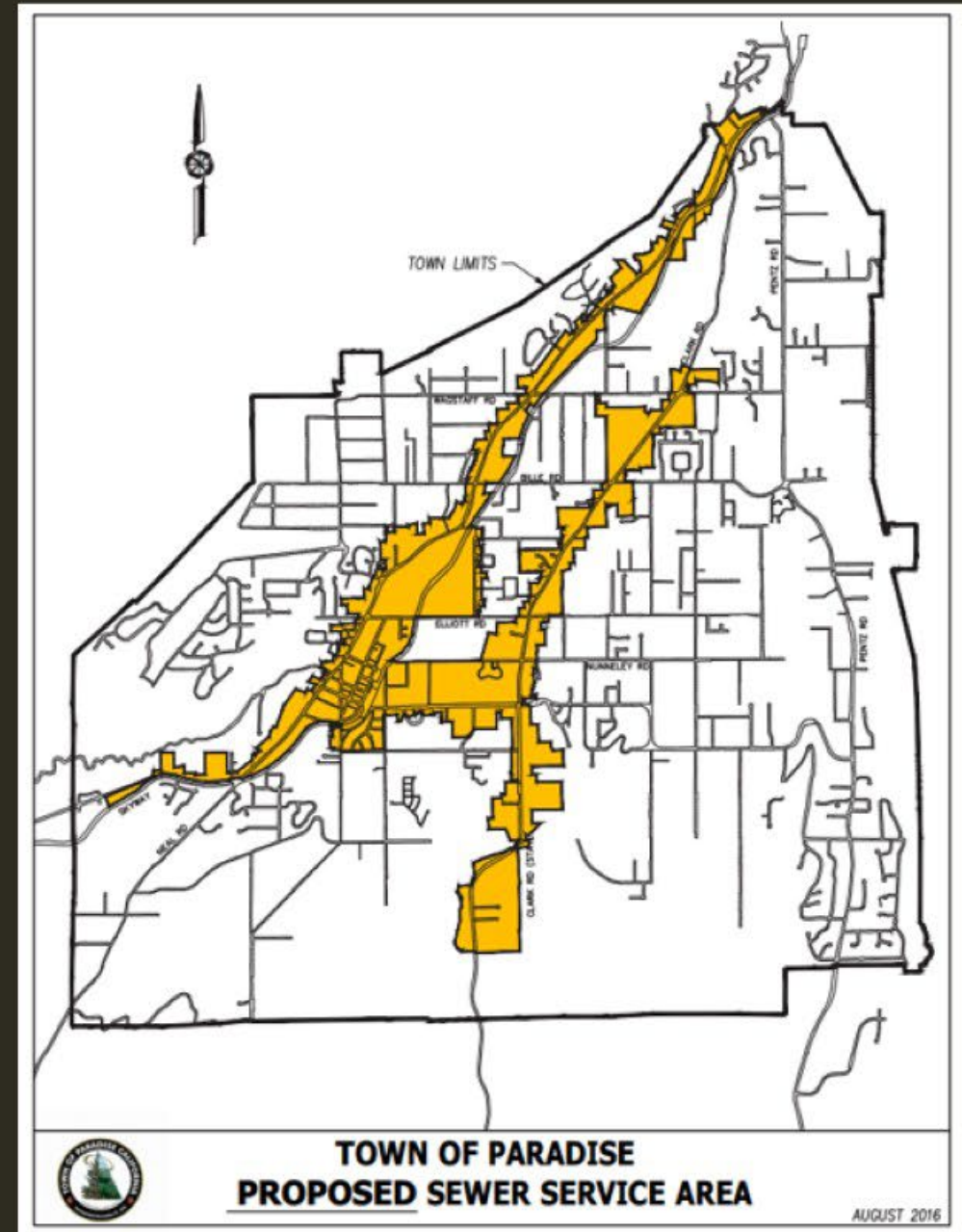
- 1969 Butte County General Plan Water and Sewer Element
- 1972 Basin Sewer Service Area Plan
- 1975 Montgomery Engineering Report
- 1983 Phase I Wastewater Management Study
- 1984 Phase I Supplemental Study
- 1985 Phase II Wastewater Management Study
- 1989 Feasibility study
- 1990 Wastewater District Formed for Commercial only
- 1993 Council action abandoned sewer project
- 1994 Downtown Master Plan
- 2011 Wastewater Treatment & Collection Feasibility Study
- 2017 Paradise Sewer Project Feasibility Study
- 2020 Paradise Sewer Project HDR Engineering Phase I
- 2022 Paradise Sewer Project Environmental Impact Report



KEY DEFINITIONS

Paradise Sewer Project: Overall effort to provide a long-term solution for the collection, treatment and dispersal of wastewater from parcels identified in the Sewer Service Area (SSA).

Sewer Service Area: With some exceptions, properties encompassed by Clark Road, Skyway and Pearson Road, mapped to the right:



2017 Project Funding Picture

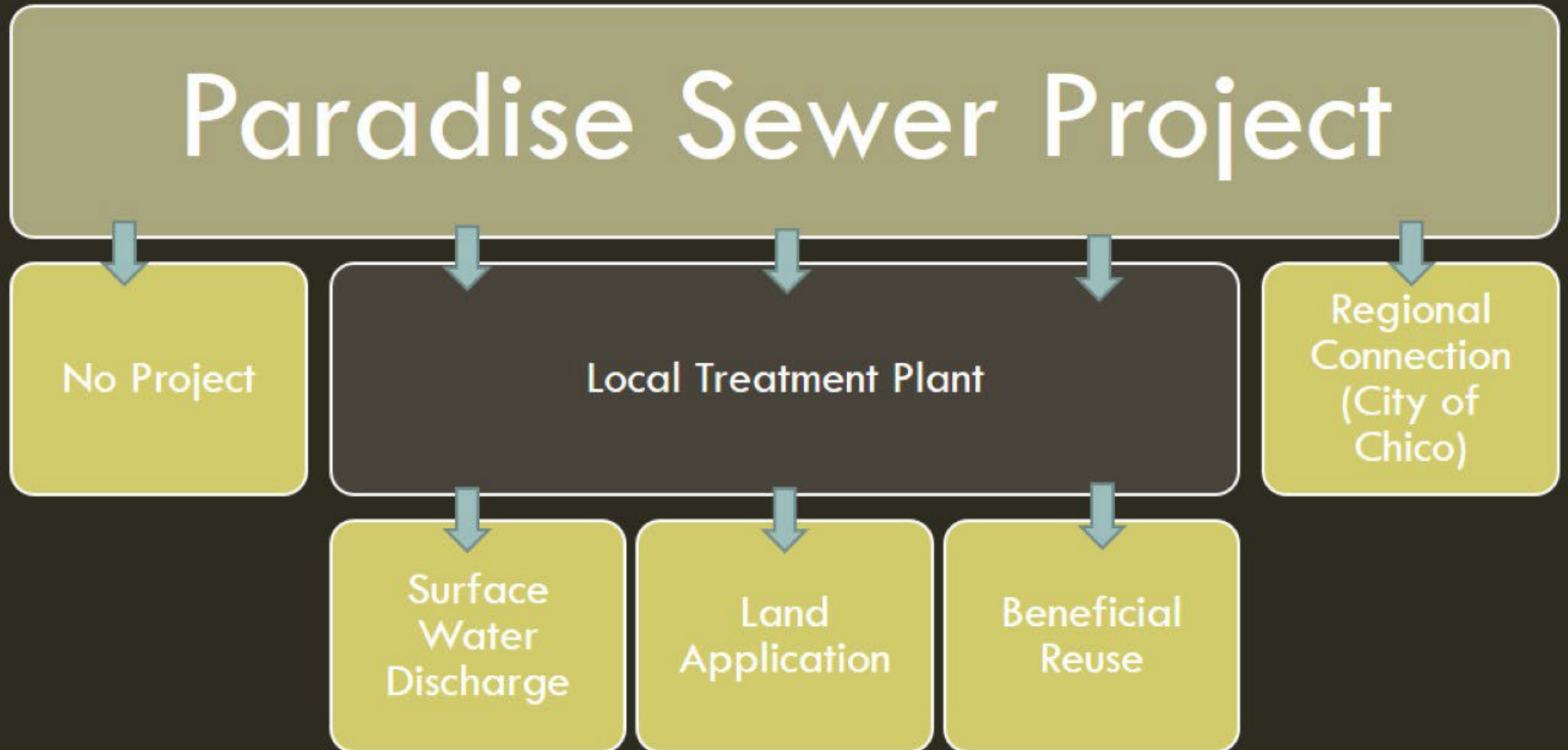
- Recognize that the proposed rates, loans and grants amount to a project that is **financially** too **burdensome** for the community to support an economically driven benefit
- Sought to determine a funding subsidy or grant from State or Federal levels which is **not currently advertised or available** to ensure a project can be advanced
- 2017 Outcome: Pursue both local and regional Sewer Project versions to maximize benefit to the Town at the lowest cost **even knowing we did not have funding source identified or confirmed**

Post-Camp Fire Sewer Project Needs

- **Improve** groundwater quality and environmental conditions
- **Restore** affordable housing to Paradise
- **Remove** a major barrier for commercial recovery

- Review again project benefits with revised Alternative Analysis (Local vs. Regional)

PROJECT OPTIONS



PROJECT COMPONENTS

(1) Collection



(2) Treatment



(3) Dispersal

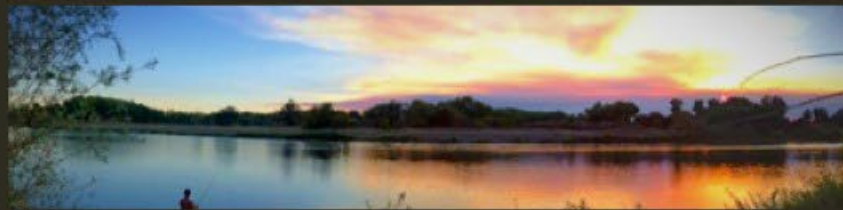


Figure 1: Phase 1 Project Components and Alternatives
Paradise Sewer Project



2020
ALTERNATIVE
ANALYSIS MATRIX

- 1. Economic
- 2. Social
- 3. Environmental
- 4. Implementation
- 5. Operational

LEGEND

0 1 2
Miles


▲ North

Regional Pipeline Alternatives

- Skyway Pipeline
- Neal Rd Pipeline
- Miocene Canal
- Sewer Service Area
- Road


ECONOMIC

- Net present value: The present value (in \$ million) of the capital, O&M, and salvage costs associated with implementing each alternative.
- Capital: The capital costs (in \$ million) associated with implementing each alternative. Does not include collection system cost.

Alternative	Score
Local WWTP	126
Miocene Canal	0
Regional - Chico	131 

SOCIAL

- Construction Impacts to the Community:
Impacts to the community during construction (e.g., traffic, noise, dust)
- Permanent Impacts to the Community:
Permanent impacts to the community from installed facilities (e.g., visual, noise, odor).
Change in public/recreational access.
- Ongoing Monitoring or Mitigation Required:
Likely on-going monitoring and/or mitigation requirements to offset impacts to the community

Alternative	Score
Local WWTP	78
Miocene Canal	94
Regional - Chico	154 


ENVIRONMENTAL

- Construction or Operational Impacts to Sensitive Resources: Construction or operational impacts to specific sensitive environmental resources (e.g., vernal pools, cultural resources), or on overall water quality, air quality, or watershed protection.
- Environmental Permitting Requirements: Ranking based on simplicity of permitting (i.e., shorter time required to obtain the permit), potential to avoid resources (and thus avoid permitting), and the predictability of obtaining a permit (some agencies are more difficult and unpredictable when it comes to issuing a permit).
- Permanent Loss of Agricultural Land: Butte County has an overall goal of maintaining agricultural land, and some alternatives result in permanent loss of the ability to farm the land.

Alternative	Score
Local WWTP	60
Miocene Canal	135
Regional - Chico	165 



IMPLEMENTATION

- Obtaining Non-Environmental Permits or Regulatory Approvals: Difficulty in obtaining non-environmental permits or agency approvals (e.g., an initial NPDES permit, railroad or CalTrans crossing permits, CalWater approval)
- Obtaining Political Approvals: Difficulty in obtaining political approvals or negotiating contracts
- Cooperation of Local Landowners: Willingness of local agricultural landowners to use treated wastewater, or willingness of local landowners to sell their land (i.e., “willing sellers”)

Alternative	Score
Local WWTP	108
Miocene Canal	92
Regional - Chico	158 

OPERATIONAL


- Legal and Regulatory Requirements: Stringent legal and regulatory requirements (e.g., risk of future regulatory violations/fines). Potential for future increases in regulatory requirements (e.g., NPDES discharge permit limits).
- Technical Complexity: Complexity of operation and maintenance. Often relates to the technical complexity of a treatment facility.
- System Flexibility: Increases options for Operations to maintain system service, or for Maintenance to maintain assets. Improves system ability to adapt to changing demand and future expansion. Removes system bottlenecks.

Alternative	Score
Local WWTP	142 
Miocene Canal	60
Regional - Chico	140 

TOTAL WEIGHTED SCORES

Regional Alternative is highest scoring project when weights are divided equally

Regional Alternative remains highest scoring if criteria is weighted differently

Alternative	Score
Local WWTP	514
Miocene Canal	381
Regional - Chico	748 

REGIONAL ALTERNATIVE SUMMARY

- **Economic:** Lowest capital and net present value costs.
- **Social:** Lowest community impacts during and after construction.
- **Environmental:** Least probable environmental impacts.
- **Implementation:** Fewest permits needed. State Water Board, Central Valley Regional Board, and Cal EPA support.
- **Operational:** Least complicated to operate. Benefits from experienced Chico staff.
- **Approved by Town Council December 2020**

SEWER REGIONALIZATION PROJECT ADVISORY COMMITTEE

ADVISORY COMMITTEE MEMBERS

The Advisory Committee consists of the Mayors and Vice Mayors from Chico and Paradise.

Town Of Paradise Representatives



Mayor
Steve Crowder

[LEARN MORE](#)



Council Member
Rose Tryon

[LEARN MORE](#)

City Of Chico Representatives



Mayor
Andrew Coolidge

[LEARN MORE](#)



Vice Mayor
Kasey Reynolds

[LEARN MORE](#)

The role of the Advisory Committee is to develop principles of agreement for the City to provide the Town with wastewater treatment services. The Advisory Committee will also monitor overall progress of the project including the EIR process and associated public comment periods as well as provide updates and recommendations back to the two Councils.



SRPAC Accomplishments

- Supported Public Outreach as a compliment to the Environmental Impact Report
- Approved the Principles of Agreement
- Identified Connection Payment to the City of Chico
- Approved the Inter-Municipal Agreement
- **Tasked staff to continue direct coordination to identify steps in implementation and if future meetings were needed, the Committee would convene**





Progressive Design-Build Process

Town of Paradise chose to utilize Progressive Design Build to achieve cost and schedule certainty as soon as possible.

April 2024



Council Action:
Initial Contract Execution



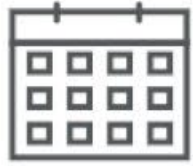
Council Action:
Guaranteed Maximum Price Contract Amendment



Final Contract Closeout



TODAY

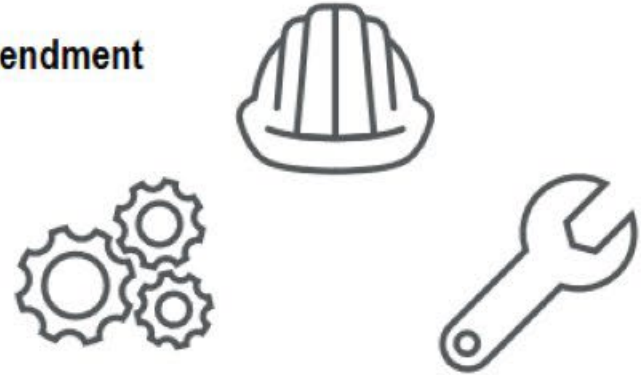


Phase 1a
Basis of Design



Phase 1b, c...
30-90% Design

Phase 1:
Pre-Construction Phase



Complete Design, Procure, Construct, & Commission

Phase 2:
Procurement & Construction Phase



TOWN OF PARADISE
SEWER PROJECT



Part 2: Basis of Design

Prepared for
Town of Paradise

Paradise Sewer Project

**Special Town
Council Meeting**

January 21, 2025



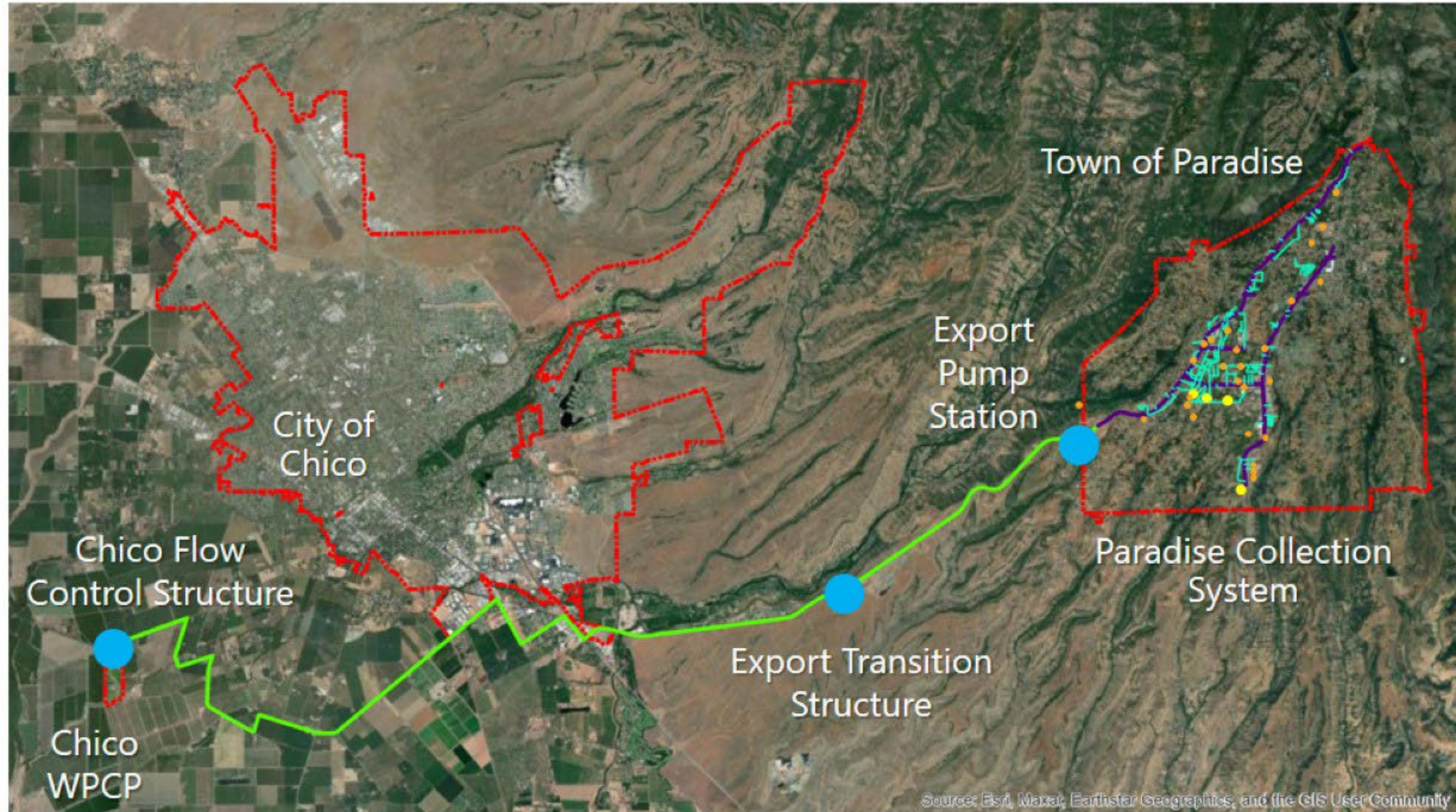
Agenda

- Project Overview and Objectives
- Basis of Design Phase
- Collection System
- Hydraulic Modeling
- Export Pipeline
- Field Investigations
- Operations and Maintenance

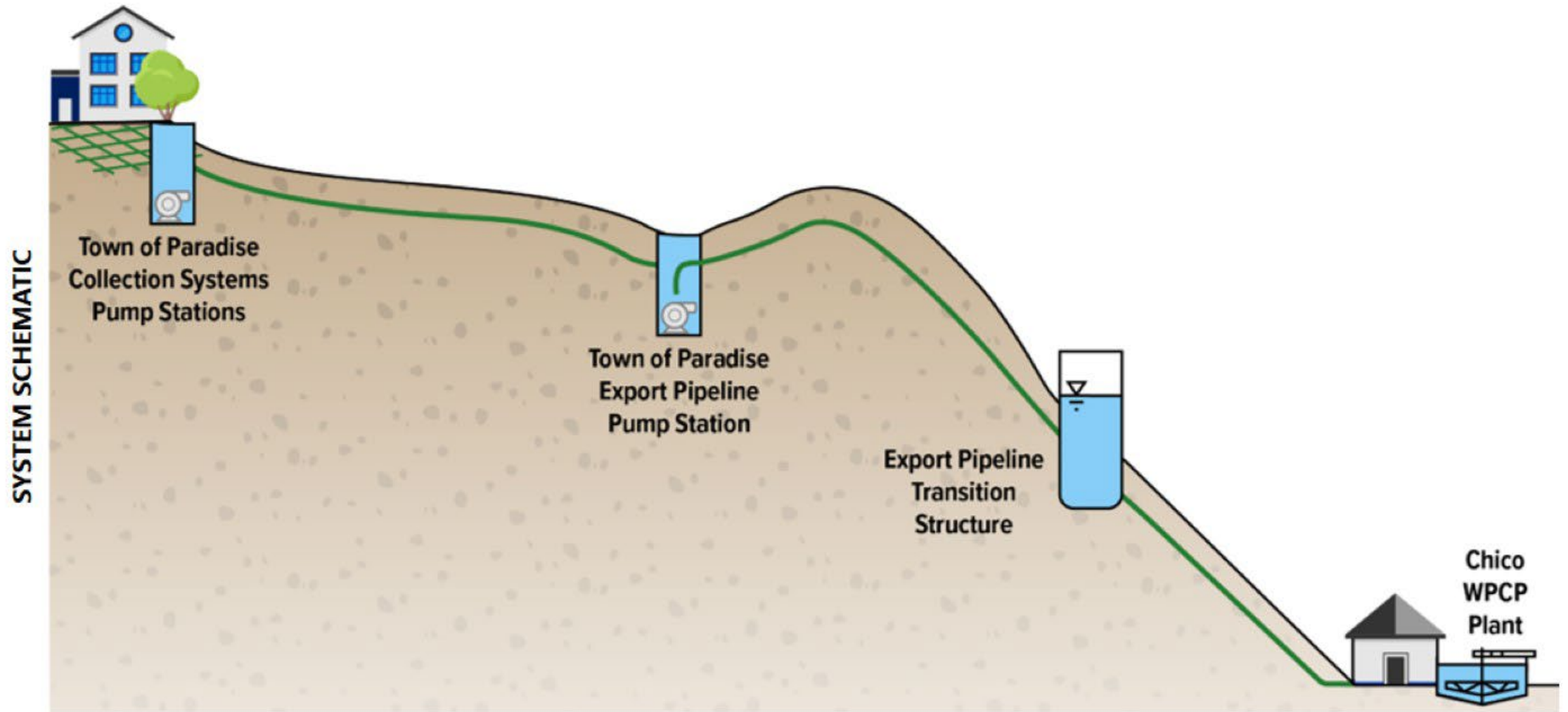


Project Overview and Objectives

Project Overview



Project Overview



Project Objectives



Provide long-term, efficient, reliable disposal of wastewater in a cost-effective, environmentally beneficial manner acceptable to the Regional Water Quality Control Board (RWQCB) and other regulatory agencies



Generate economic recovery by eliminating septic-related capacity limitations, as well as the general burden of on-site wastewater management for businesses



Provide for the ability to construct and maintain affordable housing, specifically multi-family housing



Basis of Design Phase

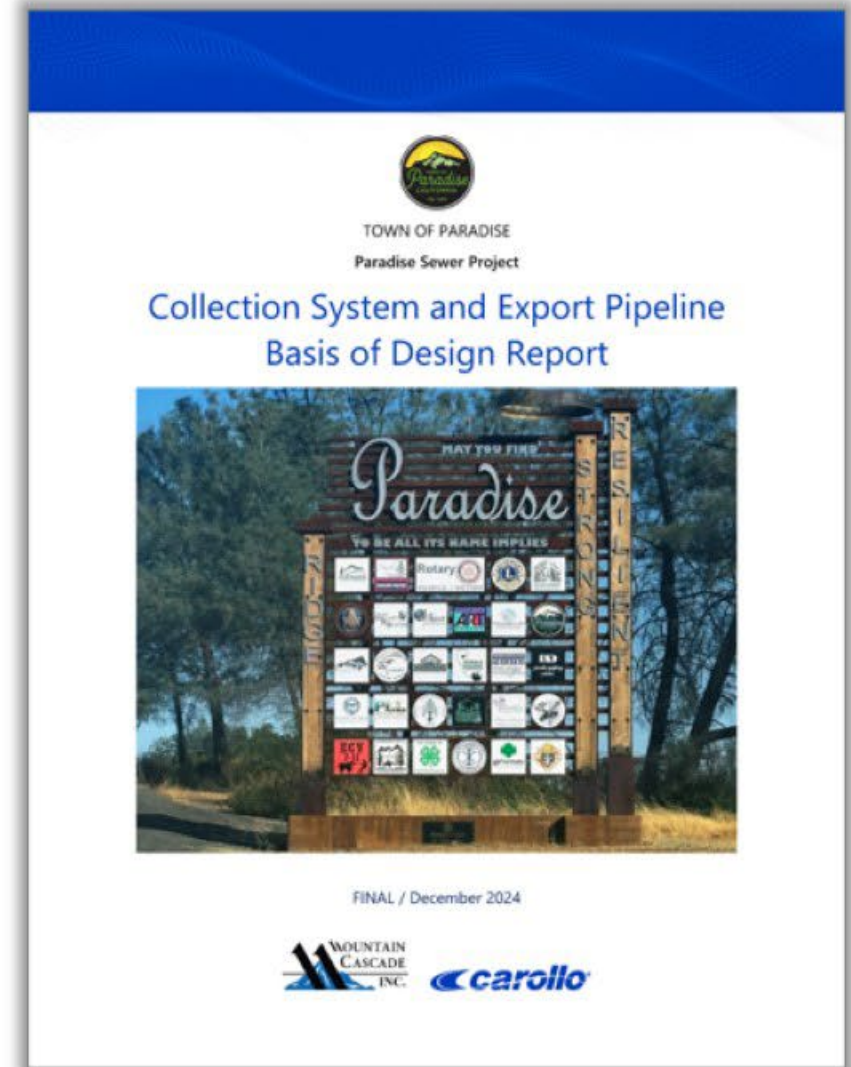


Purpose of Basis of Design Phase

- Summarize the technical evaluations performed during preliminary design to define the Project
- Summarize decisions made by the Town during key technical workshops presented by the Design-Builder
- Develop the conceptual design and cost
- Identify next steps and key investigations to advance the design to 30 percent

Basis of Design Phase Highlights

- Started March and completed December 2024
- Two parallel teams with targeted expertise
- 12 technical workshops with Town
- Key field investigations
- Advanced hydraulic modeling
- Development of key design criteria
- Utility and agency coordination
- Updated construction schedule and cost estimate



Basis of Design Report Table of Contents

- Introduction
- Reference Document Review
- Phase 1A Field Investigations
- Existing Utilities, Public Works Facilities, and Upcoming Projects
- Hydraulic Model
- Design Criteria and Standards
- Sewer Collection System
- Export Pipeline
- Strategies for Lateral connections
- Supervisory Control and Data Acquisition and Instrumentation Design
- Environmental Design Considerations
- Property Acquisition and Right-Of-Way Needs
- System Operations and Maintenance
- Recommended Project

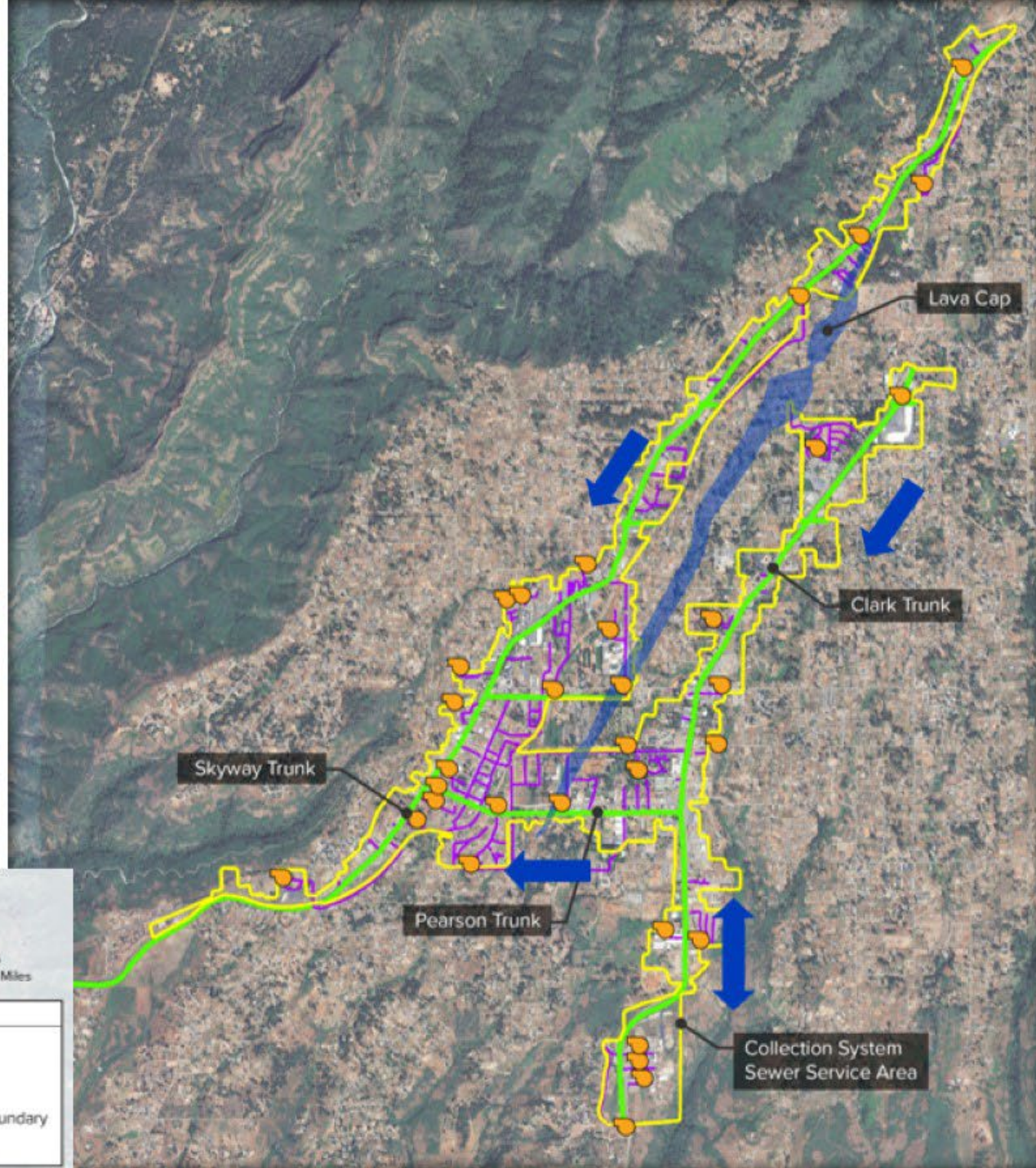


Collection System



Collection System Overview

- Sewer laterals and collector pipes convey sewage to trunk sewers
- Trunk sewers convey flow to the export pipeline in Skyway
- Small pump stations and large pump stations lift sewage over hills
- Private roads and easements present a challenge



System Collects Flow from Sewer Service Area (SSA) and Conveys to Export Pipeline

Majority of system is 8-inch diameter with 12-inch trunk lines in Pearson and Skyway

Legend

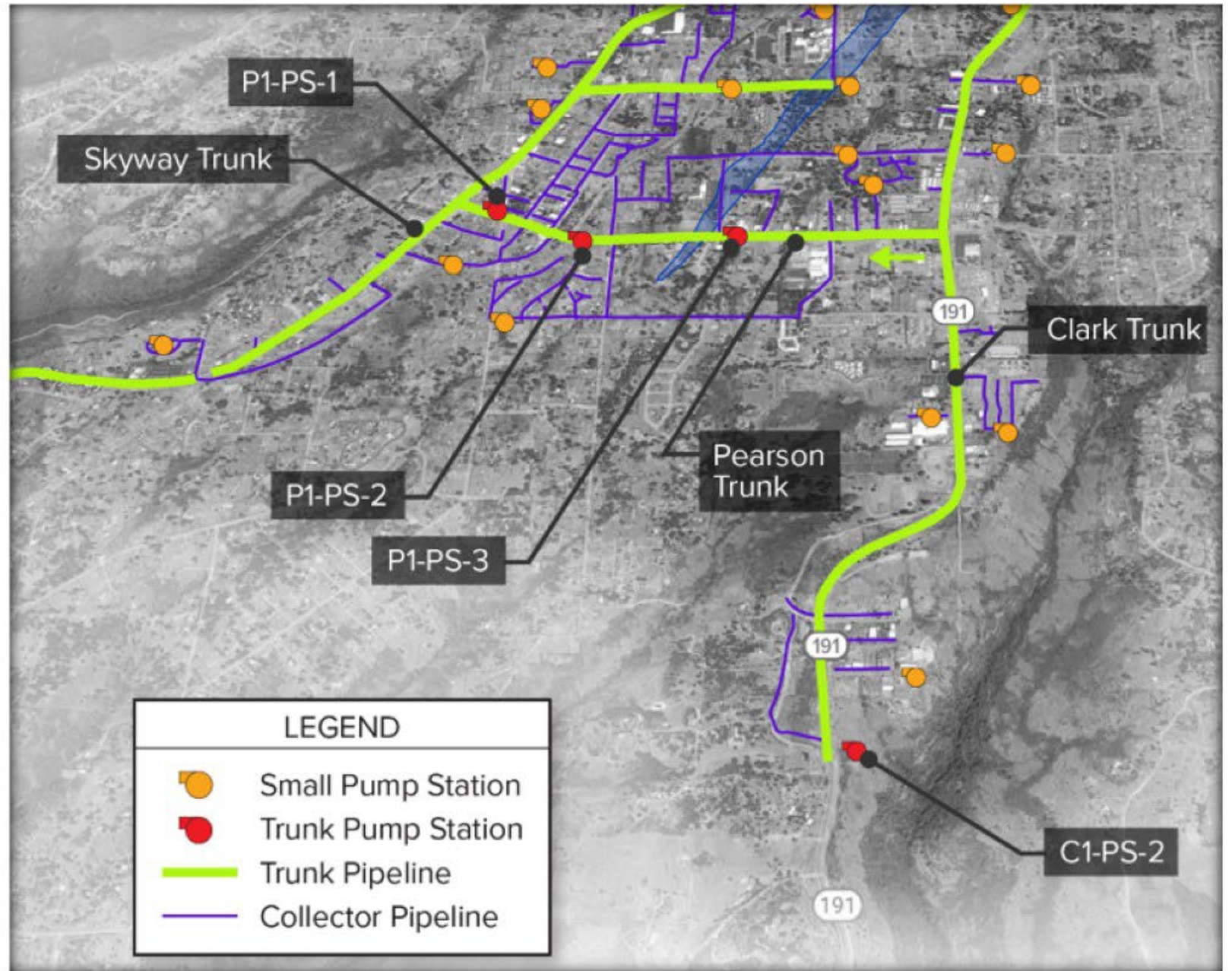
Initial Gravity Main by Diameter

- 8"
- 10"
- 12"
- 15"
- SSA
- Roadways

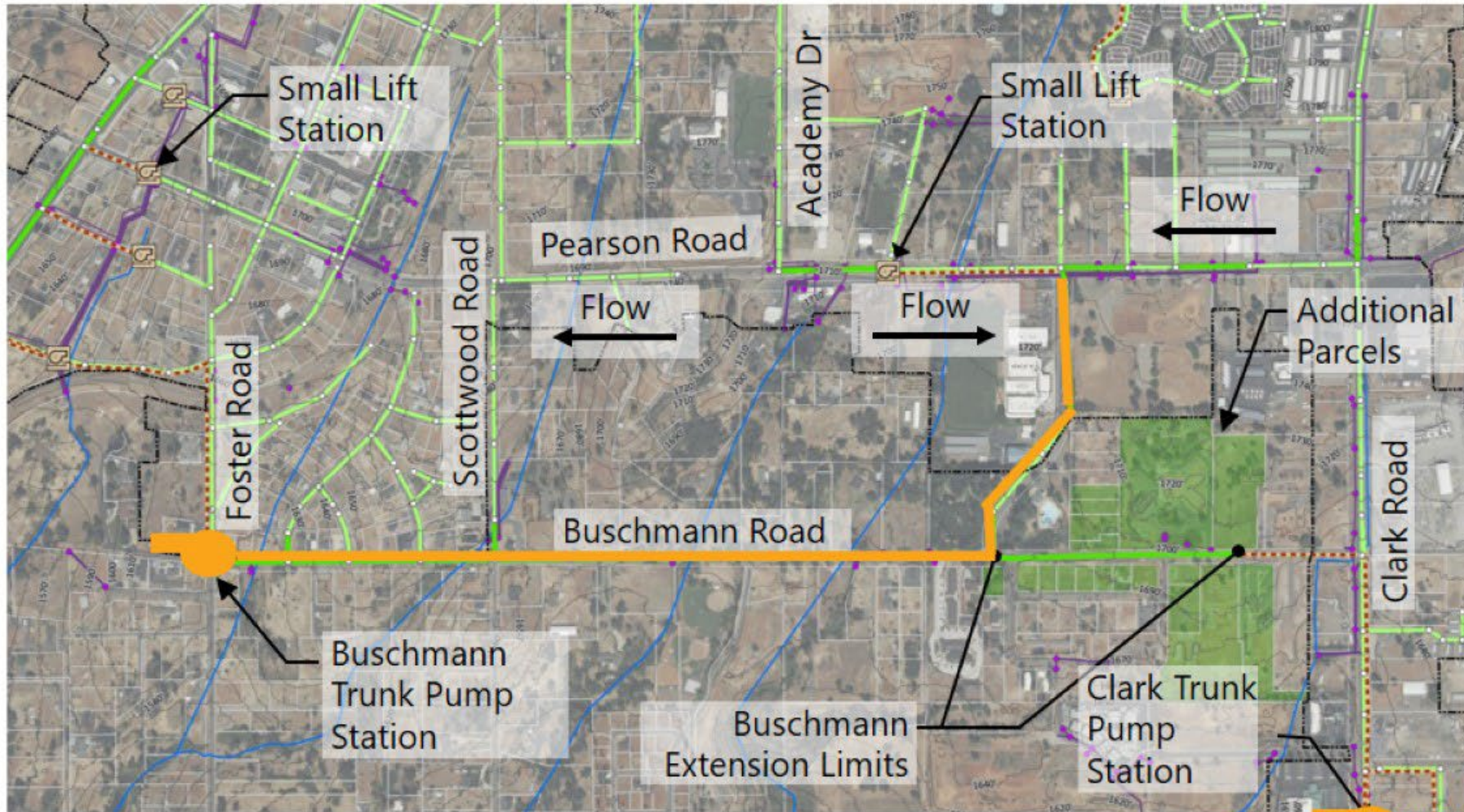
Export Pipeline



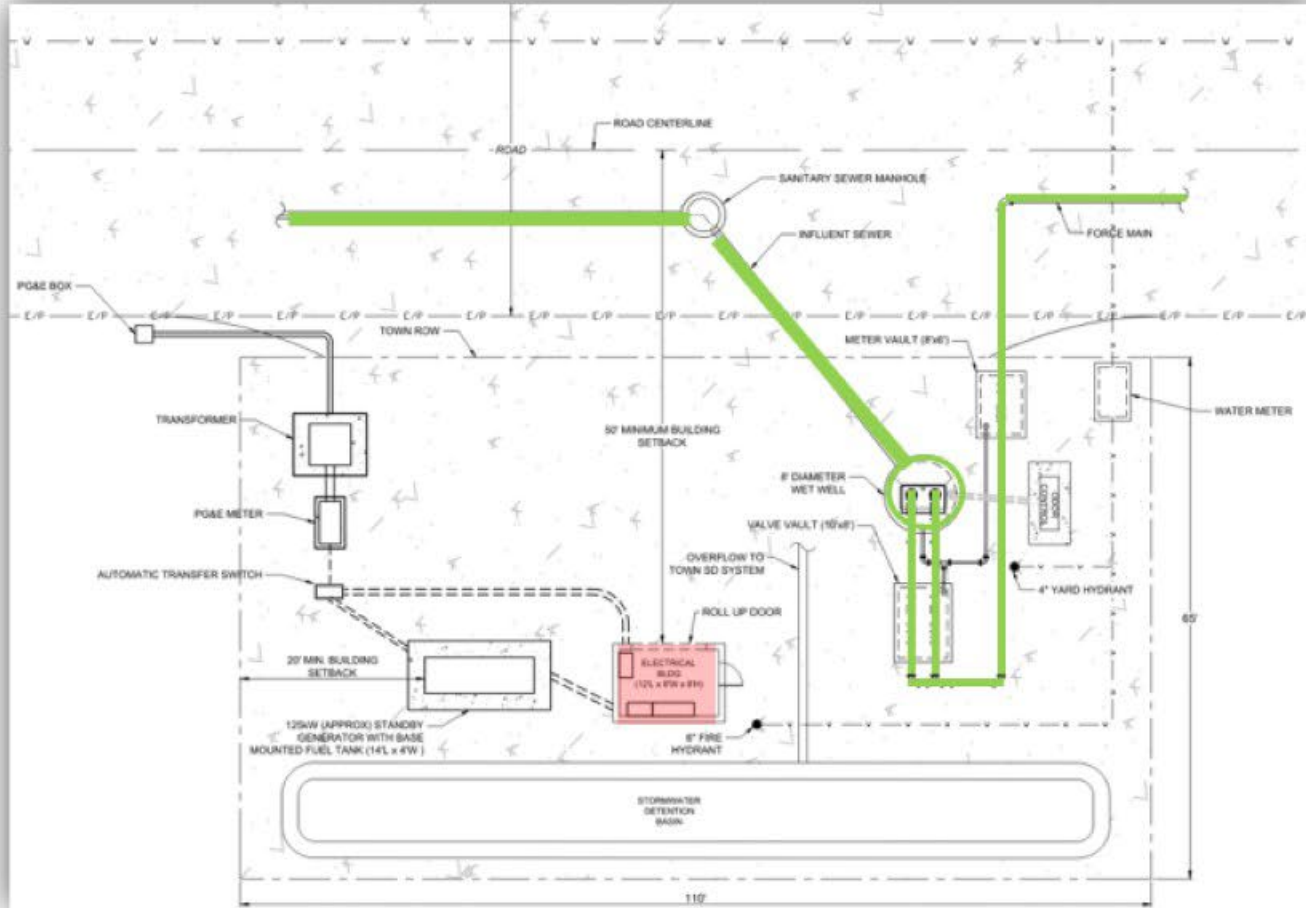
—
The Base
Alternative
Included Four
Trunk Line
Pump Stations



Pearson-Buschmann Alternative Eliminates Two Trunk Line Pump Stations



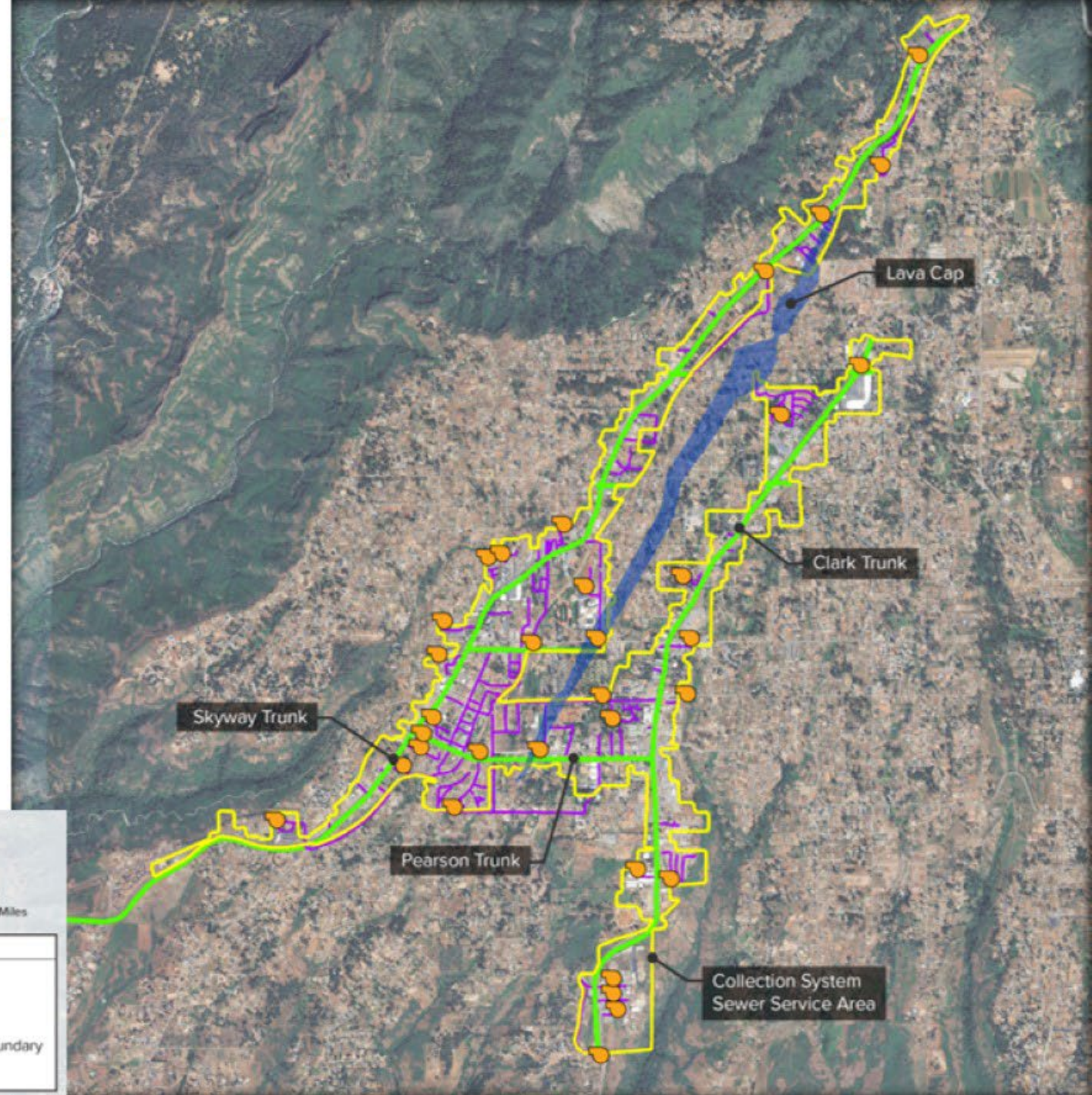
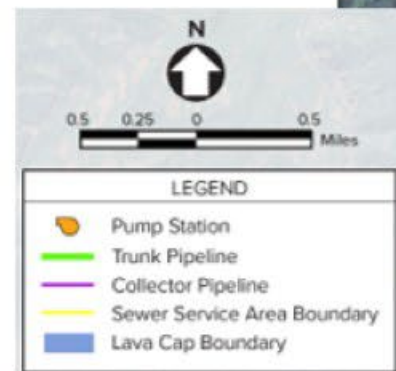
Trunk Line Pump Stations Convey System Flows



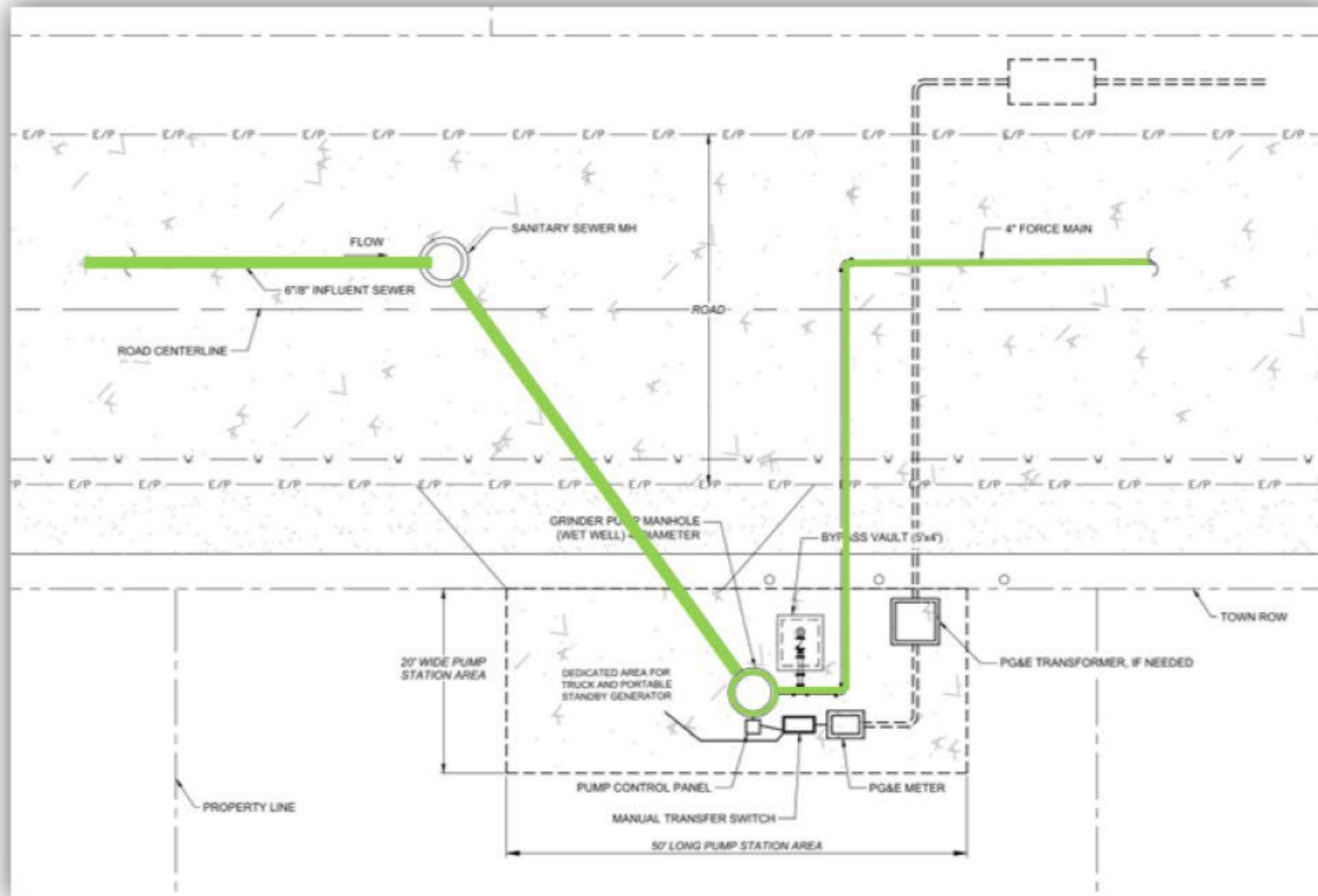
Trunk Line Pump Station Site Plan

Recommended Alternative Includes 29 Small Pump Stations

- Small pump stations lift wastewater to trunk lines
- Needed for low elevation neighborhoods



Small Pump Stations Lift Sewage to Trunk Pipelines



Small Pump Station Site Plan

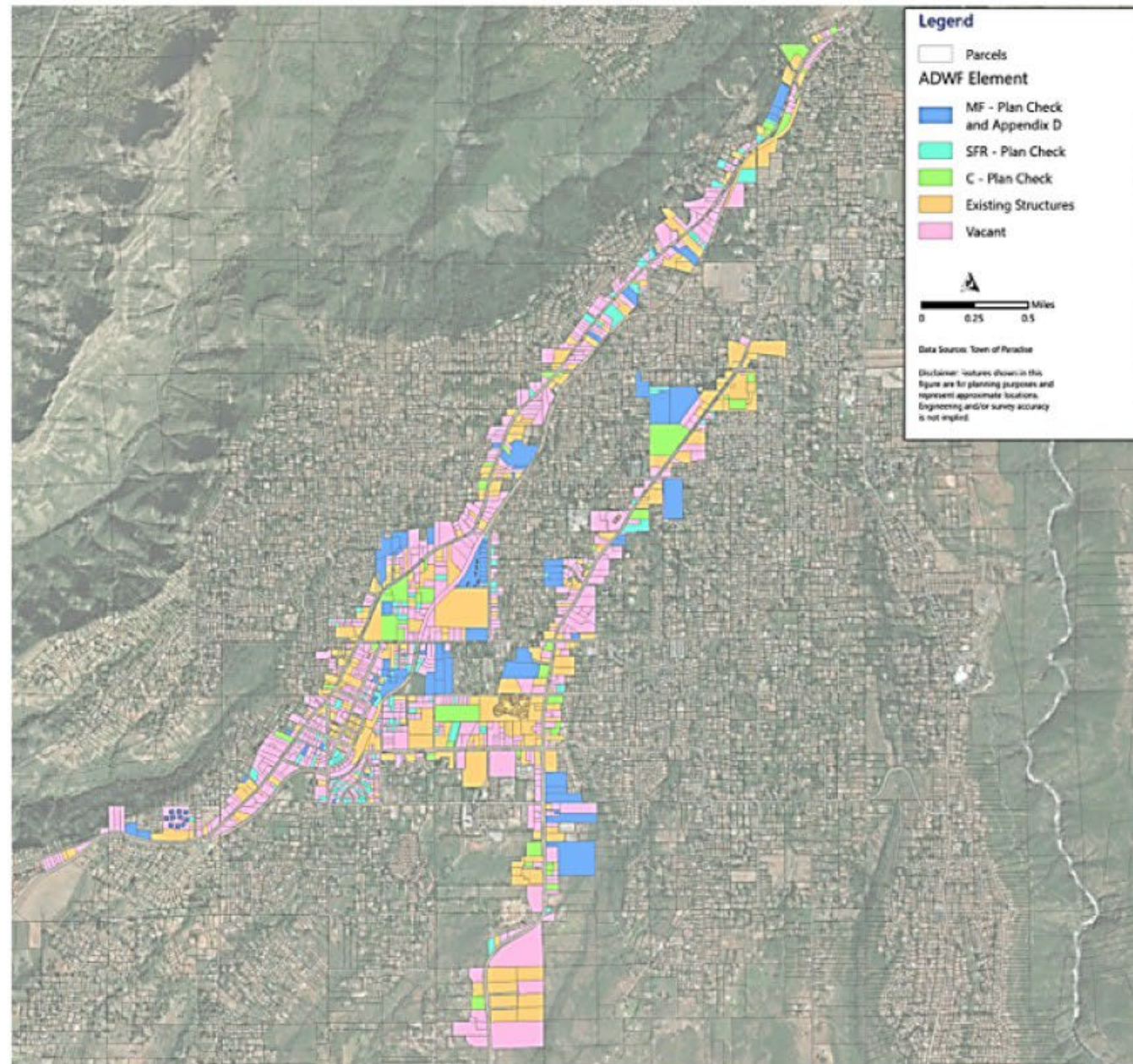




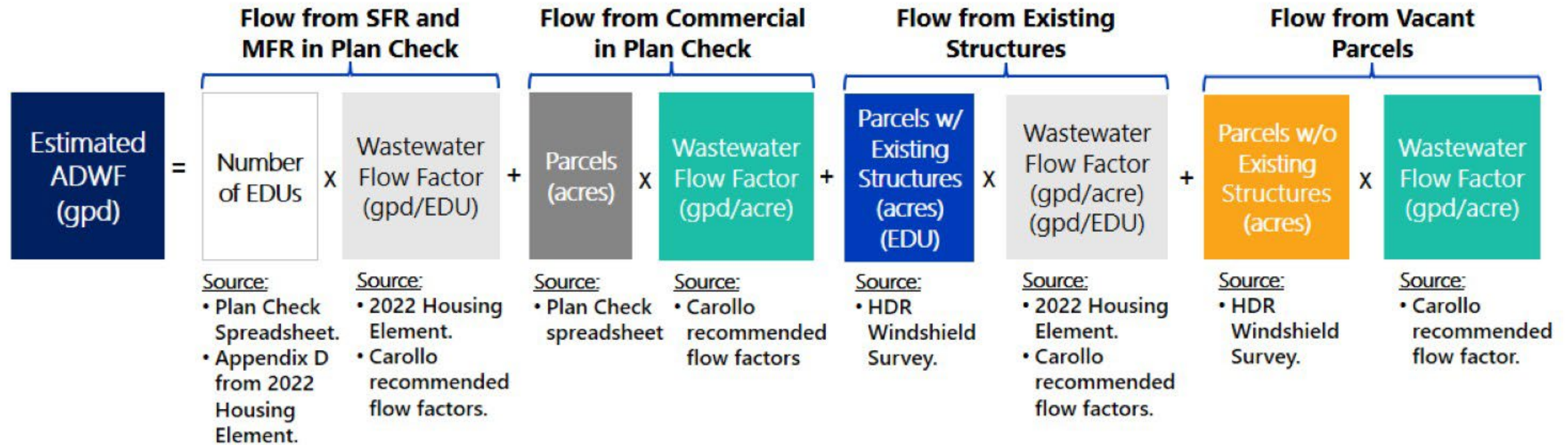
Hydraulic Modeling



Modeling Based on Land Use Elements Within the SSA



Process of Estimating Average Dry Weather Flows for Design

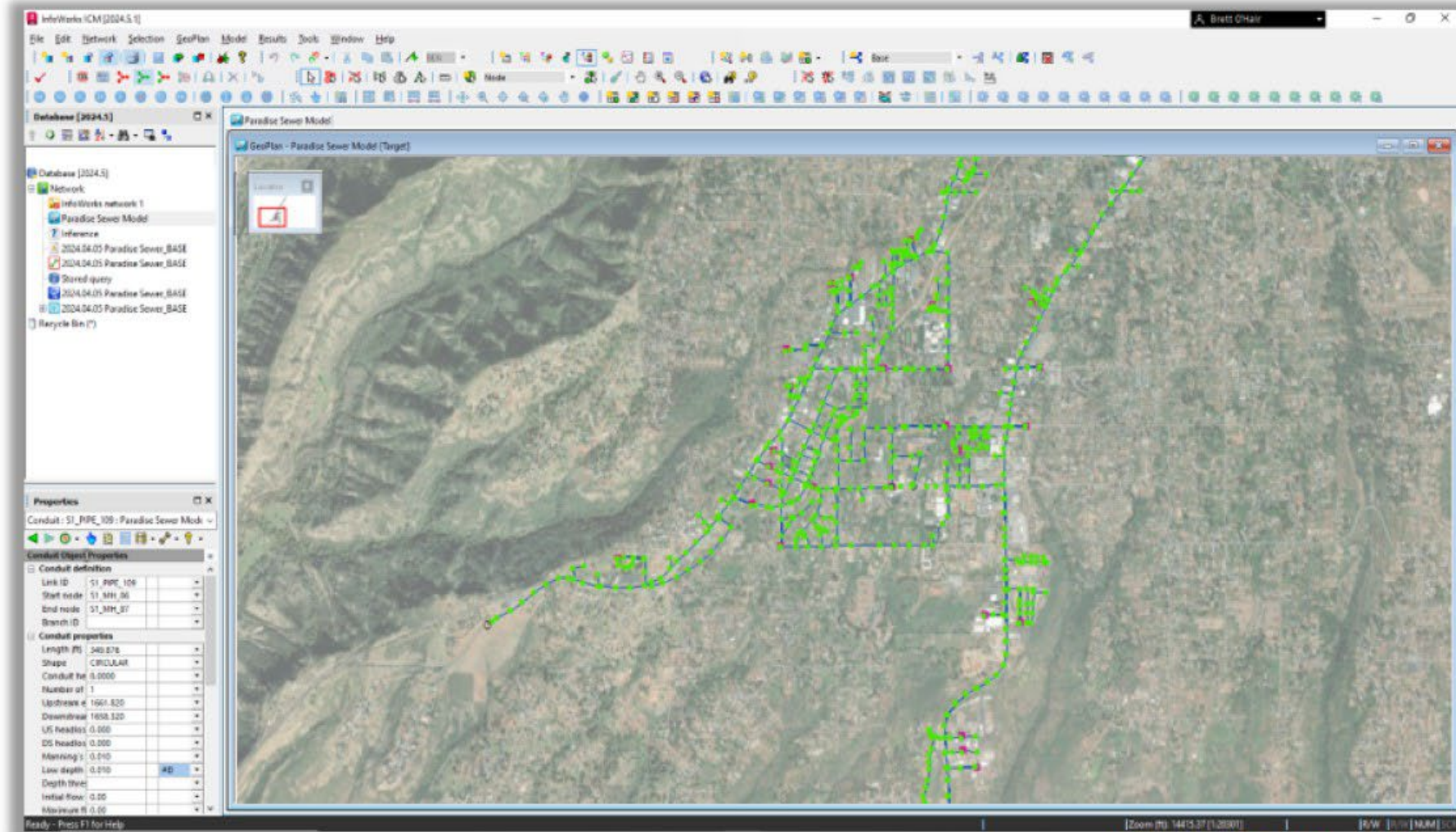


Abbreviations:

ADWF: average dry weather flow
 gpd: gallons per day
 SFR: single family residential
 MFR: multi-family residential
 EDU: equivalent dwelling unit

Full collection system model created in InfoWorks ICM

- Used PG&E lidar for elevations
- Started from HDR design
 - » SSA parcels
 - » Laterals
 - » Gravity Manholes
 - » Lift stations
- Adjusted model based on updated info and elevations



Estimated Average Dry Weather Flow (ADWF)

Flow Source	ADWF (mgd)
SFR and MFR from Plan Check	0.155
Commercial from Plan Check	0.059
Existing Structures	0.264
Vacant Parcels	0.325
TOTAL	0.803

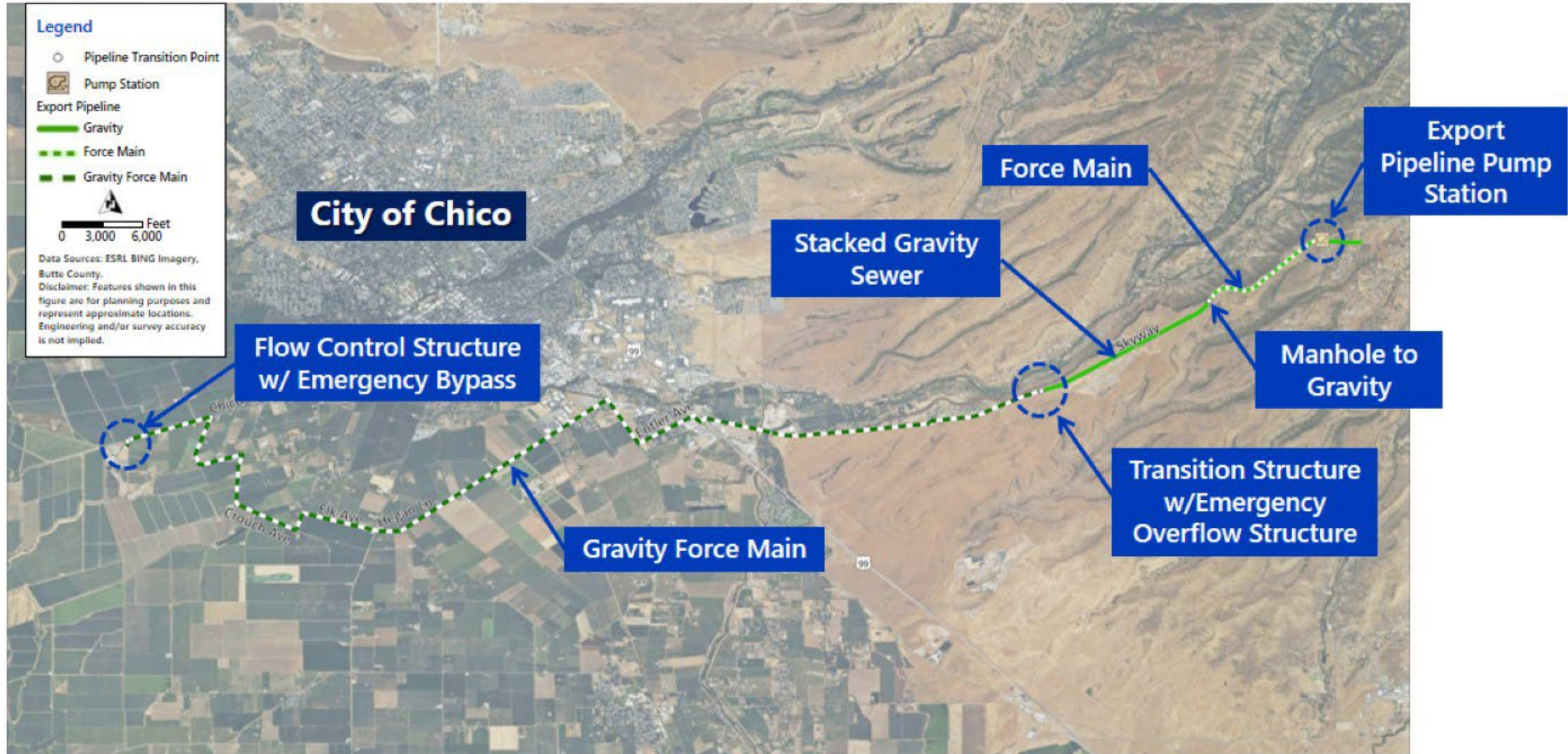
**ADWF estimated
as 0.803 mgd**



Export Pipeline



Export Pipeline Alignment



Export Pipeline Trenchless Crossings

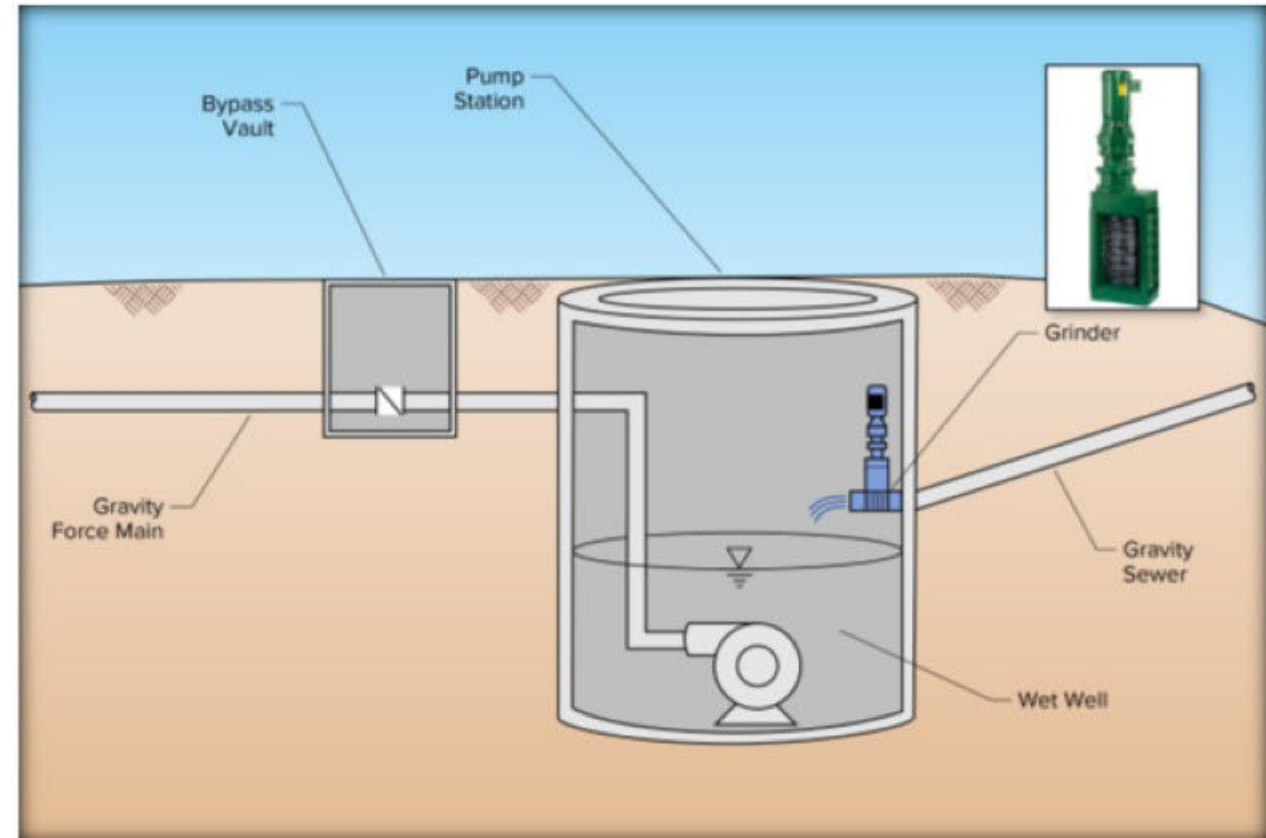


Example Trenchless Crossing at Butte Creek



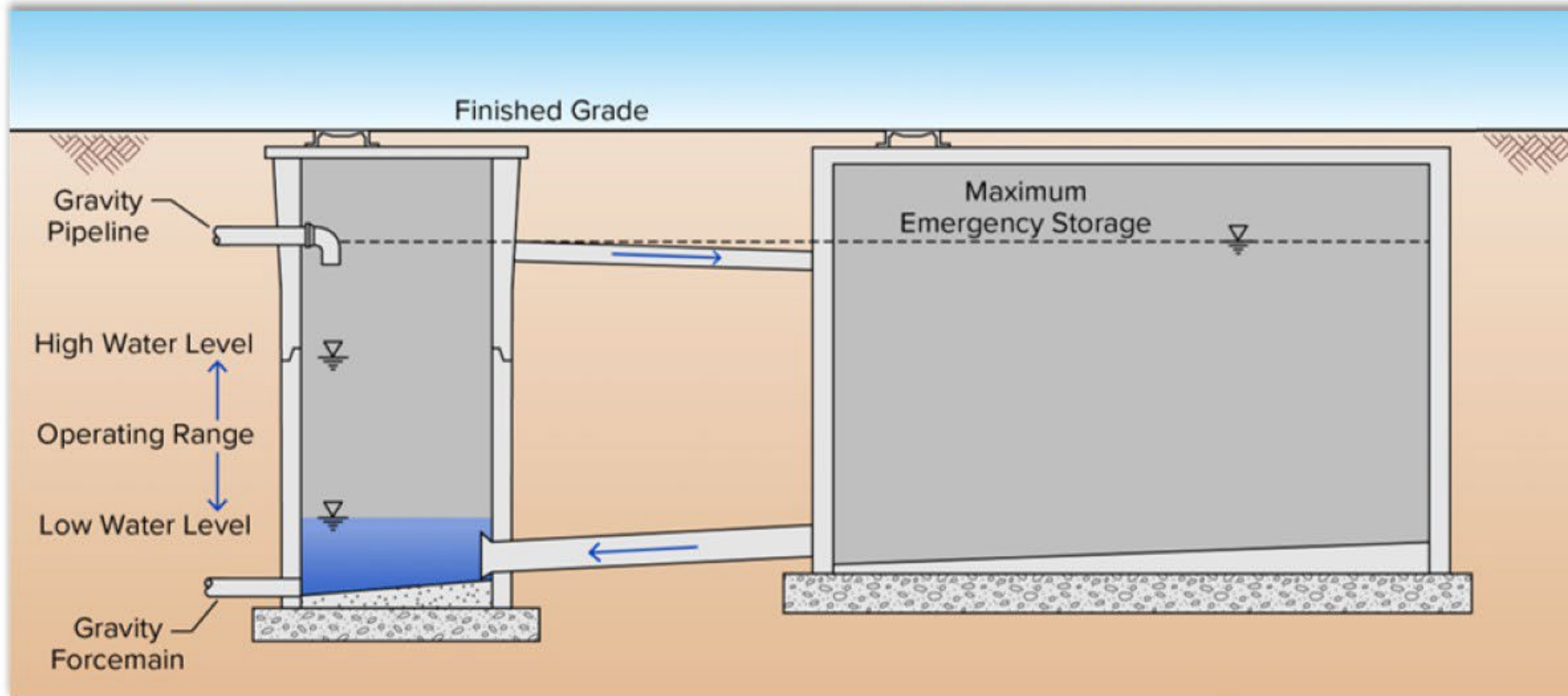
Export Pipeline Pump Station and Grinder

- Export pump station
 - » Property near Town limits identified as preferred location.
- Grinder included to reduce the particle size of wastewater



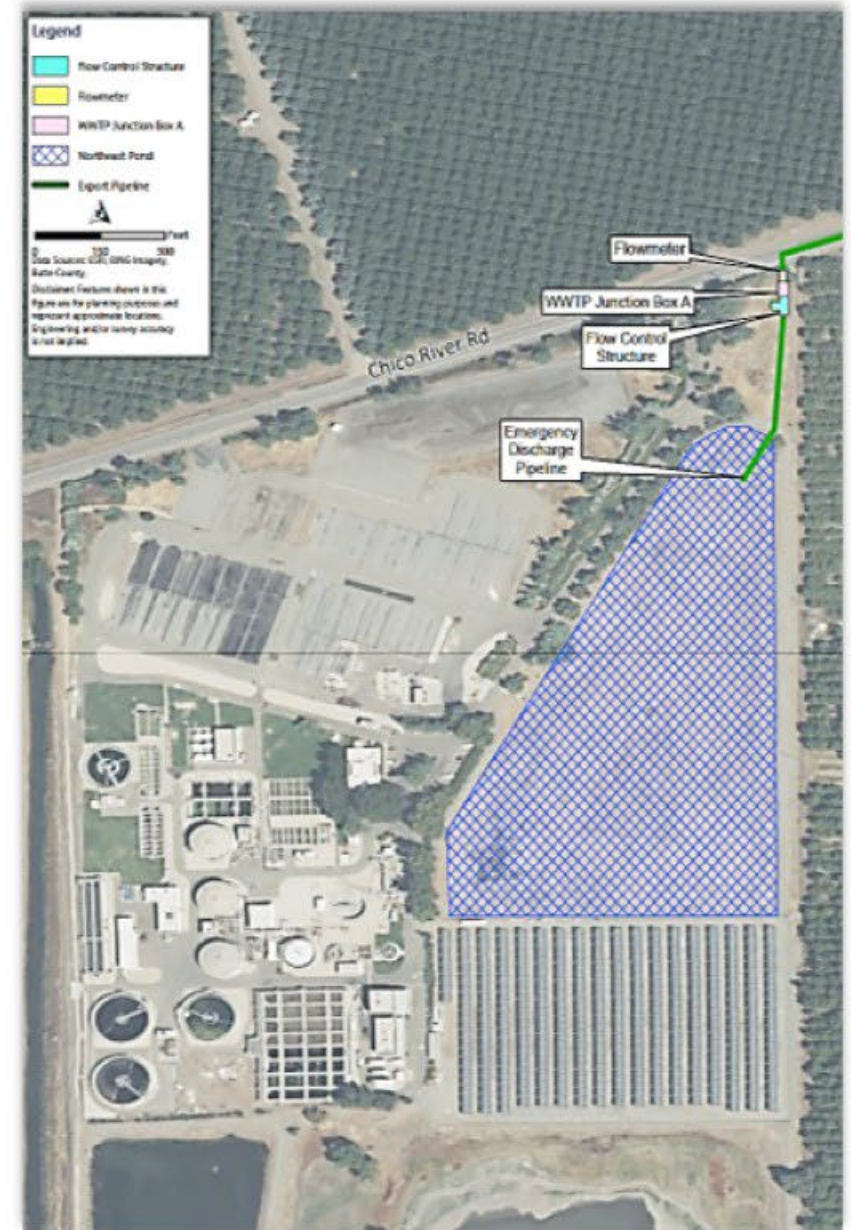
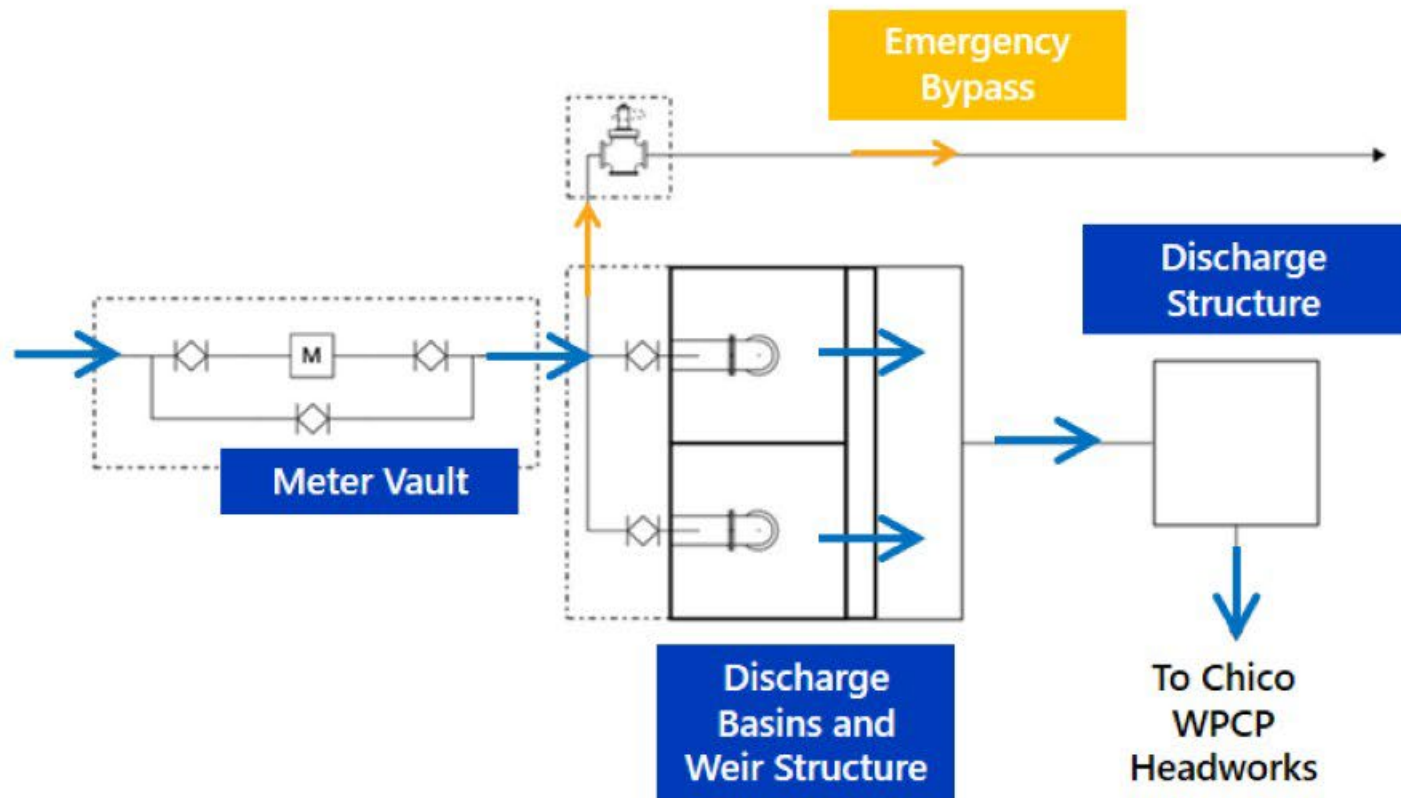
Transition and Emergency Storage Structures

- Critical facility will communicate with Chico WPCP and Town
- Emergency storage reduces risk during blockage



Connection at the Chico Water Pollution Control Plant (WPCP)

- Flow from Paradise enters Chico WPCP through the Flow Control Structure.





Field Investigations

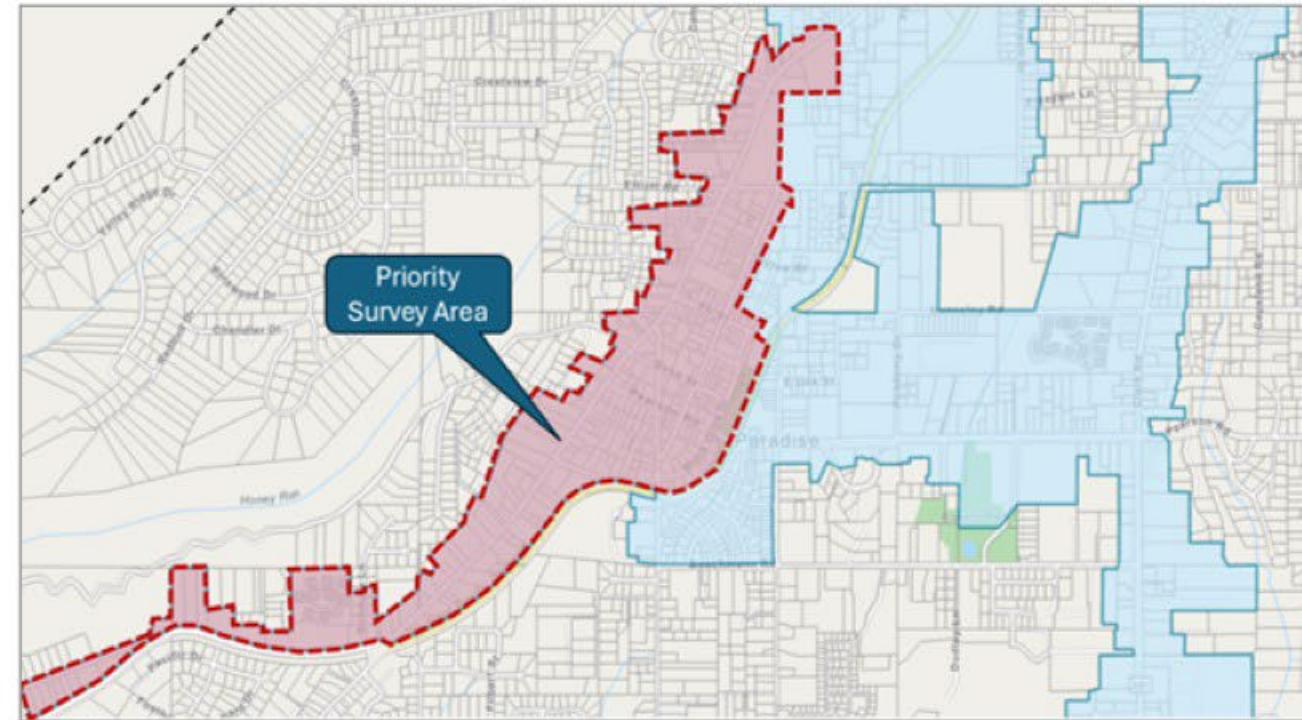
Topographic Survey

- **Phase 1:**

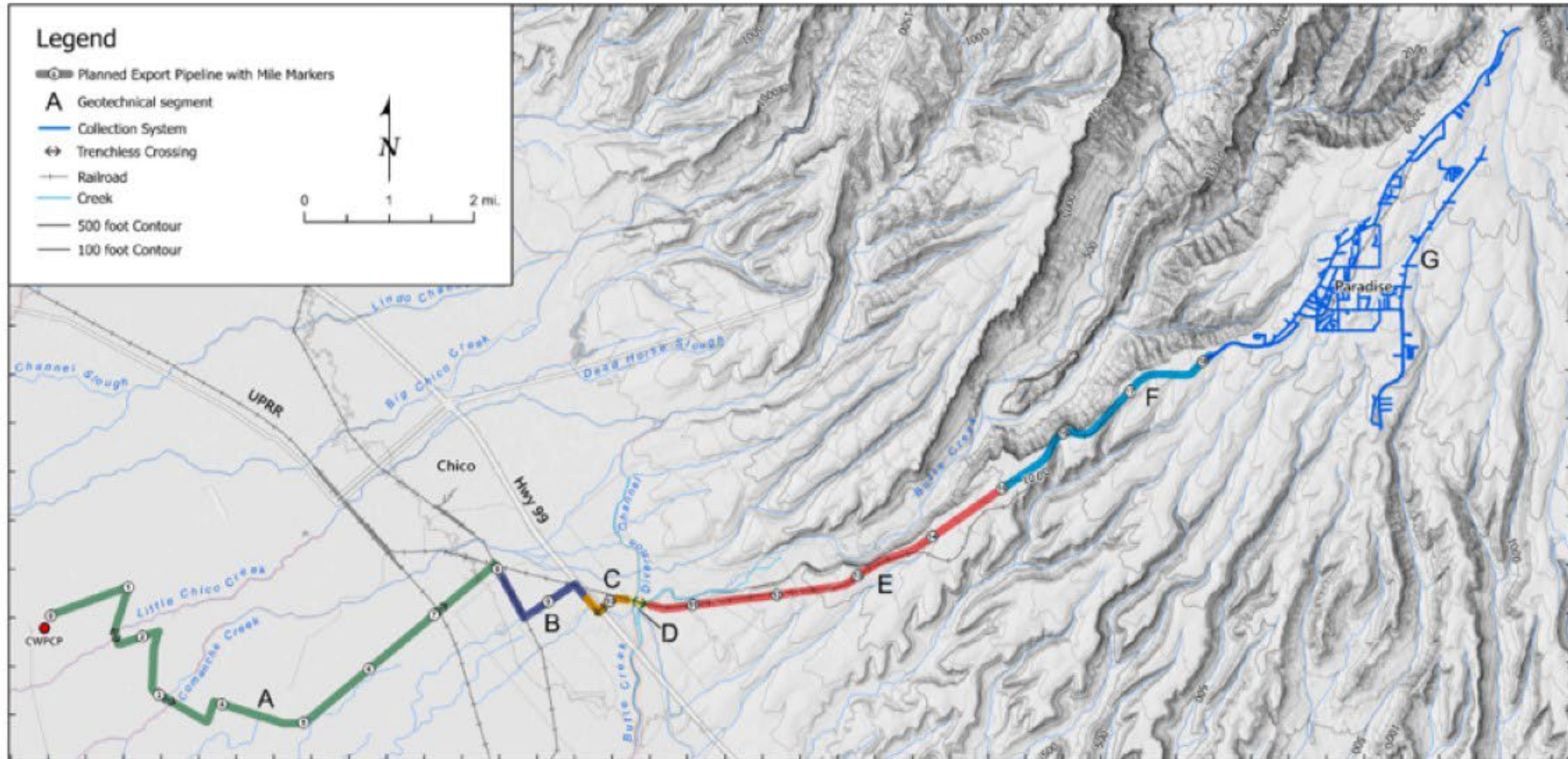
- » Used PG&E LiDAR files for collection system preliminary design
- » Topographic survey of trenchless crossings

- **Phase 2 (on hold):**

- » Topographic survey for export pipeline and Town priority area
- » Determination and resolution of right-of-way needs
- » Identification of septic tank locations and finished floor elevations
- » Lidar and orthographic mapping of export pipeline



Desktop Geotechnical Study of Geologic, Geotechnical, and Environmental Conditions



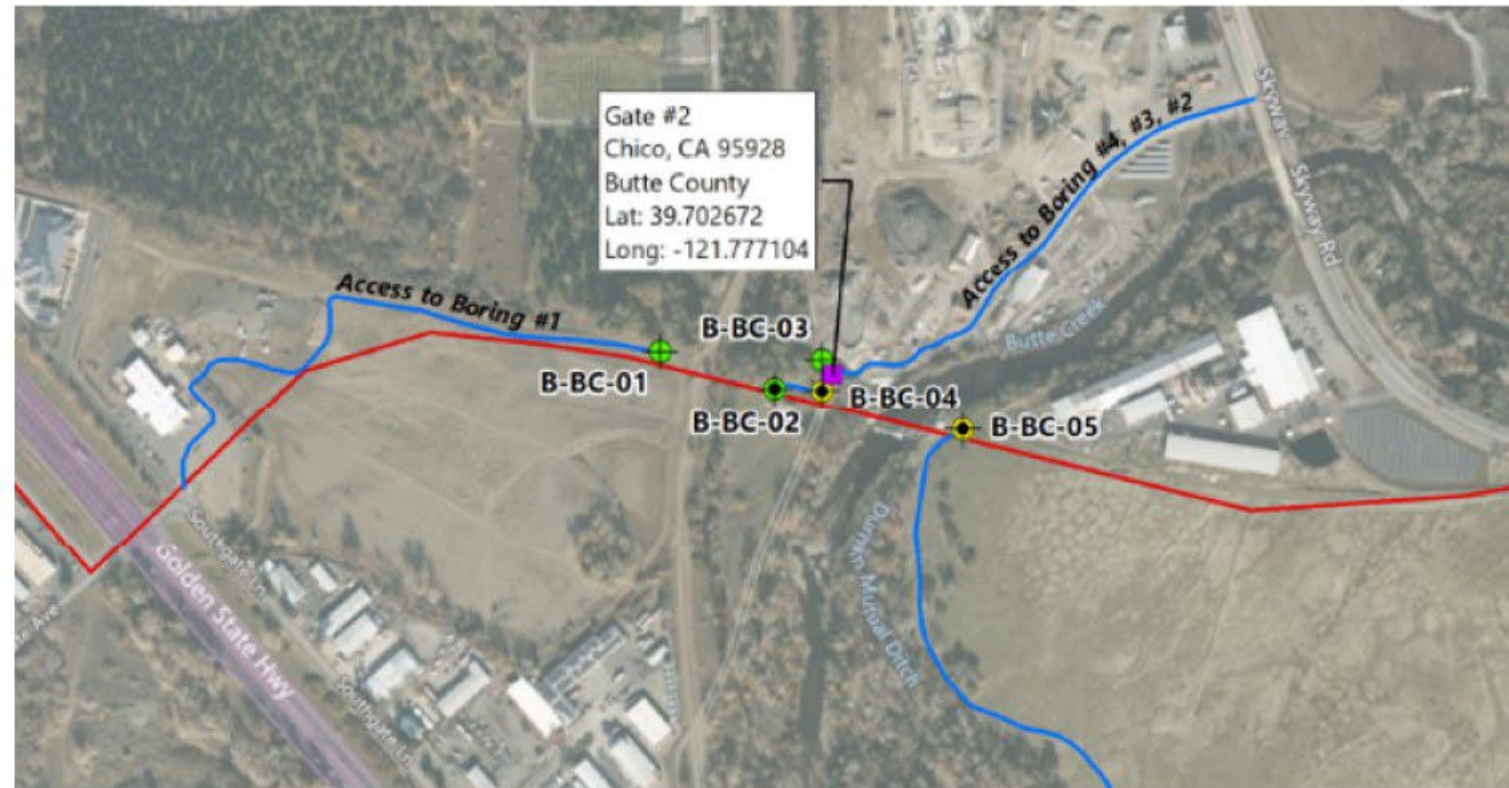
Segment	Geologic Conditions	Potential Geotechnical Concerns
A	Loose to firm fine-grained alluvium with gravel layers below 8 ft.	Trench wall instability, shallow groundwater. Trenchless crossing may encounter gravel
B	Stiff sandy silt and clay alluvium with gravel layers below 8 ft.	Shallow groundwater
C	Loose to dense sand, gravel, and cobbles of historical mine tailings	Caving of loose rocks and over-break. Trenchless crossing through mine tailings
D	Active drainages with loose gravel, sand and silt, shallow bedrock	Trenchless crossing through weathered bedrock and gravelly alluvium
E	Very shallow, hard, weathered volcanic deposits	Difficult excavation, over-excavation
F	Shallow soil over hard, weathered volcanic deposits	Difficult excavation, over-excavation, landslide susceptibility
G	Weathered volcanic deposits: lean sandy clay with gravel, cobbles, and boulders	Over-break due to boulders and cobbles in soil matrix, seasonal shallow groundwater along drainages

Desktop Geotechnical Study Results

- Cobbles and boulders in the subsurface over much of the alignment poses a challenge to trench excavation
- Groundwater within the Town 5 to 15 feet below ground surface
- Hazardous material risks:
 - » Soil and groundwater may be impacted by bacteria due to septic systems
 - » Soil and groundwater may contain heavy metals, petroleum hydrocarbons, volatile organic compounds, organochlorine pesticides, polychlorinated byphenyls, and asbestos.

Geotechnical Borings for Butte Creek and Little Chico Creek Plan

- US Army Corps of Engineers 408 permit required
- Key next step during final design



Development of Next Steps for Geotechnical Investigation

- Approach for in-town work to define depth and hardness of bedrock
 - » Electromagnetic (EM)/ground penetration radar (GPR) to identify thicknesses of overburden soil
 - » Seismic refraction surveys every 3,000 feet along the trunk lines, at each pump station, and spread throughout the Town.
 - » Test pits & limited borings in key locations

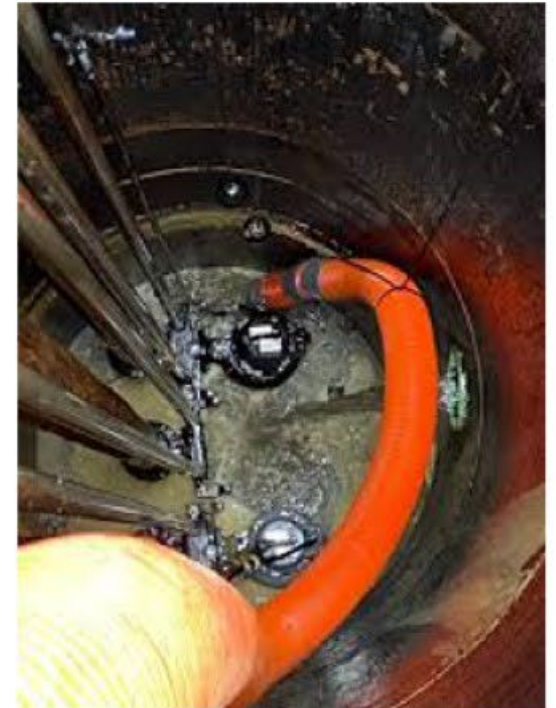




Operations and Maintenance

Facilities That Need O&M

- Pump stations
- Gravity sewers/force mains
- Manholes
- Transition structure
- Influent flow facilities at Chico WPCP



— Evaluated Four Operation and Maintenance Alternatives

Alternative 1

Town Operates
and Maintains

Alternative 2

City of Chico Operates
and Maintains

Alternative 3

3rd Party Operates
and Maintains

Alternative 4

Multi-party Operation
of System

Multi-Party Operation and Maintenance Plan

Role	Responsibility
Sewer System Supervisor	Town
Trunk and Collector Pipeline CCTV and Jetting O&M	3 rd Party Contractor
Trunk Pump Stations, Small Pump Stations, Transition Structure and Emergency Storage O&M	Town
Meter Vault at Chico WPCP	Town



Closing



The Work Completed To-Date Forms a Strong Foundation for Future Work

- Field investigations
- Hydraulic modeling
- Collection system conceptual design
- Operations and maintenance plan
- Network communication studies
- Updated design and construction schedule
- Detailed construction cost estimate

The PDB Team remains committed to the project and is ready to pivot with direction from the Town



TOWN OF PARADISE SEWER PROJECT

1. Consider concurring with staff's recommendation to accept the Basis of Design Report (BODR) prepared and submitted by Carollo Engineers and concur with staff's recommendation to modify project objectives to include a local treatment option, phasing of Sewer Service Areas, and formation of a Council Project Committee.

Action Requested



TOWN OF PARADISE
SEWER PROJECT



Part 3: Project Cost



Collection System

Labor	\$	74,233,343	37.3%
Equipment	\$	36,155,268	18.2%
Materials	\$	51,581,411	25.9%
Subcontract	\$	17,248,185	8.7%
Trucking	\$	19,790,092	9.9%
Total	\$	199,008,299	



693,282 Labor Hours





Export Pipeline

Labor	\$	18,767,174	24.0%
Equipment	\$	11,847,590	15.2%
Materials	\$	30,051,375	38.5%
Subcontract	\$	9,338,986	12.0%
Trucking	\$	8,109,842	10.4%
Total	\$	78,114,967	

172,138 Labor Hours



Opportunities

- \$25 million – Import AB & Off Haul of Spoils
- \$11.8 million - Flaggers
- \$12 million – DIP Forcemain
- \$5.6 million – Contract Cost Tracking & Grant Compliance
- \$4.5 million – 120 ea. Force Main Cleanouts
- \$4.4 million – Fiber in Gravity Collector Trenches

Risks

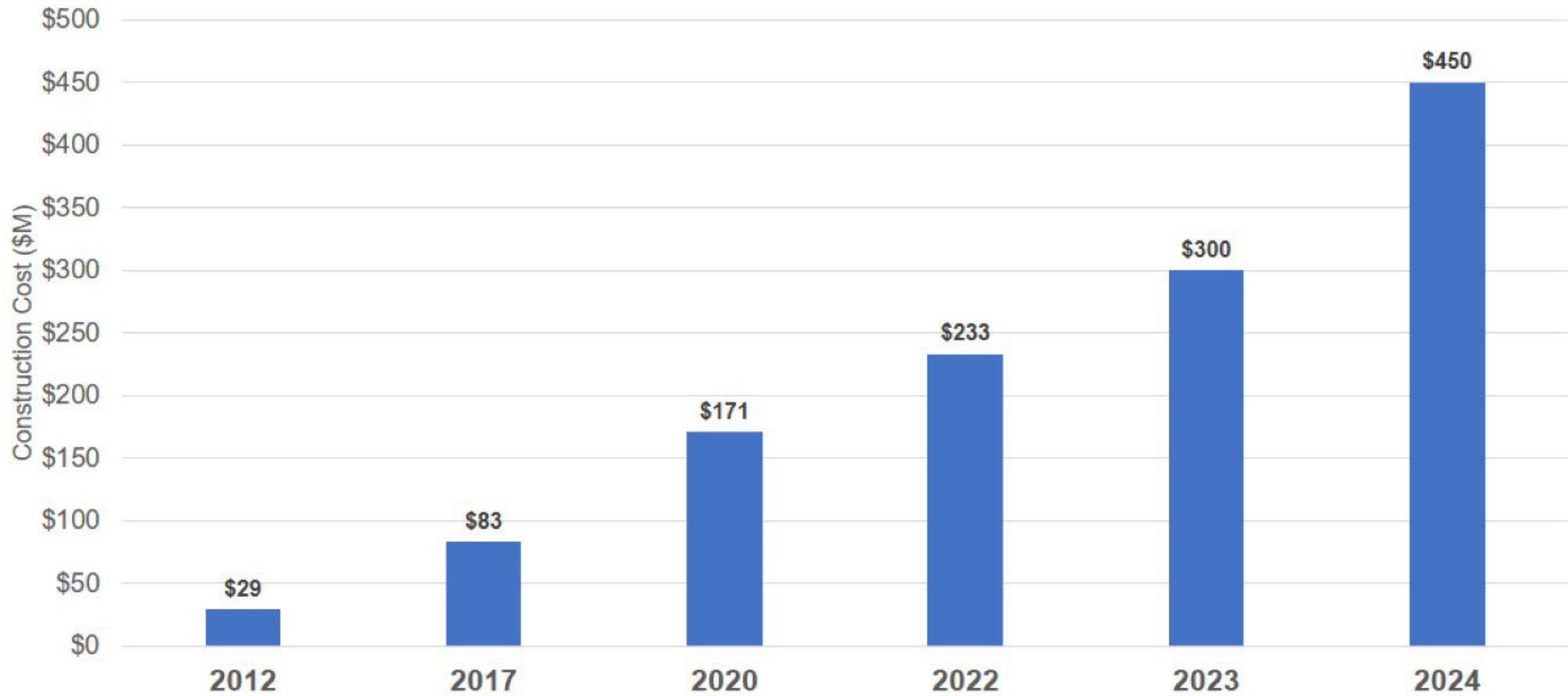
- Tunnel Crossings – All 5 worth approx. \$21 Million
- County Road Reconstruction - \$16.5 Million
- Unmarked/ Unknown Utility locations



Estimated Project Cost to Complete (11/15/2024)

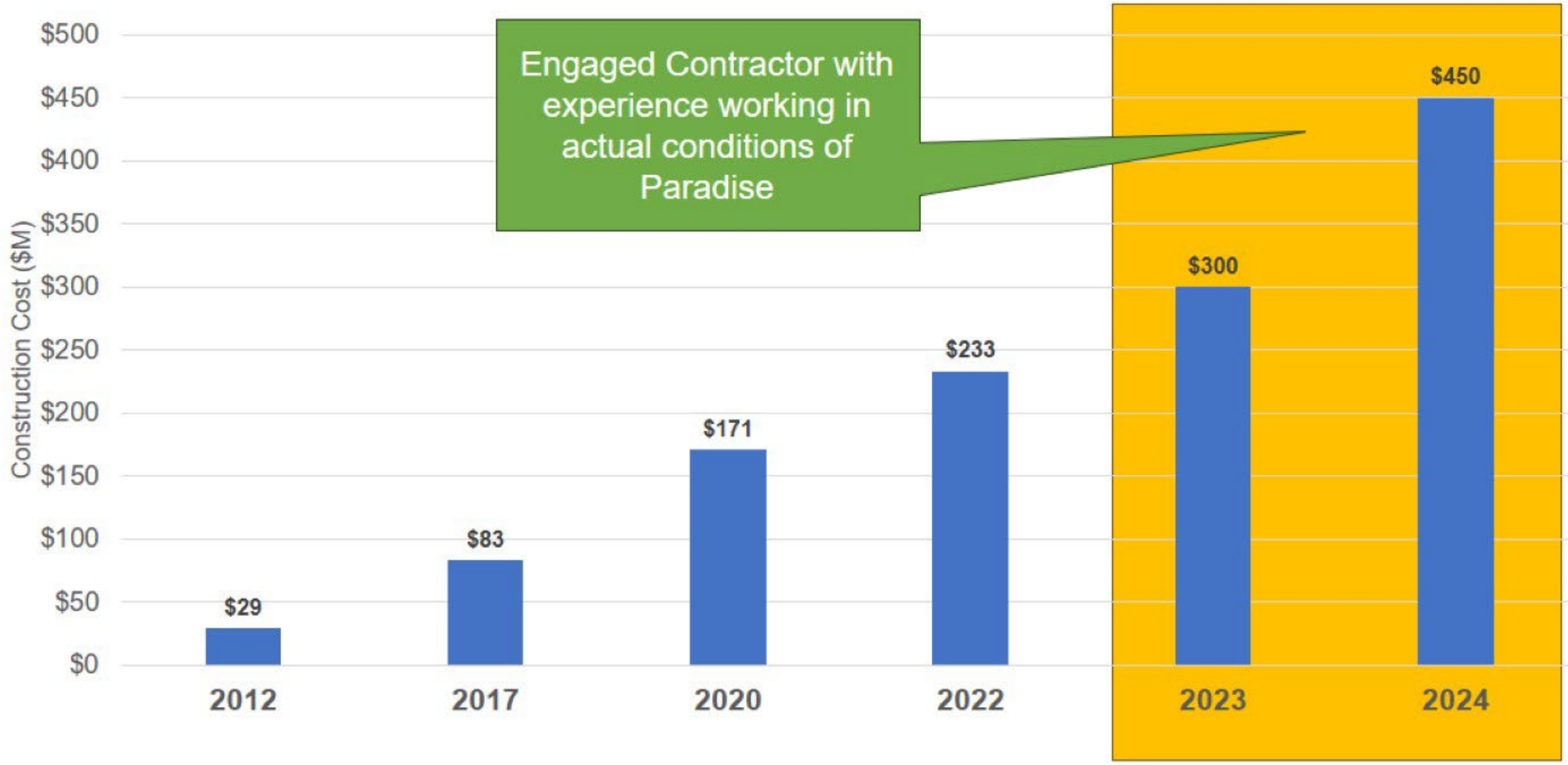
Cost Component	Estimated Cost Range
Engineering & Preconstruction	\$25,000,000 – 35,000,00
Town, OA & Legal	\$3,500,000 – 5,500,000
Subtotal - 90% Design & GMP	\$28,500,000 – 44,500,000
Real Estate Acquisition & Professional Services	\$15,000,000 – 25,000,000
Environmental Permit / Agency Costs	\$250,000 – 500,000
Environmental Mitigation Credits	\$2,500,000-3,500.000
Chico Connection Payment	\$14,900,000
Subtotal - Real Estate, Environment & Chico	\$32,650,000 – 43,900,00
Export Pipeline Construction	\$70,000,000 – 80,000,000
Collection System Construction	\$180,000,000 – 200,000,000
Engineering Services During Construction	\$12,000,000 – 15,000,000
PDB Bonds, Insurance & Fee	\$60,000,000 – 70,000,000
Town Cost & Contingency	\$25,000,000 – 35,000,000
Subtotal – Construction Phase	\$347,000,000 – 400,000,000
Estimated Total Project Cost to Complete	\$408,150,000 – 488,400,000

Project Estimates Over Time





What did we learn between 2023-2024?





Sewer Project by the Numbers

- Approx. **365,000** linear feet of pipe including laterals
 - Almost the same distance from Town to Sac International Airport
- Over **880** manholes
- Up to **32** pumps stations & structures
- At least **5** trenchless crossings
- Approx. **500,000** tons base rock
- Approx. **123,000** tons of asphalt
 - Approx. **50** miles of 12' lane 6" thick.
- Approx. 960,000 labor hours





TOWN OF PARADISE
SEWER PROJECT



Part 4: Funding Pursuits



Funding Pursuits

Secured Funding

- US Department of Agriculture
 - \$800,000
- US Housing & Urban Development
 - \$46,000,000
- US Environmental Protection Agency
 - \$1,750,000
- State Water Board DFA
 - \$2,800,000

Funding Opportunities Reviewed

- FEMA Public Assistance
- FEMA BRIC
- US Economic Development Administration
- US Department of Agriculture
- US Army Corps of Engineers
- State Water Board DFA
- Federal Advocacy
- State Advocacy

Funding Source: USACE EI

Program Name: Environmental Infrastructure (EI) Assistance

Agency: US Army Corps of Engineers (USACE)

Brief Description: Program focuses primarily on water infrastructure and environmental restoration projects.

Maximum Award: \$130M+

Likely Award: \$50M

Local Match: Up to 75%

Status/Likelihood:

Likely



**US Army Corps
of Engineers®**

Town met with USACE staff to discuss a nonbinding letter of intent (LOI) for the program. Next meeting is tentatively scheduled for March/April.

Funding Source: California Programs, Septic to Sewer

Program Name: Septic to Sewer Program

Maximum Award: \$50M

Likely Award: \$30M

Status/Likelihood:

Likely

Town staff is actively engaging with Water Board staff on potential funding opportunities based on project Scope.



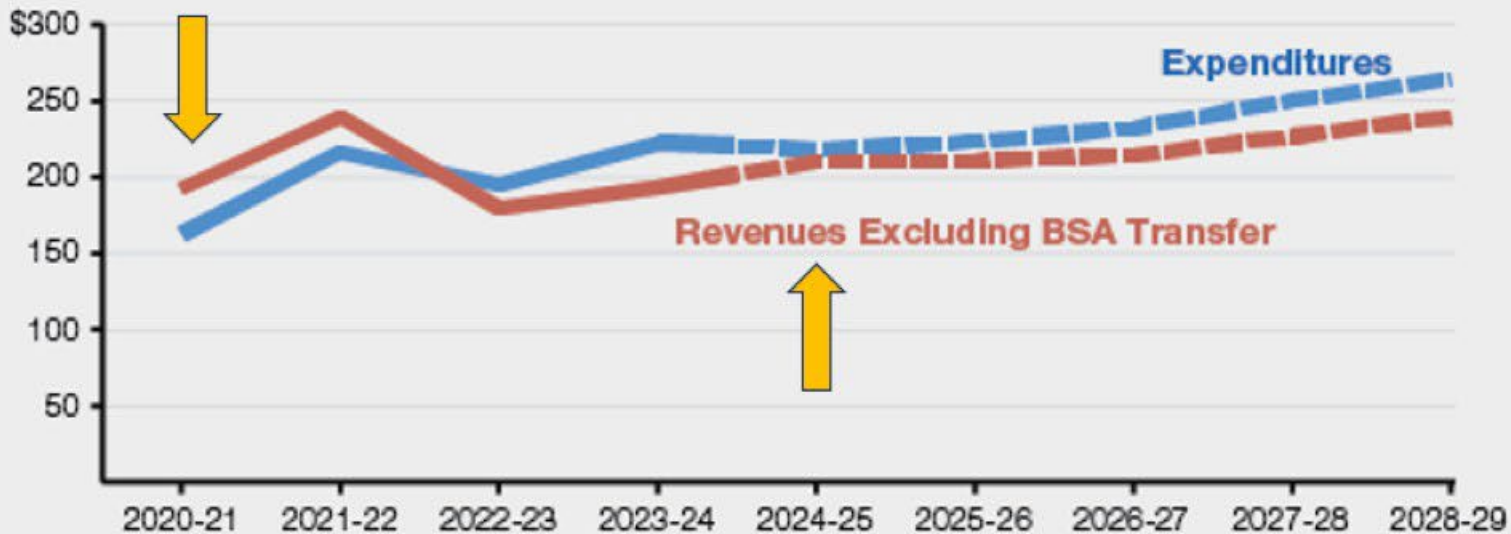


State Budget Changes Since 2020

Figure 7

Revenues Not on Track to Grow Fast Enough to Catch Up to Ongoing Spending

(In Billions)



BSA = Budget Stabilization Account.

LAOA

- Overall budget surplus has changed to statewide deficit
- Water Board funding programs have been adversely affected



Funding Source: California Programs, Proposition 4

Program Name: Proposition 4 - Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024

Maximum Award: TBD

Likely Award: TBD

Status/Likelihood:

Likely

Governor's Proposed Budget noted use of \$1.1B in Safe Drinking Water, Drought, Flood and Water Resilience funding in 2025-2026 Budget.

Final budget subject to Governor's Revision in May.

California Natural Resources Agency is holding webinars 1/24 and 1/30 on how funds will be distributed to local agencies.



CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD ANALYSIS & SUPPORT

2020-2024, RWQCB...

- Engaged and participated in the Phase 1 Process with Town and HDR
- Performed their own independent analysis of the Town's potential avenues forward (regional or local)
- Recommended the Town advance the regional option with the City of Chico
- Facilitated the SRPAC
- Served as liaison in ongoing cost analyses and funding opportunities

Today RWQCB...

- Understands the goals and objectives of the project remain unchanged
- Supports the Town in securing construction funding moving forward for a revised local treatment project alternative





TOWN OF PARADISE SEWER PROJECT

2. Provide staff direction on project next steps to commence requirements and impacts of modifying the Project Description for the Paradise Sewer Project from a regional connection to the City of Chico to a potential local treatment plant option. Further direction is requested on potential alternatives for a phased project approach to reach the full intended Sewer Service Area.

Action Requested



TOWN OF PARADISE
SEWER PROJECT



Part 5: Revised Project



Roadmap to Next Steps

Step 1a – Revise the Project

- Same Project Objectives
- Select a **start-up** project
 - Wastewater Treatment Plant location
 - Treatment type
 - Discharge location
- Revise the Environmental Document
 - New impacts
 - Aesthetics, odor, operations, etc

Step 1b – Funding & Design

- Pursue USACE funding for segment of work being the Wastewater Treatment Plant
- Pursue available State funding for revised Collection System phased approach
- Advance design work



Step 1a - Project Alternatives

- Treatment process technology
- Discharge location & method
- Estimated user connections
- Project examples
- Estimated total project cost
- Alternative analysis

Project Alternative Factsheets
Paradise Sewer Project

Alternative [##] - [Title]

Insert map figure of the project alternative including:

- SSA served
- Treatment location
- Effluent Disposal/Choperal location

Alternative Project Description
(Brief description of the alternative being proposed including treatment technology, water quality standard, SSA served, solids disposal, treated water disposal/disposal method)

Estimated User Connections

Type of Connection	Number of Connections ¹
Residential	
Commercial/Industrial/Other	
Total User Connections	

Notes:
¹ Includes (X) multi-family and (Y) school connections
² Assuming 25% of currently vacant lots are rebuilt prior to project completion

Project Examples

- **Project #1 Name**
 - o Location
 - o Construction Cost
 - o Total funded through O&M
 - o Year Completed
 - o Influent flow (mgd)
 - o Effluent quality
 - o [Other notes like similarity or differences to proposed Paradise alternative]
- **Project #2 Name**
 - o Location
 - o Construction Cost
 - o Total funded through O&M
 - o Year Completed
 - o Influent flow (mgd)
 - o Effluent quality
 - o [Other notes like similarity or differences to proposed Paradise alternative]

10/20/2021 Project Alternative Factsheet | Paradise Sewer Alternative Fact Sheet Template.docx 2

Treatment & Disposal Process Technology

Insert a simple process flow diagram and/or technology photos:

- Influent flow
- Effluent water quality design criteria

Estimated Cost

System Component	Estimated Cost Range ¹
Engineering & Preconstruction ²	
Environmental ³	
RDW Acquisition	
Collection System Construction	
Treatment Construction	
Effluent Disposal Construction & Permitting	
Additional Construction Phase Costs ⁴	
Estimated Total Project Capital Cost	
Estimated Operating Cost – Net Present Value (20 years, 0.3%)	

Notes:
¹ Costs modeled in 2022 dollars
² Includes design, legal, O&M, and Town costs
³ Includes APWA/CDEA, environmental permitting, and mitigation/bonding
⁴ Includes ESDC, CM, PCB Assets & Installation, Contingency & Town Costs

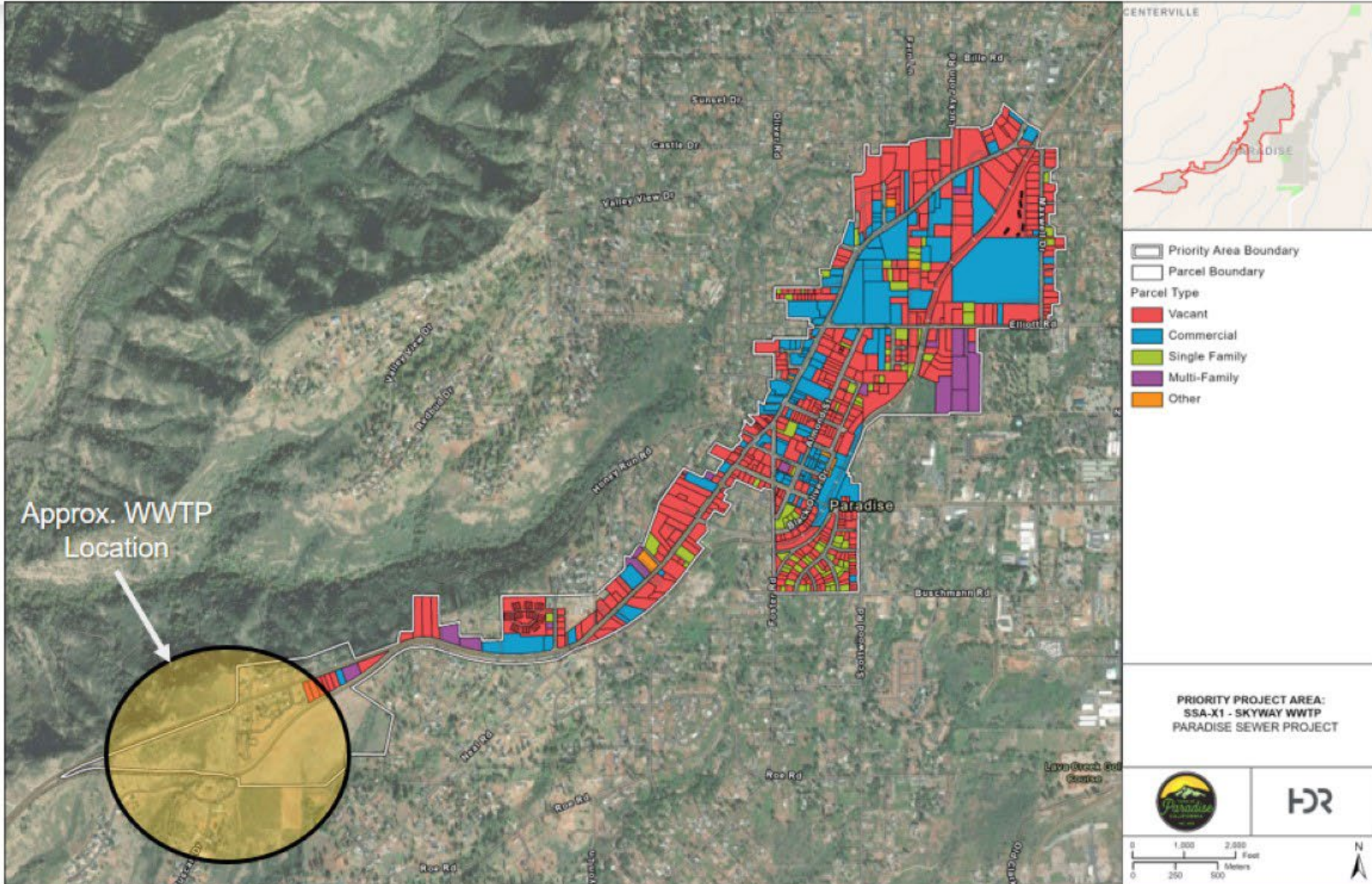
Alternative Analysis Criteria

Analysis Criteria	Score	Weight	Benefits/Challenges/Considerations
1. Economic			•
2. Social			•
3. Environmental			•
4. Implementation			•
5. Operational			•
6. Scalability			•
Total Weighted Score			

10/20/2021 Project Alternative Factsheet | Paradise Sewer Alternative Fact Sheet Template.docx 3

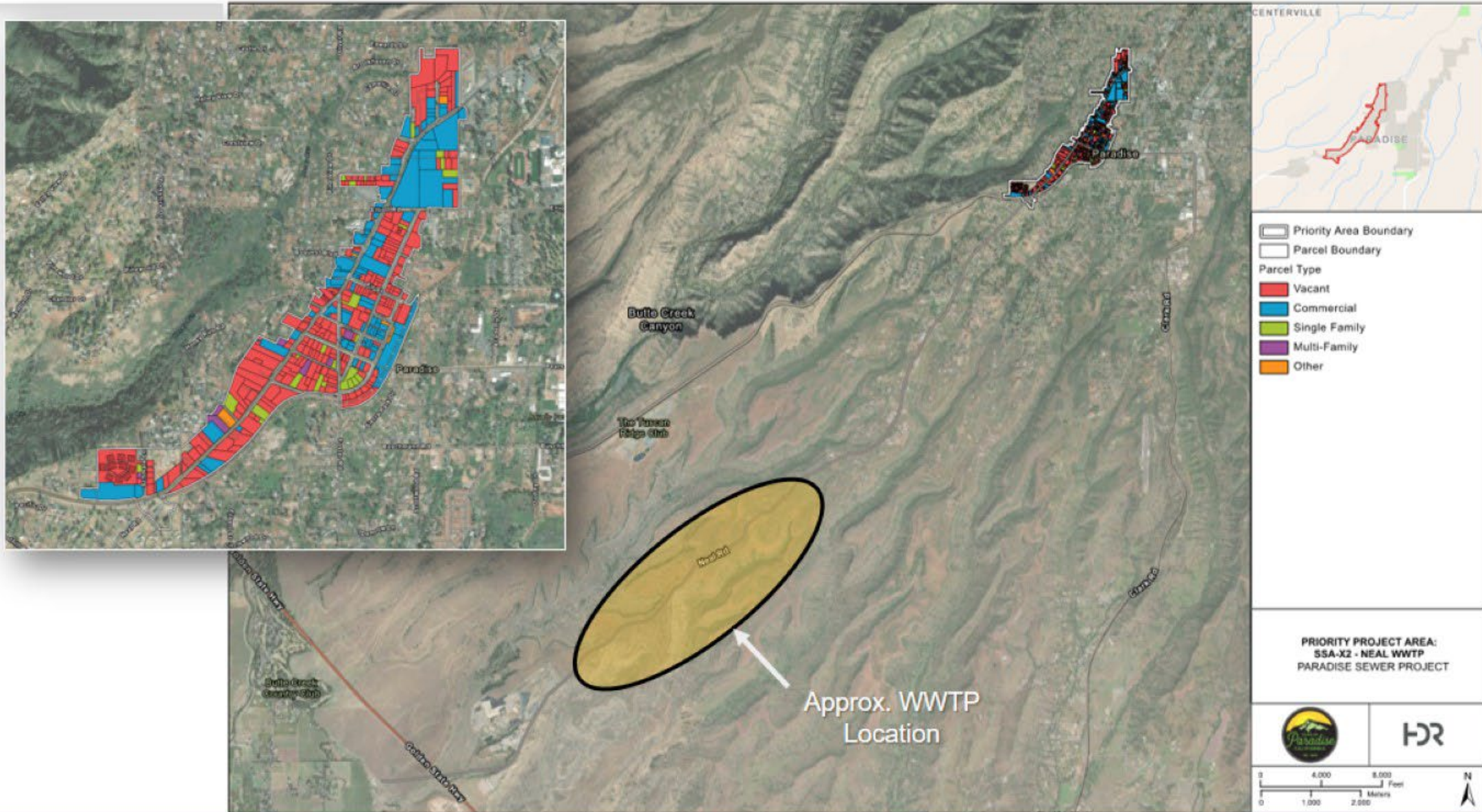


SSA & Plant Location - Skyway



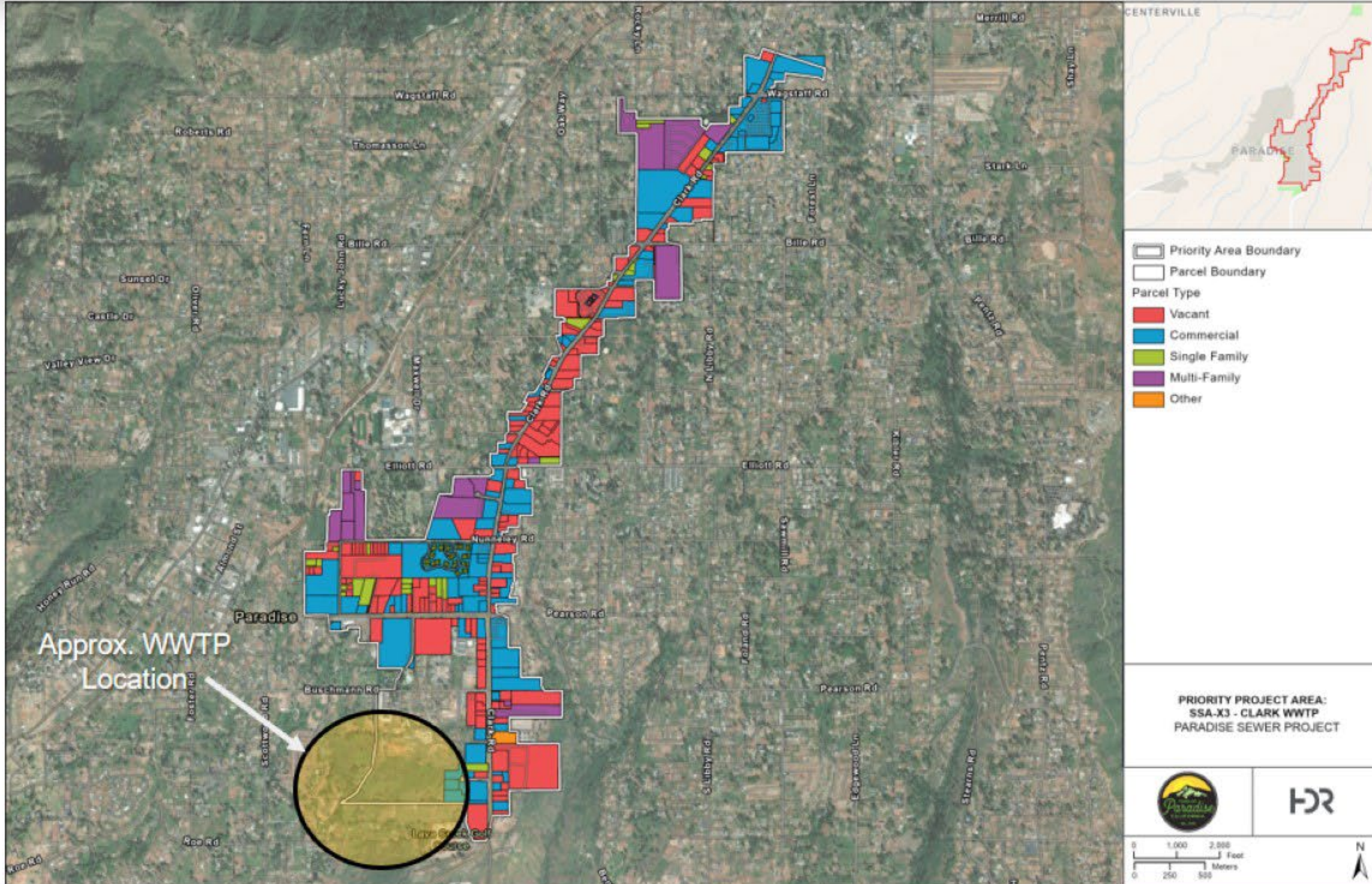


SSA & Plant Location – Neal Rd





SSA & Plant Location – Clark Rd





TOWN OF PARADISE
SEWER PROJECT



Part 6: Sewer Committee



Previous Advisory Committee

- Sewer Regionalization Project Advisory Committee (SRPAC)
 - Active March 2021 to May 2022
 - Paradise Town Council and Chico City Council Partnership
 - Goal: to develop principles of agreement for the City of Chico to provide the Town with wastewater treatment services
 - Put on hold May 2022 when Principles of Agreement was signed
 - Town and City staff were delegated to progress design and coordination after the IMA was adopted

Town Of Paradise Representatives



Mayor
Steve Crowder

[LEARN MORE](#)



Council Member
Rose Tryon

[LEARN MORE](#)

City Of Chico Representatives



Mayor
Andrew Coolidge

[LEARN MORE](#)



Vice Mayor
Kasey Reynolds

[LEARN MORE](#)



New Ad Hoc Committee

- Paradise Sewer Project Ad Hoc Advisory Committee
 - Role: With the change anticipated in the project direction, staff believes it is critical for the Town Council to follow, develop and support closely. An Ad Hoc Committee will provide an avenue for staff to meet at regular intervals with the two Councilmembers appointed to assess opportunities and potential action. Project team will report more frequently as this progresses to the entire Council.

Once appointed, staff and the committee will determine a meeting schedule and format to ensure ongoing review and engagement in this new direction for the sewer project.



TOWN OF PARADISE SEWER PROJECT

3. Appoint two Councilmembers to serve on an Ad Hoc Committee, replacing the previously established Sewer Regionalization Project Advisory Committee between the Town of Paradise, City of Chico and Central Valley Regional Water Quality Control Board.

Action Requested

Action Requested & Next Steps

- Today...
 1. Consider concurring with staff's recommendation to accept the Basis of Design Report (BODR) prepared and submitted by Carollo Engineers and concur with staff's recommendation to modify project objectives to include a local treatment option, phasing of Sewer Service Areas, and formation of a Council Project Committee. (ROLL CALL VOTE)
 2. Provide staff direction on project next steps to commence requirements and impacts of modifying the Project Description for the Paradise Sewer Project from a regional connection to the City of Chico to a potential local treatment plant option. Further direction is requested on potential alternatives for a phased project approach to reach the full intended Sewer Service Area.
 3. Appoint two Councilmembers to serve on an Ad Hoc Committee, replacing the previously established Sewer Regionalization Project Advisory Committee between the Town of Paradise, City of Chico and Central Valley Regional Water Quality Control Board.
- Future Council Meeting... Present Project Fact Sheets to select an alternative for revised Environmental and Permitting Efforts
- Staff Mission: Achieve certainty for
 - Treatment type and discharge location
 - Funding potential with USACE
 - New funding potential and timelines for revised project with State



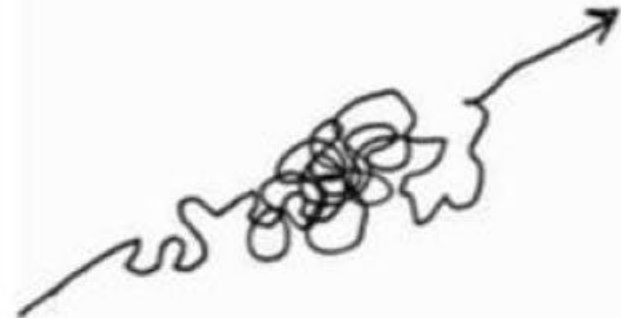
Closing Remarks

Success



what people think
it looks like

Success



what it really
looks like



TOWN OF PARADISE
SEWER PROJECT



Thank you! Questions?