TOWN OF PARADISE
SEWER PROJECT

Town Council Meeting

June 9, 2026

Agenda

- 2025 Alternatives Analysis
- Project Update
- Carollo Analysis of Hybrid vs. Full-STEP Collection System
- Beneficial Re-Use Update
- Ad Hoc Committee Recommendation
- Funding Update
- Rate Analysis/Model Update
- Environmental Review Next Steps/Plan
- Action Requested

Project Development

Winter 2025

- Council decision to pursue local treatment options
- Sewer Project Ad Hoc Committee Reformed

Spring 2025

- Alternatives Analysis
- Community input
- Equipment vendor input
- Wastewater facility tours
- Water Board coordination
- Comparative cost estimates

Summer 2025

- Presented findings to the public and Town Council
- Ad Hoc Committee Recommended Alternative 1
- Council approved revised project description for Alt 1

Fall 2025

- Hired Carollo for WWTF design services
- Identified potential sites for WWTF
- Began environmental analysis of a local treatment facility

Winter/Spring 2026

- Resumed sewer design
- Began WWTF design
- Soils desktop study
- Soils testing and analysis at potential WWTF sites
- Continued funding pursuits

Today

- Updated Ad Hoc Committee Recommendation for Alternative 3

Whole Project Alternatives (2025)

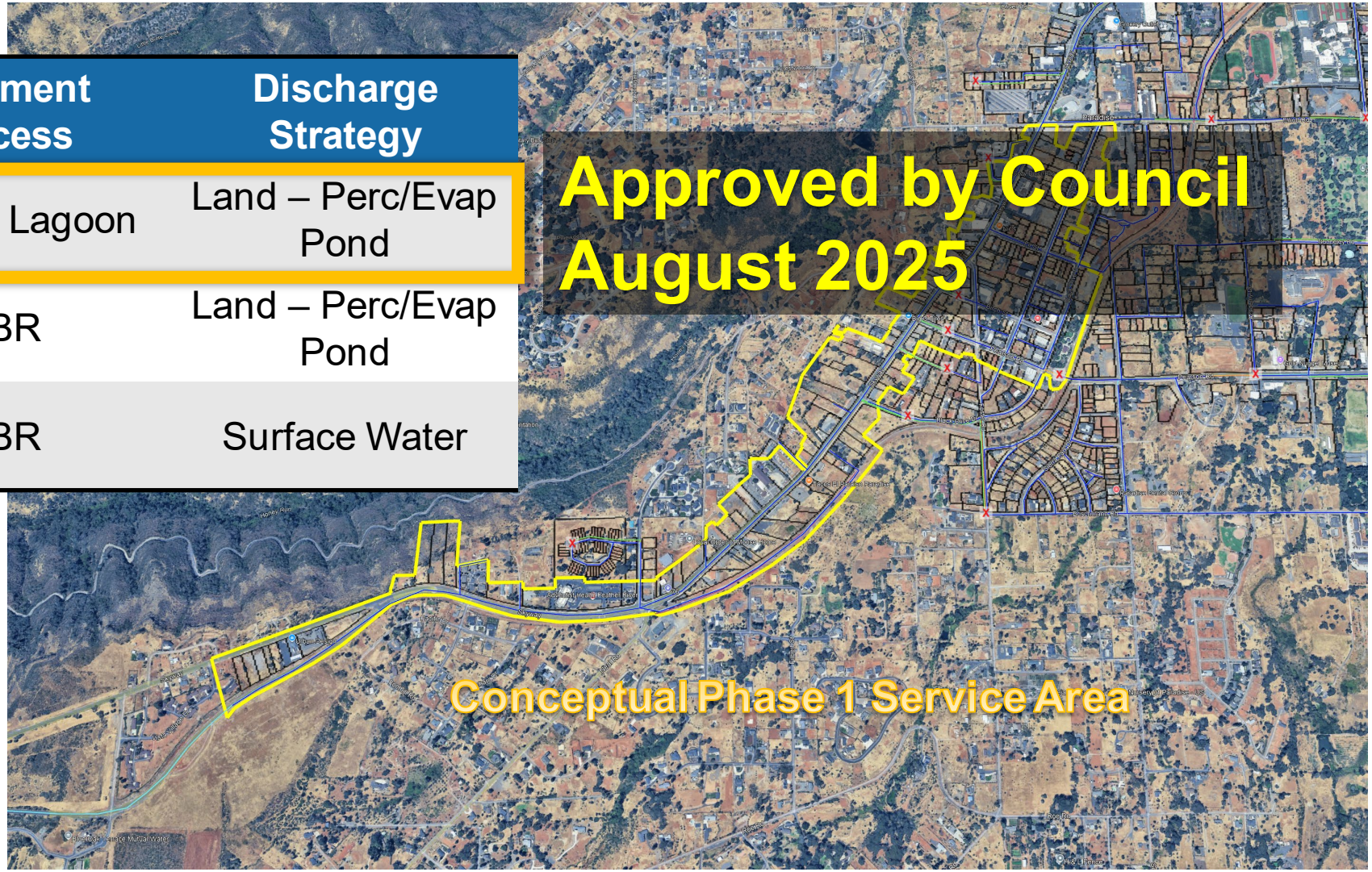
Collection Types	Treatment Types	Discharge Options
Gravity Sewer	Aerated Lagoon	Land Application
Low-Pressure Sewer (STEP)	Fixed Growth	Surface Water
Hybrid Gravity/Low-Pressure (STEP)	Suspended Growth/ Activated Sludge	Beneficial Reuse
	Membrane Bioreactor (MBR)	

Whole Project Alternatives (2025)

Collection Types	Treatment Types	Discharge Options
Gravity Sewer	**Aerated Lagoon**	**Land Application**
Low-Pressure Sewer (STEP)	Fixed Growth	**Surface Water**
Hybrid Gravity/Low-Pressure (STEP)	Suspended Growth/ Activated Sludge	Beneficial Reuse
	Membrane Bioreactor (MBR)	

Phase 1 Alternatives Evaluated

Alt	Collection System	Treatment Process	Discharge Strategy
1	Hybrid Gravity/STEP	Aerated Lagoon	Land – Perc/Evap Pond
2	Hybrid Gravity/STEP	MBR	Land – Perc/Evap Pond
3	Hybrid Gravity/STEP	MBR	Surface Water



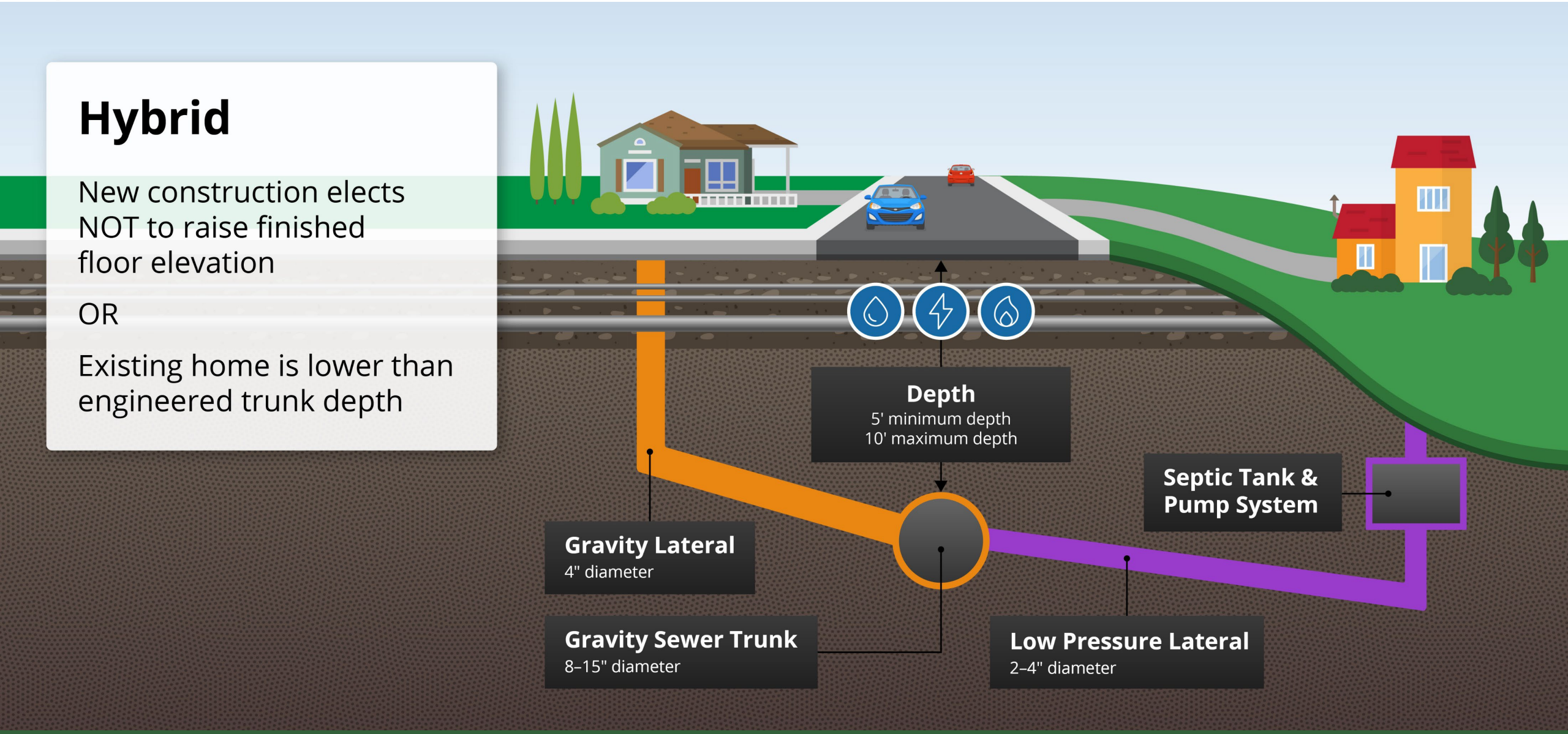
Hybrid Gravity/Low-Pressure (STEP) Collection System Concept

Hybrid

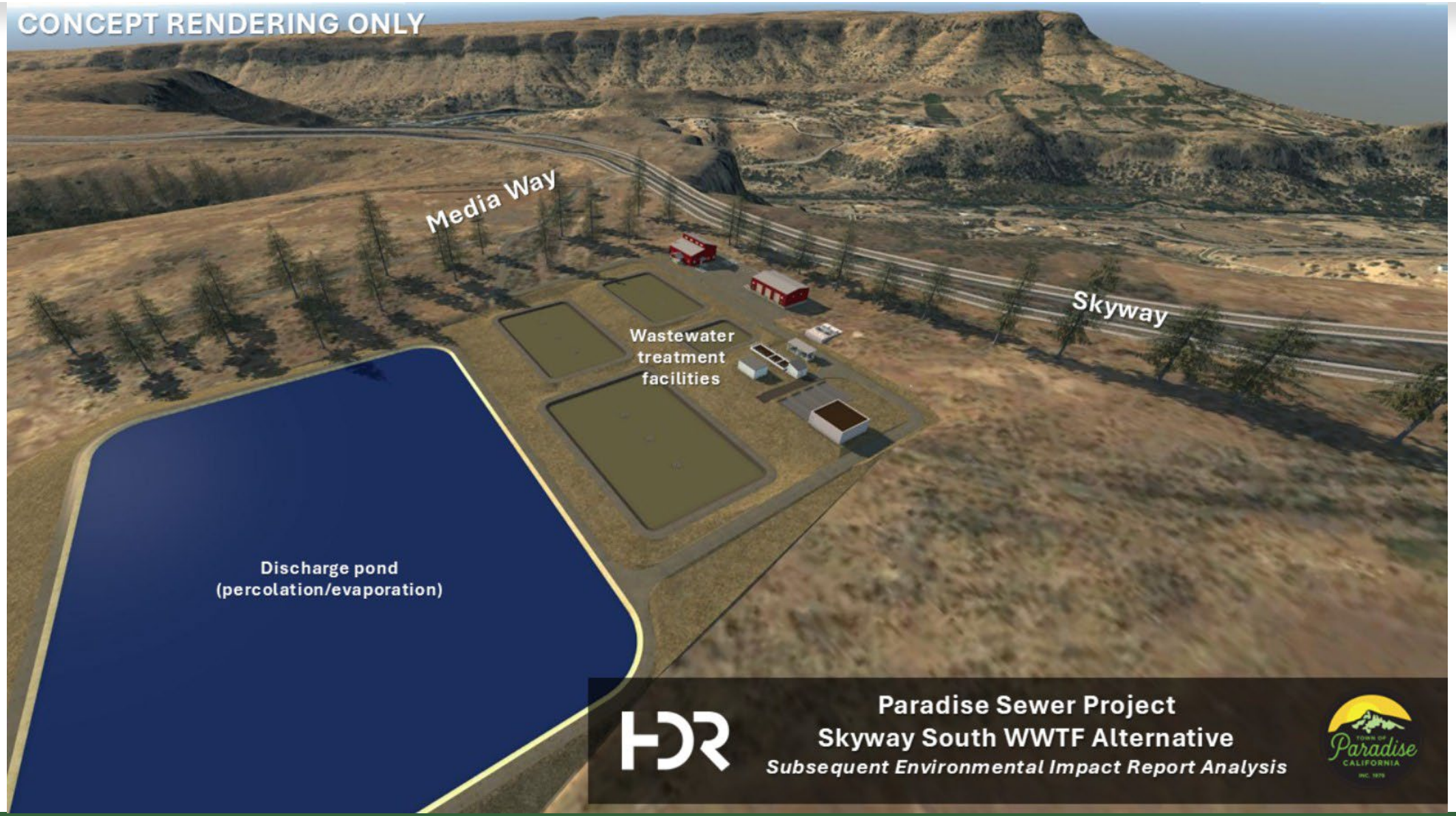
New construction elects NOT to raise finished floor elevation

OR

Existing home is lower than engineered trunk depth



Alternative 1 WWTF Concept



From media release Feb 6, 2026

Treatment Facility Update

- Desktop data study indicates soils will be challenging for percolation pond construction and discharge in or near Paradise
- Subsurface investigations at 2 locations (Skyway South and Clark Rd.)
  - Shallow bedrock
  - High groundwater
  - Percolation rates incompatible with percolation ponds for the volume needed
  - Confirmed desktop study information

CONCLUSION: Percolation ponds are not feasible for Paradise

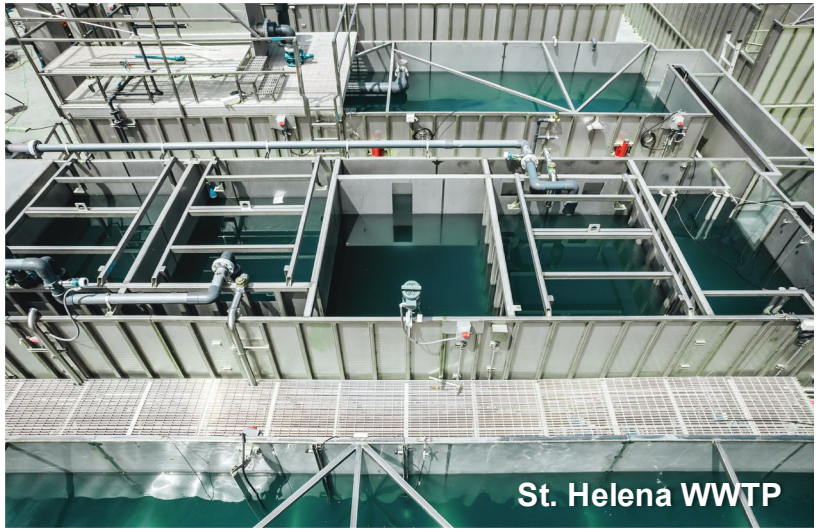
Whole Project Alternatives (2026)

Collection Types	Treatment Types	Discharge Options
~~Gravity Sewer~~ DOES NOT MEET OBJECTIVES	~~Aerated Lagoon~~ NOT FEASIBLE	~~Land Application~~ NOT FEASIBLE
Low-Pressure Sewer (STEP)	~~Fixed Growth~~ DOES NOT MEET OBJECTIVES	**Surface Water**
Hybrid Gravity/Low-Pressure (STEP)	~~Suspended Growth/ Activated Sludge~~ DOES NOT MEET OBJECTIVES	Beneficial Reuse
	Membrane Bioreactor (MBR)	

Treatment Recommendation: MBR

- Relatively high capital cost and O&M cost
- Can be pre-engineered design and pre-fabricated for quick construction
- Controls can be automated to ease operational burden
- Future-proof – high quality effluent can produce tertiary treated water for surface discharge or future reuse
- Small footprint, can be hidden inside structures if desired
- Easily scalable for a growing community


Lake of the Pines WWTP


St. Helena WWTP

Source: Cloacina
https://www.cloacina.com/municipal-system-upgrade

Community Proposal Response

Collection Types	Treatment Types	Discharge Options
~~Gravity Sewer~~ DOES NOT MEET OBJECTIVES	~~Aerated Lagoon~~ NOT FEASIBLE	~~Land Application~~ NOT FEASIBLE
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	Membrane Bioreactor (MBR)	

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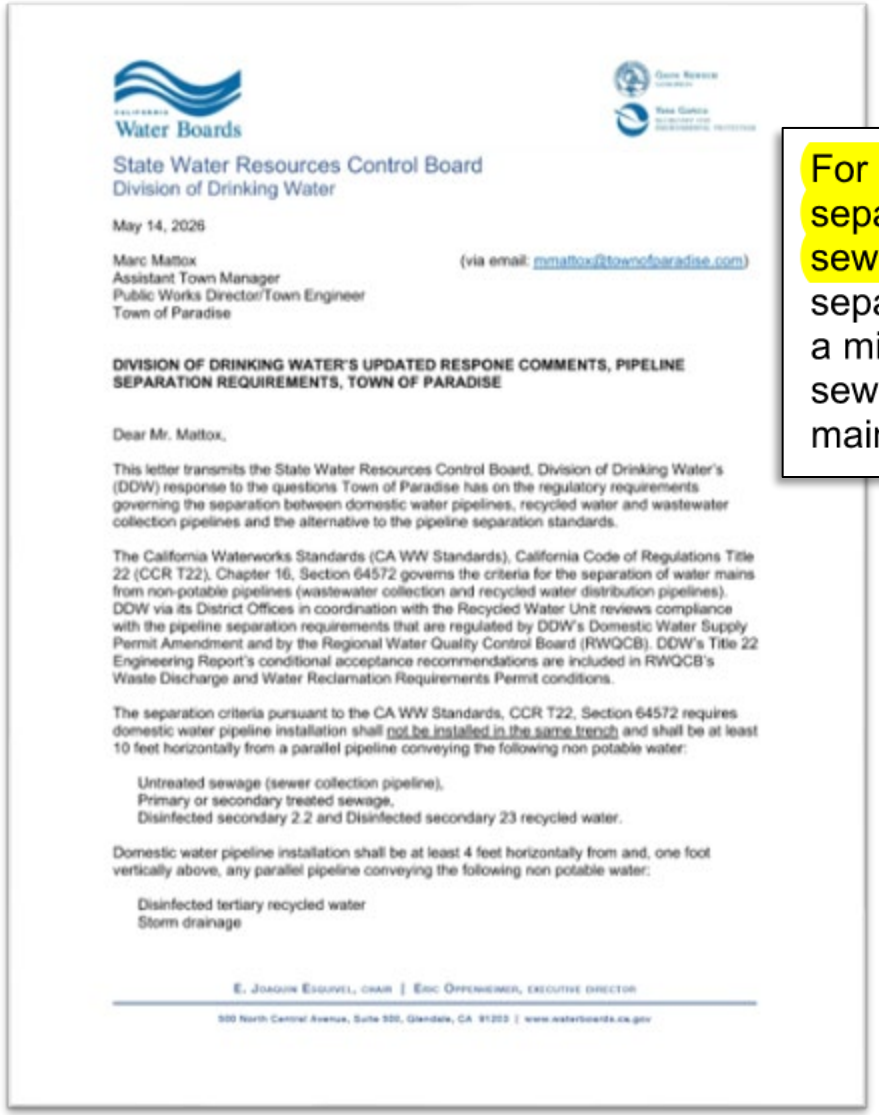
Collection System Analysis (Carollo)

Recycled Water & Sewer Separation



Water Boards

State Water Resources Control Board
Division of Drinking Water

May 14, 2026

Marc Mattox (via email: mmattox@townofparadise.com)
Assistant Town Manager
Public Works Director/Town Engineer
Town of Paradise

DIVISION OF DRINKING WATER'S UPDATED RESPONE COMMENTS, PIPELINE SEPARATION REQUIREMENTS, TOWN OF PARADISE

Dear Mr. Mattox,

This letter transmits the State Water Resources Control Board, Division of Drinking Water's (DDW) response to the questions Town of Paradise has on the regulatory requirements governing the separation between domestic water pipelines, recycled water and wastewater collection pipelines and the alternative to the pipeline separation standards.

The California Waterworks Standards (CA WW Standards), California Code of Regulations Title 22 (CCR T22), Chapter 16, Section 64572 governs the criteria for the separation of water mains from non-potable pipelines (wastewater collection and recycled water distribution pipelines). DDW via its District Offices in coordination with the Recycled Water Unit reviews compliance with the pipeline separation requirements that are regulated by DDW's Domestic Water Supply Permit Amendment and by the Regional Water Quality Control Board (RWQCB). DDW's Title 22 Engineering Report's conditional acceptance recommendations are included in RWQCB's Waste Discharge and Water Reclamation Requirements Permit conditions.

The separation criteria pursuant to the CA WW Standards, CCR T22, Section 64572 requires domestic water pipeline installation shall not be installed in the same trench and shall be at least 10 feet horizontally from a parallel pipeline conveying the following non potable water:

Untreated sewage (sewer collection pipeline),
Primary or secondary treated sewage,
Disinfected secondary 2.2 and Disinfected secondary 23 recycled water.

Domestic water pipeline installation shall be at least 4 feet horizontally from and, one foot vertically above, any parallel pipeline conveying the following non potable water:

Disinfected tertiary recycled water
Storm drainage

E. Joaquin Esquivel, chair | Eric Oppenheimer, executive director

500 North Central Avenue, Suite 500, Glendale, CA 91203 | www.waterboards.ca.gov

For instances of separation of recycled water lines and sewer lines, DDW applies pipeline separation requirements similar to those for potable water lines and pipelines conveying sewage. For horizontal separation between recycled water lines and sewer lines, a minimum separation of 6 feet should be maintained, though a 10-foot separation is preferred. In addition, a minimum vertical separation of 1 foot should be maintained between recycled water lines and sewer lines; with the exception for gravity sewers where a 6-inch vertical separation may be maintained - though the 1-foot vertical distance is preferred.

Typical trench width is 1.5 to 2 feet

CONCLUSION: Recycled water and sewer pipes cannot be installed in the same trench and as a result, beneficial reuse is cost-prohibitive

Whole Project Alternatives (2026)

Collection Types	Treatment Types	Discharge Options
~~Gravity Sewer~~ DOES NOT MEET OBJECTIVES	~~Aerated Lagoon~~ NOT FEASIBLE	~~Land Application~~ NOT FEASIBLE
~~Low-Pressure Sewer (STEP)~~ NOT FEASIBLE	~~Fixed Growth~~ DOES NOT MEET OBJECTIVES	**Surface Water**
Hybrid Gravity/Low-Pressure (STEP)	~~Suspended Growth/ Activated Sludge~~ DOES NOT MEET OBJECTIVES	~~Beneficial Reuse~~ NOT FEASIBLE
	Membrane Bioreactor (MBR)	

Phase 1 Alternative Recommendation (2026)

Alt	Collection System	Treatment Process	Discharge Strategy	
1	Hybrid Gravity/STEP	~~Aerated Lagoon~~	~~Land – Perc/Evap Pond~~	NOT FEASILBE
2	Hybrid Gravity/STEP	MBR	~~Land – Perc/Evap Pond~~	NOT FEASILBE
3	Hybrid Gravity/STEP	MBR	Surface Water	

Updated Ad Hoc Committee Recommendation

2026 Ad Hoc Committee Recommendation

Alternative 3: Hybrid Gravity/Low Pressure Collection System, Membrane Bioreactor Wastewater Treatment Facility, and Surface Water Discharge

- Conceptual service area includes downtown where recovery and growth has lagged
- MBR is flexible for future expansion or reuse implementation
- Serves project mission to be fundable (affordable), permittable, and scalable to meet Paradise's needs today and into the future


Mt Shasta WWTP

Updated Project Funding Picture

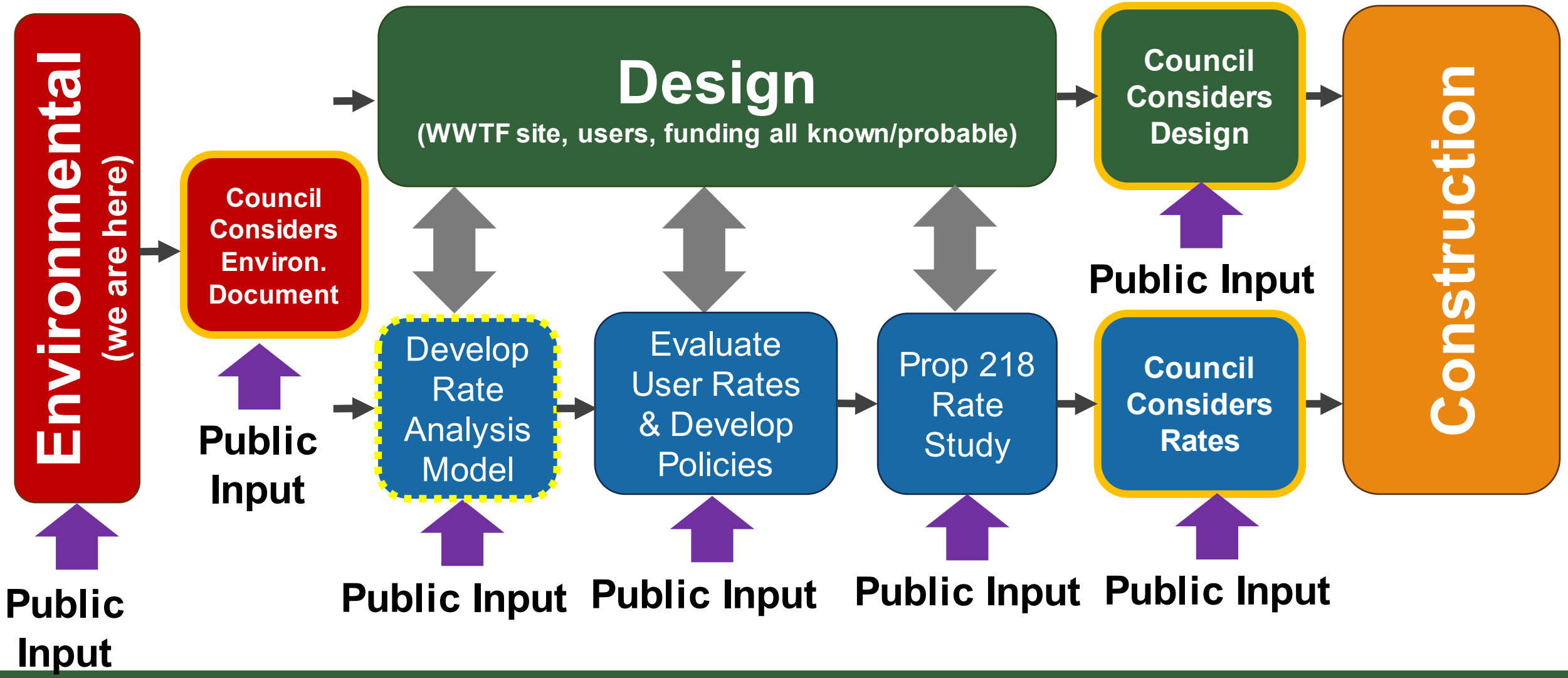
Secured Funding	**2025**	**2026**	
(1) CDBG-DR APA-2 Design	$30,000,000	$30,000,000	(active for pre-construction)
(2) CDBG-DR APA-3, -4, -5 Infrastructure	$35,000,000	**$94,450,000**	(secured for construction)
(3) EPA Community Grant	$1,750,000	$1,750,000	(pending)
TOTAL Secured Funding	$66,750,000	**$126,200,000**	

Clean Water SRF Funding Opportunities		
(4) Clean Water SRF (Grant)	$28,000,000	(Requested)
(5) Clean Water SRF (Grant)	up to $47,000,000	(Future)

Phase 1 Service Area Expansion Funds

Additional Funding Pursuits (Future Project Phases)		
(6) USACE 219 – Initial Request	$2,000,000	(Requested)
(7) USACE 219 – Remaining Allocation	$48,000,000	

Opportunities for Continued Public Input



Environmental Review

Council action tonight directs staff to advance project work associated with the revised Alternative 3, as action did last August for Alternative 1.

Tonight's action does not:

- Commit to a WWTF site
- Finalize a Sewer Service Area
- Authorize immediate property or Right-of-Way acquisition
- Circumvent forthcoming environmental reviews and studies

Environmental Review (continued)

Next steps for Environmental Review include:

- Review project alternatives within Alternative 3
- Prepare Subsequent PEIR which incorporates the 2022 Final PEIR record as well as studies the new impacts associated with revised project description
  - Subsequent PEIR includes an analysis of General Plan consistency as did the 2022 PEIR. Additional benefits of revised analysis include the additional Sewer Service Overlay performed in the adopted Housing Element as well as the underway General Plan.
  - A Subsequent PEIR is deemed appropriate as the project is substantially different with a new level of analysis. The new resource topics and scope of analysis will be defined and analyzed.
- Public Review – Winter 2027
- Council Review and certification – Summer 2027

Resolution Correction

Current published resolution reads:

Section 3. The Town Council directs staff to continue advancing the Paradise Sewer Project through environmental review, permitting, site acquisition, engineering design, funding pursuits, and related implementation activities consistent with the modified project description.

Correction to be clearer:

Section 3. The Town Council directs staff to continue advancing the Paradise Sewer Project through environmental review, permitting, ~~site acquisition~~ right of way engineering, engineering design, funding pursuits, and related implementation activities with required Council consideration of major milestones and actions consistent with the modified project description.

Action Requested

1. Consider adopting Resolution No. 2026-___, "A Resolution of the Town Council of the Town of Paradise Modifying the Paradise Sewer Project Description to Include a **Hybrid Gravity/Low Pressure Collection System, Membrane Bioreactor Wastewater Treatment Facility, and Surface Water Discharge**," consistent with the recommendation of the Sewer Project Ad Hoc Committee and based upon the findings of subsequent site suitability investigations completed following Council action on August 14, 2025; and
2. Direct staff to proceed with environmental review, permitting, ~~site acquisition~~ right of way engineering, engineering design, funding pursuits, and related implementation activities with required Council consideration of major milestones and actions consistent with the modified project description; and
3. Direct staff to continue pursuing state, federal, and other funding opportunities necessary to maximize the Phase 1 Sewer Service Area and preserve opportunities for future system expansion.

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Questions?