

Strategies for Maximizing the Use of Treated Effluent in the South Truckee Meadows



Dwayne Smith, P.E.
Washoe County Community Services Department





Washoe County Utility

DISCUSSION TOPICS

- Reclaim Water Update - South Truckee Meadows
- Facility Planning Status
- 2021 Utility Rate Study
- Staff Recommendations
- Seeking Board Direction/Input





Regional Sewersheds within Washoe County

11/26/2018

Regional Sewersheds



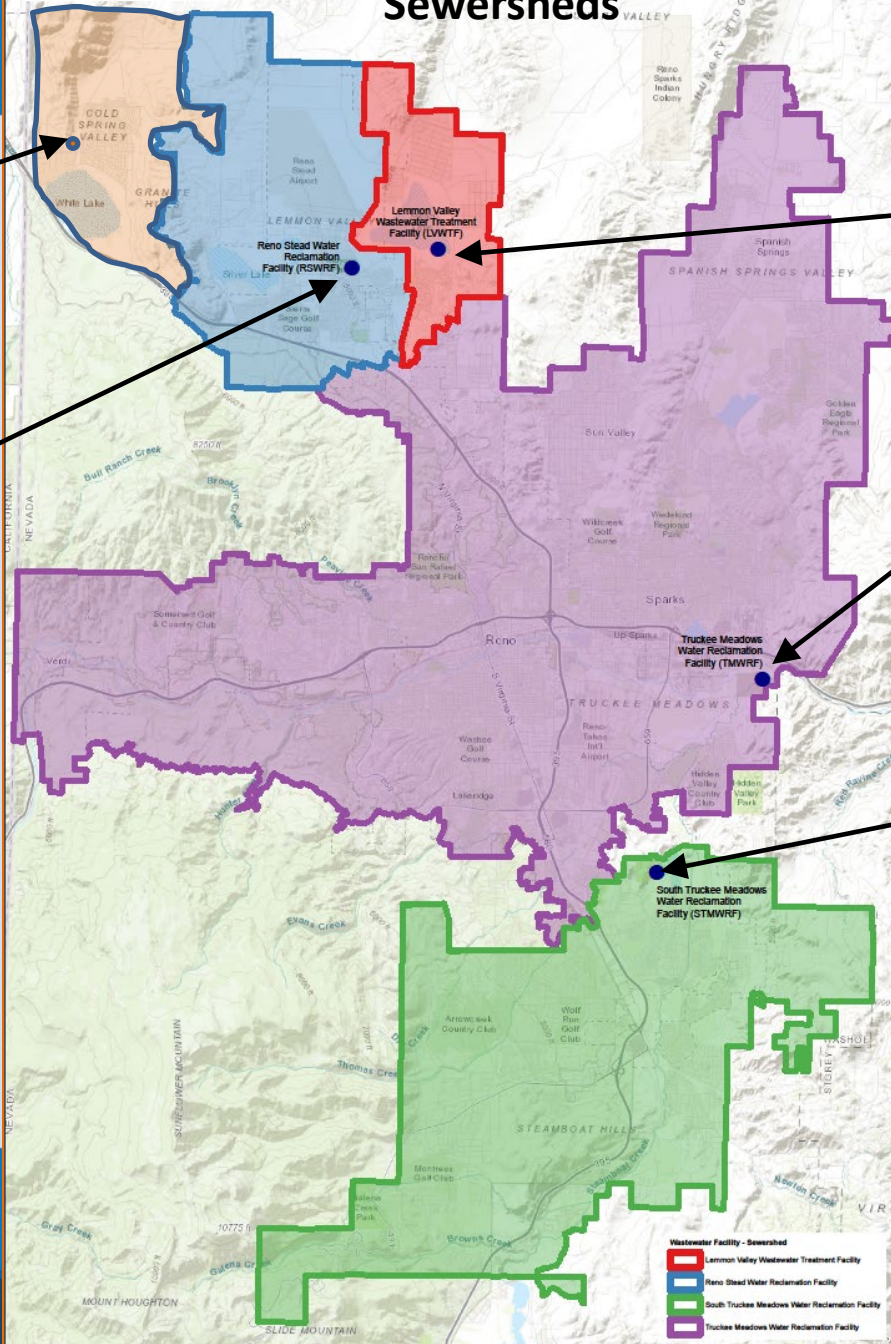
Cold Springs Water Reclamation Facility (Washoe County)

Reno Stead Water Reclamation Facility (COR)

Lemmon Valley Water Reclamation Facility (Washoe County)

Truckee Meadows Water Reclamation Facility (COR and COS)

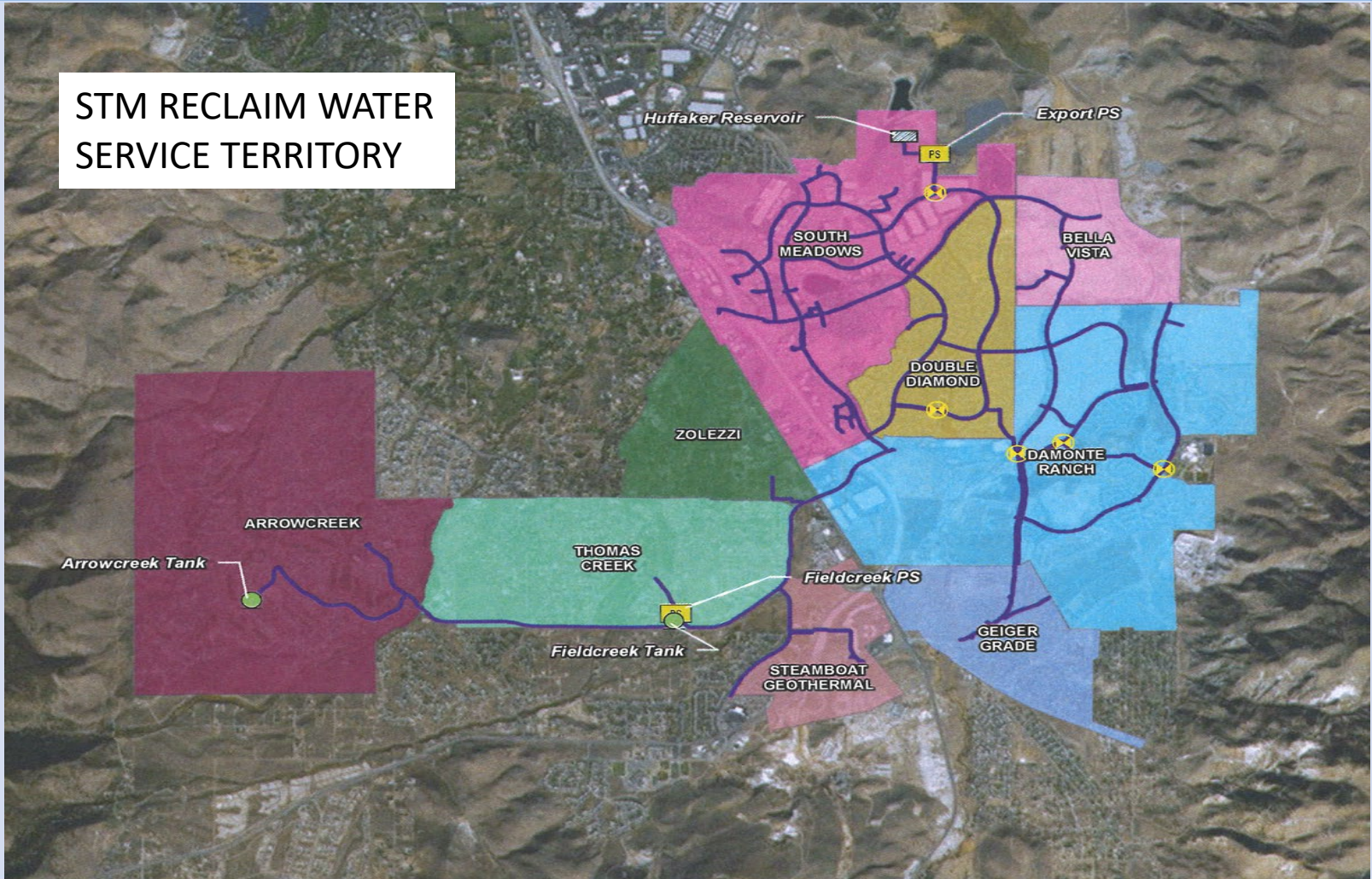
South Truckee Meadows Water Reclamation Facility (Washoe County)





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STM RECLAIM WATER
SERVICE TERRITORY





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Effluent Management in South Truckee Meadows

- No Discharge to Truckee River
- Produce Class A (Total Coliform (cfu) 2.2 Max 30-day mean, 23 Max daily number)
- 337 Services
- Reclaim Water Delivery \approx 2,844 Acre-Feet (2020)
- Store During Non-Irrigation Season in Huffaker Reservoir
- Water Quality
- Facility Planning and Analysis





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Approved Uses of Class A

- Golf Courses
- School/Athletic Fields
- Parks
- Roadway Medians/Streetscape
- Construction and Dust Control
- Pasture-Land Irrigation
- Toilet Flushing
- Commercial Toilet and Urinal Flushing
- Car Washes
- Snowmaking
- Outdoor Decorative Water Features
- Irrigation of food crops*





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Our Focus

- To Provide and Sustain a Safe, Secure and Healthy Community... Through Effective Wastewater Treatment and Reclaim Water Management
- By:
 - Meeting Our Customer Needs and Expectations
 - Providing the Highest Level of Service at the Lowest Cost
 - Protection of Our Environment
 - Water Resource Management and Best Practices
 - Fit-for-Purpose Solutions



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Challenges

- Average Daily Inflows ≈ 3.45 mgd
- Average Daily Outflows/Loss ≈ 2.8 mgd
- Inflows Increase As New Users Connect
- Irrigation Season
- Water Quality
- Dry Seasons/Wet Seasons
- Storage





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Why Use Reclaim Water?

- Reduces Potable Water Use
- Sustainable
- Cost Effective
- Quality of Life
- Resilient Communities
- Drought Resistant

Why Is Everyone Not Using Reclaimed Water?

- Availability
- Water Quality
- Cost to Covert From Potable to Reclaim
- Cost for Reclaimed Water
 - “We have our own, why buy yours”
 - “It’s easier to stick with potable water, and there's plenty of that....”





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Management Strategies

- Develop New Reclaim Water Users
- Maintain Existing Reclaim Water Users
- Convert Existing Potable Water Customers
- Expand Distribution System





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2021 Utility Rate Study

- Guiding Principals
 - 5-year Forecast (thru FY26)
 - Separate Revenues and Expenses for User Rates and Connection Fees
 - Meet All County Financial Policies
- Determine Sustainability of Current User Rate Structure
- Analyze Three Scenarios
 - Current Customer Base – Separate Sewer and Reclaim Water Utilities
 - Current Customer Base – Combine Sewer and Reclaim Water Utilities
 - Realigned Customer Base – Combine Sewer and Reclaim Water



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Rate Study Findings

- Sewer Business Area 12 – Sufficient Financial Stability to Meet County Policies
- Reclaim Business Area 11 – **Insufficient** Financial Stability to Continue to Meet County Policies

Key Points

1. Future Infrastructure Costs Necessary to Create New Sites to Put Additional Reclaim Water to Beneficial Use Depletes Cash Balances (Rates and Connection Fees)
2. Subsequent Increase to Reclaim Water Rates and Connection Fees Would Disincentivize the Use of Reclaim Water Use and/or Conversion to Reclaim Water.



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Sanitary Sewer System

- Uniform Connection and User Fee
- Connection Fee - \$5,750 per ERU (\$50/year increase)
- User Fee
 - \$47.33 per household per month
 - \$45.32 + \$5.20/1,000 gal for use over 8,213 gal (CPI increase)

STM Reclaimed Water System

- Connection/Resource Fee - \$6,000/acre-ft of demand
- User Fee
 - \$1.16/1,000 gal in lower zone, \$1.74/1,000 gal in upper zone



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Revenue, Expenses and Fund Balances

Revenue - Combined

▪ Rate Revenue	\$18,226,344
▪ Other (Interest, Service Charges)	<u>\$ 1,588,206</u>
	\$19,814,550

Expenses – Combined

▪ Sewer Operations	\$14,761,148*
▪ Reclaim Operations	\$ 1,057,496
▪ Payments to Others (Reno, Sparks)	<u>\$ 1,984,017</u>
	\$17,802,661

- Reclaim Operating Fund Balance ≈ \$5.7M (FY21 revenue)
- Sewer Operating Fund Balance ≈ \$53.5M (FY21 revenue)



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Staff Recommendations

- Merge Business Area 11 (Reclaim Water) and Business Area 12 (Sewer)
- Remove Reclaim Water User Fees and Charges

Recommendations Recognize:

- No Increase to Sewer User Rates, Except CPI
- New Reclaim Water Users, Paced With Growth
- Maintain Existing Reclaim Water Users
- Continue to Implement Water Quality Improvements
- Continue to Educate Reclaim Water Users
- Continue Collaborative Approach with UNR Water Innovation Institute and Regional Utility Purveyors
- Capital and Operating Cost Avoidance



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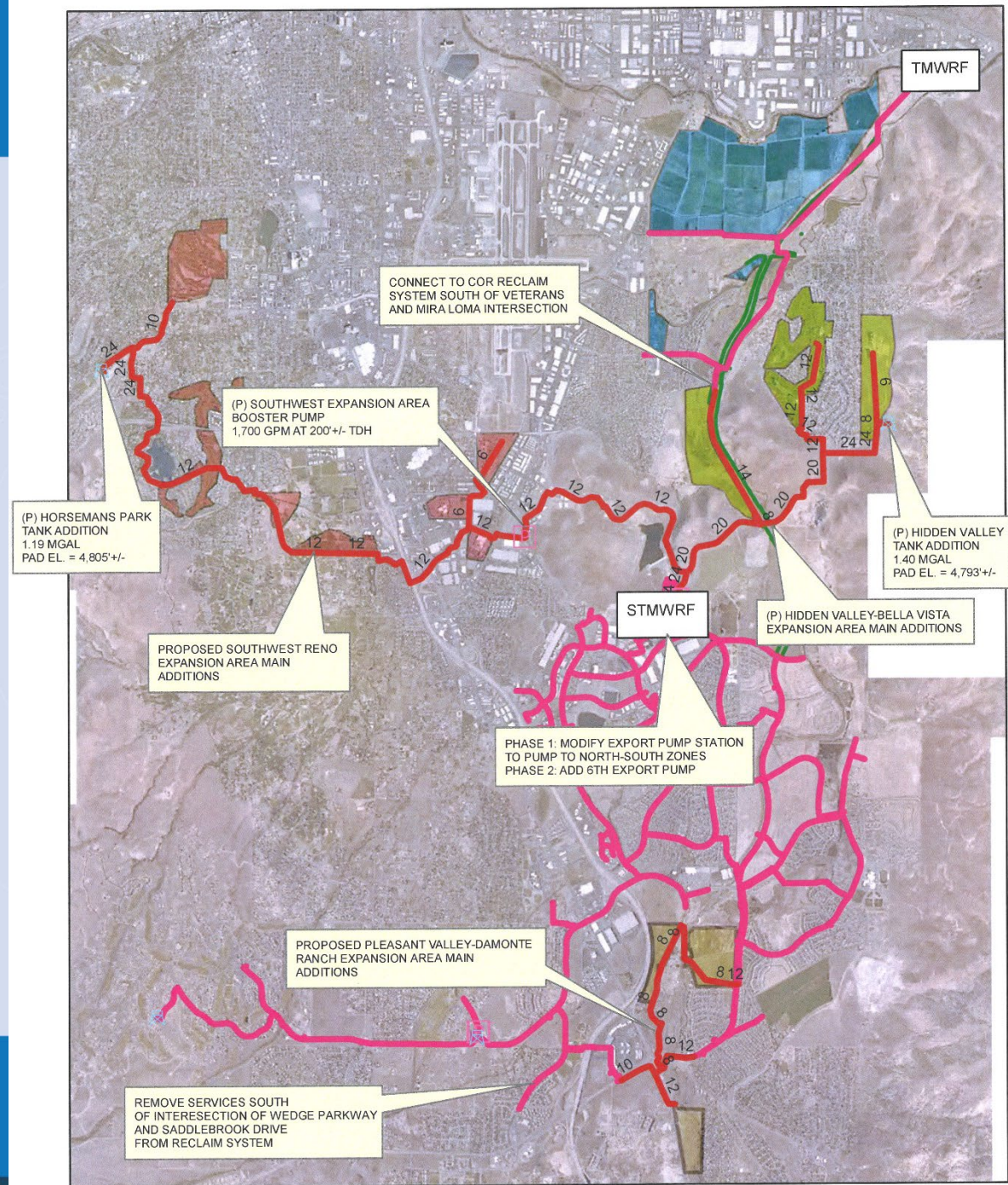
Focuses On Core Values

- Beneficial Use
 - Increase Use of Reclaim Water to Reduce the Amount of Potable Water Use
- Sustainability
 - Maintaining and Expanding Long-Term Reclaimed Water Customers
- Resiliency
 - Investing in a Drought Resistant Resource to Preserve Potable Water
- Quality of Life
 - Parks, Schools, Green Belts, Golf Courses and Irrigated Areas
- Fit For Purpose
 - Matching Water Quality to the Use That is Appropriate to That Quality of Water



Current Studies

- Hidden Valley Regional Park
- Bella Vista Residential
- Hidden Valley Golf Course
- West Expansion
- Damonte Irrigation





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Possible Direction To Staff:

- Develop Resolution and Ordinance Change to;
 - Merge Business Area 11 (Reclaimed Water) and Business Area 12 (Sewer)
 - Incentivize Existing and New Reclaim Water Customers by Removing User Fees and Charges
- Continue to Produce High-Quality Class A Reclaim Water from the STMWRF
- Educate/Assist Existing Developed Areas to Convert to Reclaim Water
- Continue to Work with State of Nevada/Washoe County Health Department –Regulation Updates.
- Continue to work with the UNR Water Innovation Institute

Next Steps

