Regional Effluent Management Planning

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Water Reclamation Facility Locations and Service Areas

CSWRF-Cold Springs Water Reclamation Facility
(Washoe County)

LVWRF-Lemmon Valley Water Reclamation Facility
(Washoe County)

RSWRF-Reno-Stead Water Reclamation Facility
(City of Reno)

TMWRF-Truckee Meadows Water Reclamation Facility
(City of Reno & City of Sparks)

STMWRF-South Truckee Meadows Water Reclamation Facility
(Washoe County)
Existing Flows and Dwelling Unit Density

Wastewater Generation by Treatment Facility (MGD)
2015 Average Daily Flows

Dwelling Unit Density
DU per sq mile
- 0
- 1 - 250
- 251 - 500
- 501 - 1,000
- 1,001 - 2,000
- 2,001 - 4,000
- 4,001 - 6,000
- 6,001 - 8,000
- 8,001 - 9,577

0.30
0.20
1.40
3.10
26.30

CSWRF  LVWRF  RSWRF  STMWRF  TMWRF
Classic Scenario and Projected Flows

Wastewater Generation by Treatment Facility (MGD)

1 "Classic" Growth Areas

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<tr>
<th>SumTotalUnits</th>
<th>CSWRF</th>
<th>LVWRF</th>
<th>RSWRF</th>
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Wastewater Generation by Treatment Facility (MGD)

4 "Infill" Growth Areas

- SumTotalUnits
  - 1 - 15
  - 16 - 40
  - 41 - 75
  - 76 - 125
  - 126 - 200
  - 201 - 325
  - 326 - 1100

Infill Scenario and Projected Flows

TMWRF: 5.67 MGD
CSWRF: 0.47 MGD
LVWRF: 0.33 MGD
RSWRF: 1.09 MGD
STMWRF: 0.00 MGD
Regional Effluent Management Planning

- Facility planning typically includes effluent management within jurisdiction’s capacity

- Regional effluent management team started meeting in 2014 to discuss effluent management from a regional perspective

- Team has recommended
  - UNR Nevada Water Innovation Institute
    - Advanced Water Treatment Technology Demonstration Project
    - Regional Effluent Management Planning Guidance Document
Regional Effluent Management Planning

Regional Effluent Management Planning Guidance Document

- Develop Goals
  - Facilities
  - Entities
  - Region

- Provide a general discussion of the management methods currently being used by local facilities
  - Surface Water Discharge
  - Non-potable Reuse
  - Rapid Infiltration Basins

- Discuss potential future management options, such as:
  - Category A+ Reclaimed Water / Indirect Potable Reuse
  - Export
Regional Effluent Management Planning

An Iterative Process

- Support Resources
- Effluent Mgmt. Team
- Workshops
- Public Stakeholders
- Water Quality & Resource Management
- Future Management Options
- Financial Issues

Western Regional Water Commission
Regional Effluent Management Planning

John Enloe, P.E., TMWA Natural Resources Director
Rick Warner, P.E., Washoe County Senior Engineer
Wastewater Generation

Wastewater Generation by Treatment Facility (MGD)

Wastewater Treatment Zones

Forecasted flows by Scenario

<table>
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<tr>
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<th>Scenario 3</th>
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