

Washoe County Regional Water Balance

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Washoe County Comprehensive Regional Water Management Plan

On April 9, 2010, the Western Regional Water Commission approved a finding that the forecasted population can be supported by the sustainable water resources.

The Washoe County Consensus Forecast is adequate for 20-year, county-wide population projections, but it is not adequate for facility planning.

Regional Water Balance

Estimates of future water demands and wastewater flows consistent with the Consensus Forecast population projection were prepared:

- Disaggregated for five primary service areas within the region
- The intent of this projection is to more closely approximate water and wastewater infrastructure needs by service provider.

Regional Water Balance Flow Diagram

A Regional Water Balance Flow Diagram has also been developed, which is a graphical representation of existing and future conditions

- Water supply
- Wastewater treatment
- Reclaimed water
- Wastewater disposal requirements

Regional Water Balance Flow Diagram

- How much potable water is used today?
- Once used, where does it go for treatment?
- Following treatment, how much of the water is reused, and where is the balance disposed?
- Are there existing or future imbalances in water supply, wastewater disposal or reclaimed water usage?
- Are there planning areas with adequate capacity to address imbalances?

Regional Water Balance – Water Supply Findings

Overall, the region has available water resources to meet the projected increase in demand.

- The Truckee Meadows, Sparks and South Truckee Meadows planning areas do not have a water supply imbalance.
- Water resource management practices by TMWA and WCDWR limit groundwater pumping and surface water resource utilization to sustainable levels.

Regional Water Balance – Water Supply Findings

In Cold Springs, Lemmon Valley and Spanish Springs Valley, there are water supply imbalances that will need to be addressed over the long term.

- The combined demand from domestic wells and permitted municipal groundwater pumping exceeds the sustainable yield of the basins.
- This is an issue that affects both existing and future water users, and exists under both current and projected 2030 conditions.

Regional Water Balance – Wastewater Findings

In the Central Truckee Meadows, Sparks and Spanish Springs planning areas, discharge to the Truckee River through the TMWRF is limited by:

- Total maximum daily load for N, P, TDS
- 7,700 af of additional disposal capacity will be required

South Truckee Meadows Planning Area

- 5,700 af of additional disposal capacity will be required

Water Management Options

Regionalization of both water and reclaimed water systems

Conjunctive use of all water supplies, including surface water, groundwater and reclaimed water, to augment capacity from areas of surplus to areas of need

Reclaimed water is a primary water resource that can be used to offset surface water and groundwater demands

- Expanded irrigation, industrial uses
- Groundwater recharge
- Indirect potable reuse