2016 Comprehensive Regional Water Management Plan

Western Regional Water Commission

March 15, 2017

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Status Report

- March 1, 2017 NNWPC public hearing - recommended plan for approval and adoption to the WRWC

- On or before March 20, 2017 Begin 30-day public inspection period

- March 30, 2017 Public Workshop

- April 18, 2017 Complete 30-day public inspection period

- April 19, 2017 WRWC public hearing for plan adoption
Regional Water Plan Outline

Plan chapters developed to address WRWC Act required elements

Executive Summary
Introduction
1. Water Planning Policies and Criteria
2. Water Resources
3. Water Purveyors and Other Water Providers
4. Wastewater and Watershed-Based Water Quality Planning
5. Flood Management and Storm Water Drainage
6. Population Forecast and Projections of Water Demand, Peak Day
   Requirements and Wastewater Flow
7. Water Conservation Plan – Efficient Use of Water
8. Cost and Financing
9. Issues and Action Plan
Appendices
Policy 1.1.c: Reduction in the use of Truckee River Water resulting from DMPs
Truckee River water saved as a result of DMPs shall be managed consistent with agreements among local entities and parties of interest to the Truckee River.

Policy 1.2.a: Conjunctive Management of Surface Water and Groundwater Supplies to Withstand an 8-year Drought Cycle
For planning purposes, the conjunctive management of TROA-reliant surface and ground water supplies for municipal and industrial use in the greater Truckee Meadows area shall be designed to withstand the worst drought cycle of record, that being the drought of 1987-1994.

Policy 1.2.h: New Water Purveyors
For those areas outside of any hydrographic basin containing TMWA owned water delivery systems, new private water systems must be under the Public Utilities Commission of Nevada (“PUCN”).
Chapter 2  Water Resources

2.1 Sources of Water  For the purposes of regional water resources planning, water sources are grouped into three general categories: surface water, groundwater and reclaimed water. It should be noted that TMWA further delineates water resources as those served inside and outside the Truckee Resource Area (TRA). The TRA refers to areas whose primary water supply is the Truckee River which is used and managed in conjunction with groundwater.

2.2 Factors Affecting Water Resource Sustainability
- Updated discussion of TROA
- Updated discussion of climate change
- Expanded discussion on historical drought
- Updated and expanded discussion of TMWA aquifer storage and recovery program
- Expanded discussion of reclaimed water as a resource
- Updated discussion of Septic Nitrate Study for Washoe County
Key Chapter Updates

Chapter 3  Water Purveyors and other Water Providers

3.1 Public Water Purveyors

- Updated water purveyors discussion to reflect consolidation of Washoe County water utility and STMGID with TMWA
- Updated list of public water systems in Washoe County (Table 3-6)
- Updated reclaimed water system distribution maps for Reno, Sparks and Washoe County
Key Chapter Updates

Chapter 4  Wastewater and Watershed-Based Water Quality Planning

4.1 Wastewater Service Providers
• Updated information related to wastewater service provider service areas.

4.2 Water Reclamation Facilities
• Updated wastewater treatment facility capacity information (Table 4-1)

4.3 Regional Effluent Management Planning
• Updated section to include description of the following efforts:
  1. Enhanced Nitrogen Removal Planning Study
  2. Water balance scenario evaluation using linear optimization programming
  3. Exceptional Quality Reclaimed Water Feasibility Study
  4. Expert Panel
  5. Geotechnical Investigations
Key Chapter Updates

Chapter 4  Wastewater and Watershed-Based Water Quality Planning (continued)

4.5 Septic Systems
   • Update on the *Septic Nitrate Baseline Data and Risk Assessment Study, Phase II: In-depth Analysis of Prioritized Study Areas, Creation of Baseline Data Set and Risk Assessment*

4.6.3 PLPT Water Quality Control Plan, Triennial Review and Water Quality Standards Revisions
   • Revised section to include discussions of:
     1. PLPT Water Quality Control Plan
     2. Triennial Review and Water Quality Standards Revisions
     3. Potential Implications of Water Quality Standards Outcomes
Key Chapter Updates

Chapter 4  Wastewater and Watershed-Based Water Quality Planning (continued)

4.6.4 Truckee Meadows Regional Storm Water Quality Management Program

The following sections were updated:
- Storm Water NPDES Permits Pertinent to the Truckee Meadows and Nevada
- Program Schedule and Annual Reporting Requirements
- Storm Water Discharge Monitoring
- Municipal Operations Program
- Structural Controls
- Storm Water Program Needs
- Truckee River Water Quality Monitoring Data
- Watershed Assessments for Tributaries to the Truckee River
Chapter 5 Flood Management and Storm Water Drainage

5.6 Truckee River Flood Management Project
   • Updated to include Truckee River Flood Management Authority
   • Updated Table 5-2 Description of Flood Project Elements

5.7 Local Government Flood Control and Storm Water Drainage Programs
   • Flood Plain Storage and Critical Flood Pools moved to this section
   • Brief paragraph on irrigation ditches added to Drainage Facilities section
Key Chapter Updates

Chapter 6 Population Forecast and Projections of Water Demand, Peak Day Requirements and Wastewater Flow

6.1 Updated Population Forecast – Water Resource availability comparison

6.2 Updated water demand and wastewater flow projections

6.3 Updated Water Balance Model
2035 Regional Water Balance Map
Key Chapter Updates

Chapter 7 Water Conservation Plan – Efficient Use of Water

7.3 Measuring Progress
- Updated Figure 7-1: Average Monthly Residential Water Use and Total Production (2003 to 2014)
- Table 7-3: Shift in Lot Sizes

7.5 Ongoing Measures to Conserve Water
- 7.5.3 Water Meters - Remove Policy 1.1.e Water Meters
- 7.5.8 Water Usage Review Program (Water Audits)
  - Updated Table 7-4: TMWA Customer Water Audits 2003 - 2014
- 7.5.11 New Irrigation Technology
  - Updated Washoe ET Program progress
Chapter 8 Cost and Financing

Updated entire chapter using current CIP and long-range cost estimates for major facilities provided by Reno, Sparks, Washoe County, SVGID and TMWA
Key Chapter Updates

Chapter 9 Issues and Action Plan

Table 9-1 WRWC / NNWPC Proposed Action Plan

Retain actions consistent with current WRWC / NNWPC direction
- Cloud Seeding
- TMWA Resource Plan
- Pursue Integrated WRF Solutions
- Monitor Growth Projections
- Water and Wastewater GIS data development

Add new actions consistent with current WRWC / NNWPC direction
- Effluent Management Strategy Development
- Expanded Uses of Reclaimed Water

Delete actions that have been completed or are no longer necessary
Questions?

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