

Northern Nevada Water Planning Commission

STAFF REPORT

DATE: October 26, 2016
TO: Chairman and Members,
FROM: Chris Wessel, WRWC Water Management Planner
Jim Smitherman, WRWC Program Manager
SUBJECT: Discussion and possible direction to staff regarding review and possible revisions to the “Issues and Action Plan” chapter for inclusion in the 2016 Regional Water Management Plan (“RWMP”) update.

SUMMARY

The last chapter for review as part of the 2016 RWMP update is Chapter 9 -- Issues and Action Plan. This chapter identifies current and future issues which will likely require action during the 5-year planning horizon. The following are the action items identified in the 2011-2030 RWMP which are presented for your review. Staff has conducted a cursory review and our proposed changes are identified as red-line edits. Elements highlighted in gray need a review and status update by the appropriate entity. Staff is looking for input and comments from the Commission as to additions, deletions and/or modifications to the proposed action items identified below.

2011-2030 Proposed Action Items

9.1 Municipal Water Resources

9.1.1 Central Truckee Meadows

~~9.1.1.A Negotiated Settlement (TROA) – The signatory parties are in the process of completing the necessary steps to implement TROA.~~

9.1.1.B Drought Standard – The NNWPC continues to recommend the use of the 9-Year Drought Cycle, and revise it if necessary during the next update of this Plan.

9.1.1.C Water Supply Development – TMWA ~~and Washoe County~~ will continue to pursue water supply projects that are economically feasible and that can be implemented to ensure water supplies are available, as future demands require.

~~9.1.1.D Participate in Bureau of Reclamation (“BOR”) climate change study for the Truckee River watershed expected to commence in 2011.~~

9.1.1.E Participate in the Desert Research Institute (“DRI”) cloud seeding program for the Lake Tahoe basin and the Truckee River basin, and coordinate with DRI’s efforts to continue the cloud seeding program statewide **and reinstate state funding.**

9.1.1.F Adopt TMWA’s *2035 Water Resource Plan* into the *2011 Regional Water Plan*.

9.1.2 South Truckee Meadows

9.1.2.A Develop tributary creek water for municipal supply by way of local treatment and continue options for the tributary creek water exchange program.

9.1.2.B Support TMWA's development of a plan to mitigate future groundwater level declines and potential impacts to domestic wells.

9.1.3 Stead / Lemmon Valley

9.1.3.A WCDWR and TMWA should develop a facility and financing plan for the required distribution system infrastructure in Lemmon Valley, including improvements necessary to integrate and utilize the Fish Springs water supplies for existing and future customers.

9.1.4 Cold Springs

9.1.4.A A facility plan needs to be completed for the build-out of approved land uses in the Cold Springs portion of the TMSA, including conjunctive use and system integration options with Utilities Inc.

9.1.4.B A comprehensive water resource plan needs to be prepared for Cold Springs and portions of the Long Valley hydrographic basin to estimate the perennial yield for the Water Baseline Table and the 2035 Regional Water Balance.

9.1.5 Spanish Springs

9.1.5.A Develop a long-term groundwater management strategy. Stakeholders include TMWA, the Sky Ranch Water Company, City of Sparks, domestic well owners, the Red Hawk Golf Course, Granite, Sha-Neva and Donovan quarry owners and other water rights owners.

9.1.5.B Monitor groundwater pumping and aquifer water levels to avoid long-term over-pumping. Use Truckee River water resources to help support demand and mitigate water quality issues.

9.1.5.C Continue implementing phased conversion of areas with high densities of septic tanks to community sewer system as funding is made available.

~~9.1.6 Lower Truckee River~~

~~9.1.6.A Update the Water and Wastewater Facility Plans for East Truckee Corridor that includes analysis of the current development proposals and approved development potential within the Truckee Meadows Service Areas boundary.~~

~~9.1.6.B Coordination with Storey County regarding existing commitments and future potential demands for the entire Tracy Segment hydrographic basin.~~

~~9.1.6.C Development of a position statement regarding construction of surface water treatment facilities in the Lower Truckee River.~~

9.1.7 Groundwater Resource Development and Impact to Domestic Wells

9.1.7.A TMWA is continuing with the programmatic mitigation program to satisfy domestic well mitigation issues

9.2 Water Conservation

9.2.A Continued implementation of conservation measures to achieve Base Case conservation.

9.3 Wastewater Management

9.3.A Continue support for proposed changes to State reclaimed water regulations to include criteria for exceptional quality reclaimed water and provide for aquifer recharge and indirect potable reuse; and if approved, provide support for the development of implementation guidelines.

9.3.B Continue development of near-term regional manage effluent strategies and a framework for an updated regional effluent management master plan.

9.3.C Continue collaboration with regional and national experts to study and develop advanced treatment technologies and undertake geotechnical investigations consistent with State regulations and regional effluent management strategies.

9.3.1 Central Truckee Meadows

~~9.3.1.A Continue Third Party review of the 1994 nutrient TMDLs and applicable WQS in coordination with state and federal regulatory authorities, and the PLPT's water quality and quantity goals, to demonstrate that continued discharge to the Truckee River from TMWRF is an environmentally sound practice.~~

~~9.3.1.B Continue technical, modeling and legal work to support the TMDL and WQS review and discussions with NDEP and EPA.~~

~~9.3.1.C Continue working with the Third Parties to facilitate public outreach, in consultation with NDEP and EPA, and obtain input from affected stakeholders at key decision points in the TMDL and WQS review and revision process.~~

9.3.1.A Continue development of near-term regional strategies to manage effluent and reduce nitrogen loading to the Truckee River, which may include expanded distribution of effluent outside the TMSA, and expanded uses which may include aquifer recharge and indirect potable reuse.

9.3.1. B Pursue connection of additional reclaimed water users to the existing systems in Sparks and Reno, consistent with regional water quality and water rights considerations, and continue investigating the feasibility of expanded uses of reclaimed water.

9.3.1. C Continue evaluating the merits of regional integrated solutions between TMWRF and STMWRF for wastewater treatment, and effluent reuse and disposal of wastewater.

9.3.2 South Truckee Meadows

9.3.2.A Actively pursue a new reclaimed water strategy to continually balance the increasing supply with available storage capacity and demand. Alternative reuse methods should be explored in detail, in coordination with NDEP, such as reclaimed water aquifer recharge storage and recovery ("ASR") and cooling water for energy generation facilities.

9.3.2.B In regard to the potential regional implications of reclaimed water aquifer recharge ASR and indirect potable reuse, it is recommended that the Reno-Stead ozone-biological activated carbon ("BAC") treatment pilot plant feasibility evaluation be continued at STMWRF to more fully optimize the technology.

9.3.2.C As discussed in Section 9.3.1, continue evaluating the merits of regional integrated solutions between TMWRF and STMWRF for wastewater treatment, effluent reuse and disposal of wastewater, including funding considerations.

9.3.3 Stead / Lemmon Valley

9.3.3.A Continue to evaluate the merits of regional integrated solutions between RSWRF and CSWRF for **wastewater** treatment, and **reuse and** disposal of **effluentwastewater**, including funding considerations.

9.3.3.B Continue to work with NDEP on proposed **amendments to the reclaimed water** regulations, including additional groundwater modeling assessments of aquifer storage and recovery capacity for long-term viability, and establishing appropriate water quality standards for the protection of water resources, public health and the environment.

9.3.4 Cold Springs

9.3.4.A Continue to evaluate the merits of regional integrated solutions between CSWRF and RSWRF for **wastewater** treatment, and **reuse and** disposal of **effluent**, including funding considerations.

9.3.4.B Update and refine the existing **Washoe County Utilities (“WCU”)** groundwater model for Cold Springs to address interrelated groundwater, surface water and wastewater issues.

9.3.5 Lower Truckee River

9.3.5.A As this area of Sparks and Storey County continues to grow, it will be important to monitor groundwater and surface water quality to check for non-point source pollutants entering the Truckee River.

9.3.5.B Revisit discussions among Washoe County, PLPT, and the City of Fernley to seek an area-wide water and wastewater strategy for lower Truckee River users.

9.3.6 Septic Systems and Water Quality

9.3.6.A **Continue to provide guidance as needed to septic system and domestic well owners on septic system maintenance, and how to manage/mitigate domestic well water with elevated levels of nitrate.**

9.4 Truckee Meadows NPDES Storm Water Discharge Permit

9.4.A Continued SWPCC communication with NDEP is necessary **to address any changes/updates to the NPDES permit**

9.4.B **Support the update of the Watershed Management Plan, and State approval, such that it can be used to apply for 319h grant funding for future watershed projects.**

9.5 Integrated Use of Water Rights

9.5.A Continue the implementation of *TROA* and related agreements. Compare the water demand and water right recovery estimates to future conditions imposed by *TROA* and related agreements.

9.5.B Continue the water rights recovery program to convert inactive Truckee River water rights to beneficial use and update the water right status and demand projections regularly.

9.5.C **Continue ~~Finalize and~~ implementing recommendations developed from the potential consolidated management of TMWA and WCDWR water rights and water resources.**

9.5.D Continue the analysis and development of non-structural measures to improve Truckee River water quality, enable increased TMWRF discharges, and ensure the future sustainability of the river.

9.5.E Quantify groundwater and surface water resources and determine the feasibility of conjunctive use or other programs, including but not limited to expanded recharge projects, use of Fish Springs Ranch water supplies, and conversion of tributary water rights to M&I water supply and other beneficial uses.

9.5.F Develop cooperative management strategies among local governments, reclaimed water providers and water purveyors that maximize the benefits of available reclaimed water resources.

9.5.G Monitor existing and future water demand and planning area growth projections, and develop plans to resolve any major discrepancies in consideration of available water resources and geographic constraints.

9.6 Water Resources and Land Use Planning

9.6.A Continue working with TMRPA staff to strengthen appropriate linkages between the *Regional Plan* and the *Regional Water Plan*

9.6.B Review areas within the TMSA boundary for gaps in facility planning and develop a plan to respond to changes in land use and the TMSA that affect current facility plans

9.6.C **Continue** to coordinate with other entities on the development of a GIS parcel based tool that can be used to estimate potential water demands and wastewater flows based on approved land uses

9.6.D Coordinate with local land use planning agencies to address rural groundwater basin imbalances

9.7 Local Government Drainage Programs

9.7.A Local government public works departments and the **Truckee River Flood Management Authority** are expected to discuss and reach consensus concerning funding and other issues involving local drainage programs and the Flood Project.

9.8 Regional Flood Plain Management and Flood Control

~~9.8.A The parties to the Cooperative Agreement are expected to resolve issues and complete the JPA negotiations.~~

9.8.B Issues regarding flood plain storage in Zone boundaries need to be addressed and ordinances to address Zones 3 and 4 will be needed.

9.8.C A Flood Plain Management Plan will need to be developed and submitted to the ACOE.

9.8.D Continue development of a regional hydrologic model.

RECOMMENDATION

Staff recommends that the Northern Nevada Water Planning Commission ("NNWPC") accept the report and provide direction to staff regarding any of the proposed action items.

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