

Northern Nevada Water Planning Commission

STAFF REPORT

DATE: December 1, 2016
TO: Chairman and Members, Northern Nevada Water Planning Commission
FROM: Jim Smitherman, Water Resources 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 with comments received to date, which are identified as red-line edits. Staff is seeking additional comments from the Commission as to additions, deletions and/or modifications to the proposed action items identified below.

2016-2035 Proposed Action Items

9.1 Municipal Water Resources

9.1.A. Coordinate with TMWA on the possible development of a policy regarding the development of new water systems, expansion of existing water systems.

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.AB Drought Standard – The NNWPC continues to recommend the use of the 98-Year Drought Cycle, from 1987-1994, for consistency with TROA and TMWA planning, and review ~~se as it if~~ necessary during the next update of this Plan.^[EJ1]

9.1.1.B.C Water Supply Development – ~~TMWA and Washoe County will e~~Continue to pursue investigate sustainable water supply projects that are socially, economically and environmentally 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.~~^[EJ2]

9.1.1.EC. 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 support reinstatement of state funding.

9.1.1.FD. Adopt TMWA’s 2016-2035 Water Resource Plan into the 2016~~4~~ Regional Water Plan.

9.1.2 South Truckee Meadows

~~9.1.2.A. Develop tributary creek water for municipal supply by way of the Mt Rose Water Treatment Plant, local treatment and continue options for the tributary creek water exchange program and investigate other options to improve the beneficial uses of the tributary creek resources.~~

~~9.1.2.B. Support TMWA's development of a plan-Plan for Groundwater Sustainability on the Mt. Rose Fan 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. [EJ3]~~
No actions recommended?

9.1.4 Cold Springs

~~9.1.4.A. Develop Aa 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. [EJ4]~~

~~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 for conjunctive use and mitigation of water quality issues. Support TMWA's pilot water treatment efforts for removal of nitrate and arsenic.~~

~~9.1.5.B.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 Tracy Segment (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.A.B Coordinate with Storey County regarding existing commitments and future potential demands for the entire Tracy Segment hydrographic basin. [EJ5]~~

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

9.1.7 Truckee Canyon (Verdi)

9.1.7.A. Coordinate with public and private water purveyors and developers regarding water resources, existing commitments and future potential demands for the Truckee Canyon hydrographic basin.

9.1.78. Groundwater Resource Development and Impact to Domestic Wells

9.1.78.A. Support expansion of TMWA's Truckee River system to reach areas such as Mt. Rose and Verdi, to allow for conjunctive use. TMWA's aquifer storage and recovery program provides secondary benefits to domestic wells locally, such as in Lemmon Valley. Indirect potable recharge may provide future benefits.

9.1.8.B Support TMWA's ~~development of a plan~~ Plan for Groundwater Sustainability on the Mt. Rose Fan to mitigate future groundwater level declines and potential impacts to domestic wells.

9.2 Water Conservation

~~9.2.A Revise Continued implementation of conservation measures to achieve "Base Case" | [EJ6] conservation for consistency with the TMWA 2035 Water Resources Plan, Chapter 5, which is tied to drought, Floriston Rates and TROA. [EJ7]~~

9.2.B Support and participate in the Water For The Seasons program, led by TMWA, which investigates climate variability and potential water supply risks.

9.2.C. Continue long-term regional precipitation gauge monitoring and data analysis.

9.3 Wastewater Management

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

9.3.B Continue development of near-term regional ~~[LPS]~~ effluent management 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.BD 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.CE Continue evaluating the merits of regional integrated solutions between TMWRF and STMWRF for the 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") 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 the 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 the wastewater treatment, and reuse and disposal of wastewater, including funding considerations.

9.3.3.B Continue to work with NDEP on proposed effluent ASR regulations reclaimed water groundwater augmentation feasibility/demonstration efforts, 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 the treatment and disposal of wastewater, including funding considerations.

9.3.4.B Update and refine the existing WCDWR WCU [LP9] groundwater model for Cold Springs to address interrelated groundwater, surface water and wastewater issues.

9.3.5 Tracy Segment (Lower Truckee River)

9.3.5.A As this area of Washoe County 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 groundwater and the Truckee River.

9.3.5.B Remain open to visit 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 domestic well owners on 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 such that it can be used in the support of applying for 319h Grant funding in support of 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 Finalize and implement recommendations developed from the potential consolidated management of TMWA and WCDWR water rights and water resources.~~

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

9.5.~~FG~~ 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 TMRPA and 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 Flood Project are expected to discuss and reach consensus concerning funding and other issues involving local drainage programs and the Flood Project.

9.7.B Discuss with local government public works departments the status of the Truckee Meadows Regional Drainage Design Manual and the possible need for developing an update.

9.8 Regional Flood Plain Management and Flood Control

9.8.A Support the TRFMA's efforts to develop funding for the flood project and incorporate cost, financing and rate information, when available, into the Regional Water Plan. ~~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 AGOE.~~

~~9.8.D Continue development of a regional hydrologic model.~~

9.8 Groundwater Quality Protection and Remediation

9.9.A Support the efforts of the Central Truckee Meadows Remediation District and others to remediate solvent and/or fuel sites in the Planning Area

9.9.B Participate in Source Water Protection Program activities sponsored by the State of Nevada

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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