



## TRUCKEE MEADOWS WATER AUTHORITY Board of Directors – Special Meeting

### AGENDA

Thursday, August 15, 2019 at 9:00 a.m.

Truckee Meadows Water Authority, 1355 Capital Blvd, Reno, NV

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#### Board Members

Chair Vaughn Hartung  
Member Neoma Jardon  
Member Jenny Brekhus  
Member Paul Anderson

Vice Chair Kristopher Dahir  
Member Jeanne Herman  
Member Naomi Duerr

#### NOTES:

1. The announcement of this meeting has been posted at the following locations: Truckee Meadows Water Authority (1355 Capital Blvd., Reno), Reno City Hall (1 E. First St., Reno), Sparks City Hall (431 Prater Way, Sparks), Sparks Justice Court (1675 E. Prater Way, Sparks), Washoe County Courthouse (75 Court St., Reno), Washoe County Central Library (301 South Center St., Reno), Washoe County Administration (1001 East Ninth St., Reno), at <http://www.tmwa.com>, and State of Nevada Public Notice Website, <https://notice.nv.gov/>.
2. In accordance with NRS 241.020, this agenda closes three working days prior to the meeting. We are pleased to make reasonable accommodations for persons who are disabled and wish to attend meetings. If you require special arrangements for the meeting, please call (775) 834-8002 at least 24 hours before the meeting date.
3. Staff reports and supporting material for the meeting are available at TMWA and on the TMWA website at <http://www.tmwa.com/meeting/> or you can contact Sonia Folsom at (775) 834-8002. Supporting material is made available to the general public in accordance with NRS 241.020(6).
4. The Board may elect to combine agenda items, consider agenda items out of order, remove agenda items, or delay discussion on agenda items. Arrive at the meeting at the posted time to hear item(s) of interest.
5. Asterisks (\*) denote non-action items.
6. Public comment is limited to three minutes and is allowed during the public comment periods. The public may sign-up to speak during the public comment period or on a specific agenda item by completing a "Request to Speak" card and submitting it to the clerk. In addition to the public comment periods, the Chairman has the discretion to allow public comment on any agenda item, including any item on which action is to be taken.
7. In the event the Chairman and Vice-Chairman are absent, the remaining Board members may elect a temporary presiding officer to preside over the meeting until the Chairman or Vice-Chairman are present (**Standing Item of Possible Action**).
8. Notice of possible quorum of Western Regional Water Commission: Because several members of the Truckee Meadows Water Authority Board of Directors are also Trustees of the Western Regional Water Commission, it is possible that a quorum of the Western Regional Water Commission may be present, however, such members will not deliberate or take action at this meeting in their capacity as Trustees of the Western Regional Water Commission.

1. Roll call\*
2. Pledge of allegiance\*
3. Public comment — limited to no more than three minutes per speaker\*
4. Approval of the agenda (**For Possible Action**)

5. Presentation on current status of recommended actions from the 2016-2035 Water Resource Plan — Kara Steeland, John Enloe, and John Zimmerman\*
6. Discussion and possible action, and direction to staff regarding the proposed policies and recommended management strategies section of the 2020-2040 Water Resource Plan — Kara Steeland, John Enloe, and John Zimmerman (**For Possible Action**)
7. Public comment — limited to no more than three minutes per speaker\*
8. Board comments and requests for future agenda items\*
9. Adjournment (**For Possible Action**)

**AGENDA ITEM #5**

## **SUMMARY OF EXISTING RECOMMENDED ACTIONS FROM 2016-2035 WRP**

### **Overview**

- This document summarizes the current status of the existing recommended actions in TMWA's 2016-2035 WRP. Please refer to Volume I: Abstract of the 2016-2035 WRP for a full description of these recommended actions.

### **Completed Recommended Actions from the 2016-2035 WRP**

- *Recommendation 1.2. Consolidation of TMWA, WDWR, and STMGID Water Operations*
  - Completed December 31, 2014.
- *Recommendation 1.4. Truckee River Operating Agreement Implementation*
  - Implemented December 1, 2015.
- *Recommendation 1.5. Donner Lake Acquisition*
  - Acquired February 2016.

### **Progress on Other Recommended Actions from the 2016-2035 WRP**

- *Recommendation 1.1. 2016-2035 Water Resource Plan*
  - TMWA has continued monitoring, reviewing, and revising water management strategies through water resource planning efforts every five years.
- *Recommendation 1.3. TMWA Planning Area*
  - TMWA is continually assessing the role and extent of TMWA's water resource planning area based on service area expansion.
- *Recommendation 2.1. Sustainability of Source Water Supplies – Climate Variability*
  - TMWA is working with Precision Water Resources Engineering to use state-of-the-art climate change modeling to assess the impacts of climate change and future hydrologic variability on TMWA's water resources and supply operations for the 2020-2040 WRP.
- *Recommendation 2.2. Sustainability of Source Water Supplies – Surface Water Contamination*
  - TMWA is working with NDEP to create an Integrated Source Water Protection Plan for Washoe County to help prevent future contamination and maintain source water quality for surface water and groundwater resources in the region.
- *Recommendation 2.3. Sustainability of Source Water Supplies – Groundwater Contamination*
  - TMWA has continued to collaborate with CTMRD to address PCE contamination. TMWA is also working on innovative strategies to address other sources of groundwater contamination, such as a nitrate treatment facility in Spanish Springs. Additionally, the Integrated Source Water Protection Plan will designate buffer zones

around TMWA's wellheads to improve the review process to help prevent future potentially contaminating uses.

- *Recommendation 2.4. Sustainability of Source Water Supplies – Groundwater Management*
  - TMWA strategically pumps its production wells and continues to provide surface water to areas previously only served by groundwater (e.g. Mt. Rose Fan). Using passive and active groundwater recharge, water levels have improved throughout the region.
- *Recommendation 2.5. Sustainability of Source Water Supplies – Aquifer Storage & Recovery*
  - TMWA continues to apply for ASR permits to expand the program and continues to equip existing production wells that are permitted for recharge.
- *Recommendation 3.1. Water Rights Availability*
  - TMWA has continued to accept the dedication of surface water rights in growth prone areas.
- *Recommendation 3.2. Current Water Resources*
  - TMWA has continued to accept water rights to meet future water demands pursuant to Rule 7.
- *Recommendation 3.3. Conjunctive Management of Water Resources*
  - TMWA has been monitoring its ability to meet current and future demands through the 1987-1994 drought period. Additionally, TMWA is completing further analyses for the 2020-2040 WRP to assess the impacts of climate change scenarios on future water supply.
- *Recommendation 4.1. Population Projection*
  - TMWA generates a population projection annually and accepts it as a reasonable estimate of future population growth for TMWA's service territory.
- *Recommendation 4.2. Water Demand Forecast*
  - TMWA accepts that its water demand projections are reasonable estimates for the future.
- *Recommendation 5.1. Water Demand Management*
  - TMWA is currently revising its existing Water Conservation Plan from the 2016-2035 WRP to meet new state requirements for drought contingency planning.
- *Recommendation 6.1. Future Water Resources*
  - TMWA is continuing to investigate potential future water supply projects, and those projects will be described in the updated WRP.

**AGENDA ITEM #6**

## **2020-2040 WATER RESOURCE PLAN POLICY DISCUSSION OVERVIEW**

### **Overview**

- This document summarizes the goals, objectives, and possible policies to discuss for TMWA's 2020-2040 Water Resource Plan.
- For reference, the outline for the 2020-2040 Water Resource Plan is attached.

### **2020-2040 WRP Goals**

- Ensure TMWA has adequate water resources to meet the community's needs over the next 20 years and beyond.
- Maintain community confidence in TMWA's planning process.
- Create innovative solutions to best manage water resources in the region.
- Determine recommended water resource management strategies and proposed policies to guide TMWA over the next five years.

### **2020-2040 WRP Objectives**

- Provide an overview of TMWA's current water resources and available water rights.
- Analyze alternative supply and demand scenarios to determine the resiliency of TMWA's resources.
- Assess potential climate change impacts on regional water supply and water demand.
- Describe TMWA's current water management and conservation strategies.
- Identify future water resource opportunities and management strategies.
- Provide opportunities for input from the public and Board throughout the planning process.

### **New Policies Enacted since Adoption of 2016-2035 WRP**

- Rate Stabilization Fund
  - Adopted by Board September 2018.
- Water Resource Sustainability Fee
  - Adopted by Board January 2019.

### **Potential Policies to Discuss for 2020-2040 WRP**

- Small Water System Acquisitions
- Strategic Water Rights Acquisitions
- Feasibility of using Category A+ Reclaimed Water

## **TMWA 2020-2040 Water Resources Plan Outline (August 2019)**

### **ES.Executive Summary**

#### **1. Introduction**

- 1.1 Plan Introduction
- 1.2 Plan Goals and Objectives
- 1.3 About TMWA
- 1.4 TMWA's Service Area
- 1.5 Plan Scope
- 1.6 Plan Update Process
- 1.7 Major Changes Since Previous WRPs
- 1.8 Summary

#### **2. Current Water Resources**

- 2.1 Surface Water Resources
  - 2.1.1 Truckee River Watershed and TROA
- 2.2 Groundwater Resources
  - 2.2.1 Production Wells
  - 2.2.2 Aquifer Storage and Recovery
- 2.3 Conjunctive Use
- 2.4 Reclaimed Water
- 2.5 Water Rights
  - 2.5.1 Available Water Rights
  - 2.5.2 Satisfying Conjunctive Use
  - 2.5.3 Competing Uses
  - 2.5.4 Rule 7
- 2.6 Summary

#### **3. Current and Future Planning Environment**

- 3.1 Droughts
- 3.2 Climate Change
- 3.3 Future Water Supply Scenarios
- 3.4 Future Water Demand Projections
- 3.5 Development and Growth in the Region
- 3.6 Water System Resiliency
- 3.7 Summary

#### **4. Conservation Strategies**

- 4.1 Water Conservation
- 4.2 Mitigating Drought
  - 4.2.1 Managing Water Loss
    - 4.2.1.1 Capital Improvement Program Projects
  - 4.2.2 Managing Water Demand
    - 4.2.2.1 Water Conservation and Outreach Program
    - 4.2.2.2 Water-Efficiency Codes



- 4.2.2.3 Water Pricing Structure
    - 4.2.2.4 Water Usage Review Program
    - 4.2.2.5 Water Watcher Program
    - 4.2.2.6 Landscape Retrofit Fund
  - 4.2.3 Measuring Effectiveness
- 4.3 Responding to Drought
  - 4.3.1 TMWA Drought Level Designation
  - 4.3.2 Demand Management During Drought Situations
  - 4.3.3 Measuring Effectiveness
- 4.4 Demand Management and Emergency Supply Conditions
- 4.5 Conservation and Water Rates
- 4.6 Summary

## **5. Future Water Resources**

- 5.1 Additional Groundwater Capacity
  - 5.1.1 New Well Development
  - 5.1.2 ASR Expansion
  - 5.1.3 Sparks Groundwater Treatment Plant
  - 5.1.4 Nitrate Treatment
  - 5.1.5 Longley Lane Water Treatment Plant
  - 5.1.6 Additional Fish Springs Ranch Water
- 5.2 Expansion of Water Conservation Program
- 5.3 Creek Water Resources
- 5.4 Reclaimed Water
- 5.5 Indirect Potable Reuse
- 5.6 Water Banking Projects
  - 5.6.1 Bedell Flat
  - 5.6.2 American Flat
- 5.7 Other Conceptual Resources
  - 5.7.1 Dry Valley
  - 5.7.2 Lower Smoke Creek
  - 5.7.3 Red Rock
  - 5.7.4 Sierra Valley
- 5.8 Summary

## **6. Protecting the Watershed and Environment**

- 6.1. Watershed Protection and Restoration Initiatives
  - 6.1.1. Truckee River Fund
  - 6.1.2. Preventing Large-Scale Wildfires in the Headwaters
  - 6.1.3. One Truckee River Management Plan
  - 6.1.4. Washoe County Integrated Source Water Protection Program
- 6.2. Sustainability
- 6.3. Summary

**7. Policy Recommendations and Management Actions**

- 7.1. Recommended Management Actions
- 7.2. Policy Recommendations

**A. Appendices**

## 2020-2040 WATER RESOURCE PLAN

### POLICY DISCUSSION: SMALL WATER SYSTEM ACQUISITION GUIDELINES

#### Overview

- This document provides information to aid the discussion for the creation of a policy framework that will guide TMWA's acquisition of small water systems in the region.

#### Existing Plan Language

There is existing plan language that relates to small water system development. The following are relevant sections from the City of Reno and Washoe County:

- **Reimagine Reno Master Plan Update**
  - Section 2.4C: Water Supply – “Support the efficient and reliable management of surface water and groundwater resources by:
    - Promoting TMWA efforts and directives to develop and manage water resources and provide water supply in accordance with its cooperating agreement;
    - Discouraging new and expanded private water purveyors; and
    - Encouraging new development served by a private water purveyor to design water systems in accordance with TMWA rules, regulations, and standards.”
- **Washoe County Ordinance 422** – Section 110.422.25 Water Delivery Facilities
  - “The development owner or property owner shall be required to:
    - Within those hydrographic basins which contain a TMWA owned and operated water delivery system:
      - Design and construct all water delivery facilities to TMWA standards and specifications, regardless of whether TMWA will provide water service to the development. The intent of this is to facilitate an orderly integration of water system facilities into the TMWA water delivery system in the future...”

#### Three Categories of Possible Acquisitions

1. Small water systems where growth will occur, and the system will need to expand to accommodate growth.
  - a. **Example:** West Reno Water Company – Acquisition by TMWA in 2019 will allow the growth-prone Verdi area access to Truckee River resources in addition to existing groundwater resources. As a result, the area will have a more secure long-term water supply.
2. Small water systems that want to get out of the business due to financial constraints, water quality issues, technical challenges, etc.
  - a. **Example:** River Belle Mobile Home Park – TMWA made them a commercial customer and received a \$500k loan from the state to make improvements for connection.

- b. **Example:** Rosemount Water Company – Rosemount Water Company provides spring water to 26 active connections in the Mt. Rose area. The system owner has informally approached TMWA.
- 3. Small water systems that are PUCN-regulated.
  - a. **Example:** Sky Ranch Utilities – A Great Basin Water Company (GBWC) owned and operated utility serving approximately 550 customers in Spanish Springs. GBWC has approached TMWA regarding wholesale water service as a possible option to mitigate increasing arsenic and nitrate concentrations in their water supply wells.

### **Key Issues for Discussion**

- TMWA is the regional water purveyor for the Truckee Meadows. As such:
  - 1. TMWA's priority is to provide water and facilities that meet all federal, state and local standards and regulatory requirements to all Washoe County, Reno, and Sparks residents served by TMWA.
  - 2. TMWA seeks to ensure the efficient use of water resources on a regional scale.
- Create guidelines for analyzing water systems and acquisition requirements. The following guidelines should be considered:
  - Describe overarching criteria for each category of acquisition but recognize the need for flexibility because each situation will be unique.
  - Each acquisition request should be evaluated on its own technical, financial and public benefit merits.
  - TMWA should work to ensure that there are no long-term costs to its existing rate payers due to acquisitions.
  - Acquisitions should be made in the public interest and should be conducted in a transparent manner.
  - Preferred method of acquisition would be for the smaller system to do improvements up to TMWA standards and dedicate all facilities to TMWA (at no cost to TMWA for the improvements) prior to TMWA acquisition.
    - **Example:** Verdi Business Park Water Cooperative – Verdi Business Park Water Cooperative brought most of its facilities up to TMWA's standards prior to turning the system over to TMWA. The conditions of the annexation agreement stated that the "Owner is responsible for all costs related to, and shall install and construct the off-site additions, improvements and modifications to the Authority's Water System Facilities necessary to complete the Annexation Facilities."
    - **Example:** West Reno Water Company – TMWA agreed to complete the majority of water system repairs and improvements and financed them through a purchase price reduction and fee on future development.
    - Note that acquisitions **may not** be required if it's more practical to provide a wholesale meter to the small water system (e.g. River Belle Mobile Home Park).

- An alternative option to acquisition by TMWA is the takeover of a small water system by the PUCN.
- Discuss what possible funding mechanisms could be used for water systems to complete improvements prior to TMWA acquisition.
- Consider how this policy might influence the actions of other small water systems, especially in the face of growth.

### **Recommended Criteria to Implement Policy**

- TMWA should not actively pursue acquiring smaller systems unless there is a public health or welfare concern and the smaller system approaches TMWA.
- TMWA should ensure the integrated, efficient use of regional water resources.
- TMWA should limit the amount of resources used to acquire systems.
  - Excessive use of staff time should require Board authorization.
  - Costs to TMWA for outside services should be limited (e.g. survey costs, pump tests, water quality sampling, etc.).
  - The entity being acquired should reimburse TMWA for one-half of all TMWA legal fees incurred to effectuate the transfer unless otherwise approved by the Board.

### **Public Water Systems**

There are over 70 public water systems in Washoe County. The lists below include some of the water systems currently operating near TMWA's retail service area.

<b>GID/Government Systems</b>	<b>Cooperatives</b>
<ul style="list-style-type: none"> <li>• Sun Valley GID (pop. 17,000)</li> <li>• Verdi Elementary School</li> </ul>	<ul style="list-style-type: none"> <li>• Parr-Reno Water Company</li> <li>• Verdi Mutual Water Company</li> <li>• Reno Technology Center</li> <li>• Silver Knolls Mutual Water Company (pop. 120)</li> <li>• Grandview Terrace</li> </ul>
<b>PUCN-Regulated Systems</b>	<b>Private (not PUCN Regulated)</b>
<ul style="list-style-type: none"> <li>• Cold Springs Utilities (pop. 7,962)</li> <li>• Sky Ranch Utilities (pop. 2,030)</li> <li>• Steamboat Springs Water Works (pop. 998)</li> <li>• Verdi Meadows Utility Company (pop. 510)</li> </ul>	<ul style="list-style-type: none"> <li>• River Belle Mobile Home Park</li> <li>• Crystal Restaurant Trailer Park</li> <li>• Sasquatch Tavern and Grill</li> <li>• Gold Ranch</li> <li>• River Pine</li> </ul>

# 2016-2035 WATER RESOURCE PLAN: EXISTING RECOMMENDED ACTIONS

*TMWA Board of Directors Workshop  
August 15, 2019*



# COMPLETED RECOMMENDED ACTIONS

- ***Recommendation 1.2. Consolidation of TMWA, WDWR, and STMGID Water Operations***
  - Completed December 31, 2014.
- ***Recommendation 1.4. Truckee River Operating Agreement Implementation***
  - Implemented December 1, 2015.
- ***Recommendation 1.5. Donner Lake Acquisition***
  - Acquired February 2016.

# PROGRESS ON OTHER RECOMMENDED ACTIONS

- ***Recommendation 1.1. 2016-2035 Water Resource Plan***
  - TMWA has continued monitoring, reviewing, and revising its water management strategies through water resource planning efforts every five years.
- ***Recommendation 1.3. TMWA Planning Area***
  - TMWA is continually assessing the role and extent of TMWA's water resource planning area based on service area expansion.



# PROGRESS ON OTHER RECOMMENDED ACTIONS

- ***Recommendation 2.1. Sustainability of Source Water Supplies – Climate Variability***
  - TMWA is working with Precision Water Resources Engineering to use state-of-the-art climate change modeling to assess the impacts of climate change and future hydrologic variability on TMWA's water resources and supply operations for the 2020-2040 WRP.
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# PROGRESS ON OTHER RECOMMENDED ACTIONS

- ***Recommendation 2.3. Sustainability of Source Water Supplies – Groundwater Contamination***
  - TMWA has continued to collaborate with CTMRD to address PCE contamination. TMWA is also working on innovative strategies to address other sources of groundwater contamination, such as a nitrate treatment facility in Spanish Springs. Additionally, the Integrated Source Water Protection Plan will designate buffer zones around TMWA's wellheads to improve the review process to help prevent future potentially contaminating uses.

# PROGRESS ON OTHER RECOMMENDED ACTIONS

- ***Recommendation 2.4. Sustainability of Source Water Supplies – Groundwater Management***
  - TMWA strategically pumps its production wells and continues to provide surface water to areas previously only supplied by groundwater (e.g. Mt. Rose Fan). Using passive and active groundwater recharge, water levels have improved throughout the region.
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# PROGRESS ON OTHER RECOMMENDED ACTIONS

- ***Recommendation 4.1. Population Projection***
  - TMWA generates a population projection annually and accepts it as a reasonable estimate of future population growth for TMWA's service territory.
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- ***Recommendation 6.1. Future Water Resources***
  - TMWA is continuing to investigate potential future water supply projects, and those projects will be described and analyzed in the updated WRP.

# 2020-2040 WATER RESOURCE PLAN: RECOMMENDED ACTIONS AND POLICIES

*TMWA Board of Directors Workshop  
August 15, 2019*



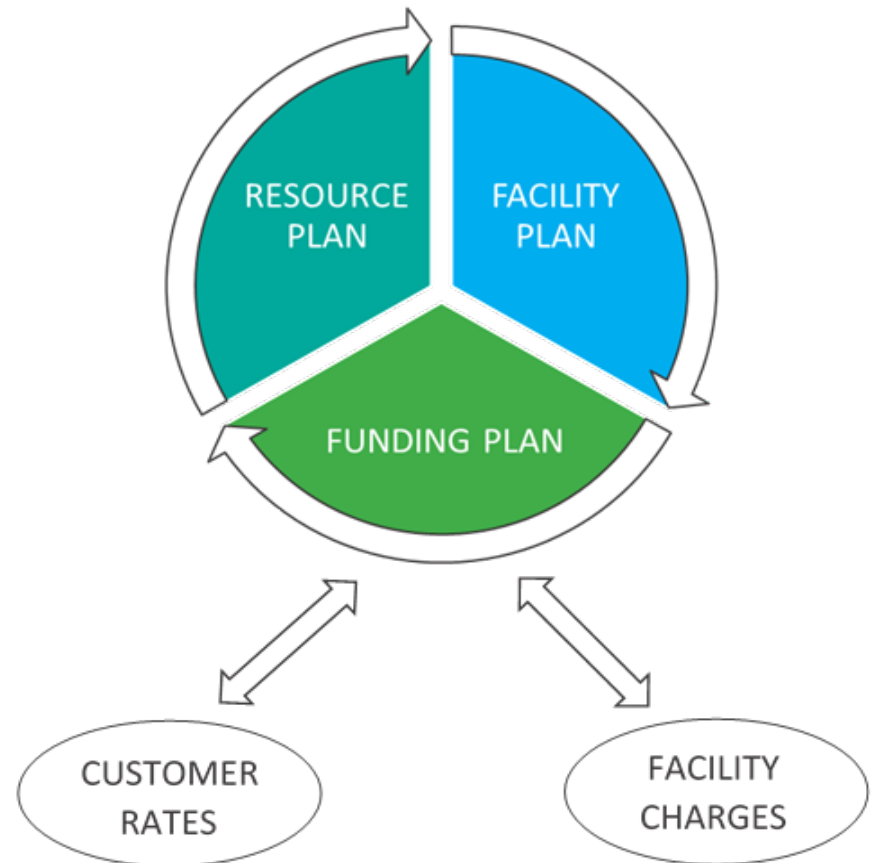
# 2020-2040 WATER RESOURCE PLAN OUTLINE

1. Introduction
2. Current Water Resources
3. Current and Future Planning Environment
4. Conservation Strategies
5. Future Water Resources
6. Protecting the Watershed and Environment
7. Recommended Policies and Management Strategies



# TMWA'S INTEGRATED PLANNING APPROACH

- TMWA uses an integrated approach to ensure a secure water future for the community with three plans:
  - **Water Resource Plan:** provides a present-day status update and future outlook regarding TMWA's water resources for the next 20 years
  - **Water Facilities Plan:** analysis of TMWA's infrastructure, with recommendations to ensure reliable high-quality water distribution for the next 20 years
  - **Funding Plan:** determination of funding needed for utility operations and projected capital improvements over the next 5 years



# 2020-2040 WRP GOALS

Ensure TMWA has adequate water resources to meet the community's needs over the next 20 years and beyond.

Maintain community confidence in TMWA's planning process.

Create innovative solutions to best manage water resources in the region.

Determine recommended management strategies and proposed policies to guide TMWA over the next five years.

# 2020-2040 WRP OBJECTIVES

Provide an overview of TMWA's current water resources and available water rights.

Analyze alternative supply and demand scenarios to determine the resiliency of TMWA's resources.

Assess potential impacts from climate change on regional water resources.

Describe TMWA's current water management and conservation strategies.

Identify future water resource opportunities and water management strategies.

Provide opportunities for input from the public and Board throughout the planning process.

# WRP PUBLIC SURVEY RESULTS

- Top 3 public concerns for issues that may negatively impact our water supply over the next 20 years:

Population  
growth

More severe  
droughts

Wildfire in the  
upper  
watershed

- Top 3 issues the public would like to see addressed in the WRP:

Growth and future  
water demands

Future availability  
of existing water  
resources

The state of our  
current water  
resources

- Top 3 topics of importance to the public:

Planning water  
resources around  
projected growth

Maintaining  
drought reserves

Maintaining  
groundwater  
supplies

# NEW POLICIES ENACTED SINCE ADOPTION OF 2016-2035 WRP

- **Rate Stabilization Fund**
  - Adopted by Board September 2018.
- **Water Resource Sustainability Fee**
  - Adopted by Board January 2019.

# POLICIES TO DISCUSS FOR 2020-2040 WRP

- **Small Water System Acquisitions**
  - Refer to handout.

# POLICIES TO DISCUSS FOR 2020-2040 WRP

- **Strategic Water Rights Acquisitions**
  - An objective of the 2020-2040 WRP process is to continue to maintain an inventory of water rights for future growth.
  - Strategic water rights purchases should be made for rights with very early priority dates, relatively large blocks of water rights in a single transaction (50 acre-feet), or for specific projects (Whites Creek water rights for Mt. Rose Water Treatment Plant), and other resources with unique benefits.

# POLICIES TO DISCUSS FOR 2020-2040 WRP

- **Feasibility of using Category A+ reclaimed water**
  - Remain actively engaged in a leadership role of OneWater Nevada in evaluating the feasibility of using Category A+ advanced purified reclaimed water to enhance TMWA's water resource sustainability, drought resiliency and efficient use of water resources in the region.

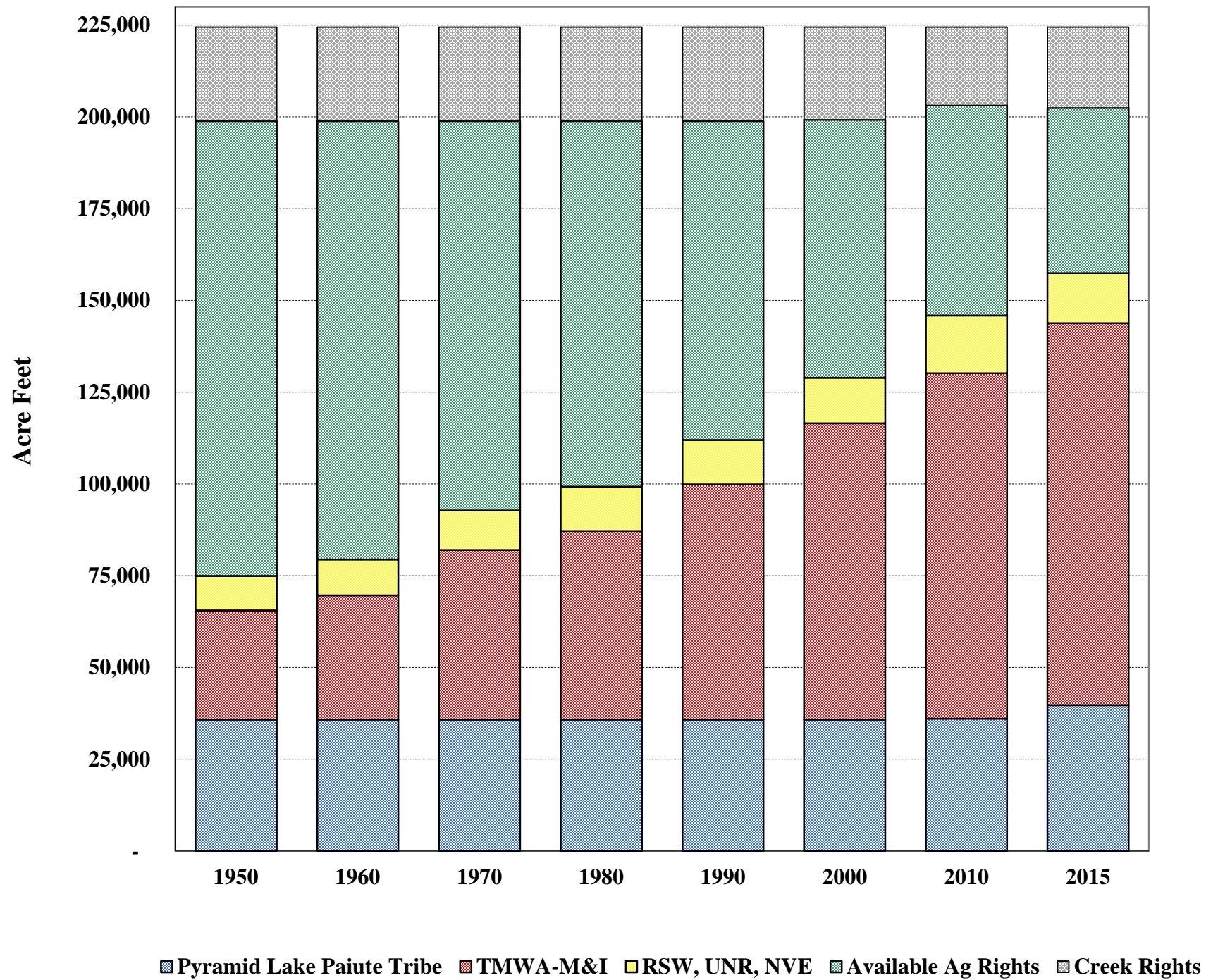


# Strategic Water Rights Acquisitions

- An objective of the 2020-2040 WRP process is to continue to maintain an inventory of water rights for future growth.
- Strategic water rights purchases should be made for rights with very early priority dates, relatively large blocks of water rights in a single transaction (i.e. greater than 25-50 acre-feet), or for specific projects (Whites Creek water rights for Mt. Rose Water Treatment Plant), and other resources with unique benefits.

# Truckee River Decreed Water Rights Are Finite

- Approximately 224,400 acre-feet (AF) allocated under the Decree
- Major Truckee River Water Right Holders
  - TMWA
  - Pyramid Lake Paiute Tribe
  - Reno-Sparks-Washoe County
  - NV Energy
  - UNR
  - TRI General Improvement District



# Remaining Decreed Irrigation Water Rights

- Approximately 40,000 AF
  - Small amounts held by numerous parties
  - Title issues to resolve
  - Expensive to identify, research status, and transfer title
- Downstream Competition for Remaining Rights
  - TRI GID
  - Pyramid Lake Paiute Tribe
  - Others

# TMWA Decreed Truckee River Water Rights

• Total	118,500 AF
• Initial Decreed Municipal Rights	<u>39,000</u> AF
• Acquired Since 1944	<u>71,300</u> AF
• TMWA Rule 7 Inventory	4,300 AF
• TMWA Creek Rights	2,100 AF
• Banked for Others (Mainstem)	<u>5,700</u> AF
• Banked for Others (Creek)	<u>2,500</u> AF

# Water Rights Needed to Meet 2040 Demand

• 2040 Water Demand Estimate	99,000 AF
• Estimated Water Rights Required	18,000 AF
• TMWA & Banked Surface Water	<u>14,600 AF</u>
• Banked Groundwater	<u>11,800 AF</u>
• Fish Springs	8,000 AF
• Others	3,800 AF
• Total TMWA and Banked	26,400 AF

# Strategic Water Rights Acquisitions

- An objective of the 2020-2040 WRP process is to continue to maintain an inventory of water rights for future growth.
- Strategic water rights purchases should be made for rights with very early priority dates, relatively large blocks of water rights in a single transaction (i.e. greater than 25-50 acre-feet), or for specific projects (Whites Creek water rights for Mt. Rose Water Treatment Plant), and other resources with unique benefits.