RESOLUTION NO. 2026-23

OF THE BOARD OF DIRECTORS OF THE NEVADA IRRIGATION DISTRICT

ADOPTING, FILING, AND IMPLEMENTING THE URBAN WATER MANAGEMENT PLAN UPDATE

WHEREAS, the California Legislature enacted Assembly Bill 797 (Water Code Section 10610 et seq., known as the Urban Water Management Planning Act) during the 1983-84 Regular Session, and as amended subsequently, which mandates that every supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually, prepare and urban Water Management Plan (UWMP), the primary objective of which is to plan for the conservation and efficient use of water; and;

WHEREAS, the Nevada Irrigation District (District) is a supplier of water providing urban water service to over 20,000 connections; and

WHEREAS, the UWMP shall be periodically reviewed at least once every five years, and the District shall make any amendments or changes to its UWMP which are indicated by the review, and;

WHEREAS, California Department of Water Resources requires that UWMP be adopted, after public review and hearing, by July 1, 2026 and filed with the California Department of Water Resources within 30 days of adoption; and

WHEREAS, the District has, therefore, prepared and circulated a draft Urban Water Management Plan for public review and reviewed by the Counties and Cities within the District's service area, and other interested parties, and a properly noticed public hearing regarding said UWMP, including publication of notice as required by Government Code 6066 was held by the District's Board of Directors on May 13, 2026; and

WHEREAS, the District did prepare and shall file said Plan with the California Department of Water Resources.

NOW, THEREFORE, BE IT RESOLVED AND PROCLAIMED by the Board of Directors of the Nevada Irrigation District as follows:

(1) The District is committed to continuing implementation of water efficiency improvements in the next five to ten years.
(2) The Urban Water Management plan, 2025 Update, is hereby adopted and ordered filed with the District.
(3) The Operations Staff is hereby authorized and directed to file the Urban Water Management Plan, 2025 Update, with the California Department of Water Resources.
(4) The General Manager is hereby authorized and directed to implement the Urban Water Management Plan, 2025 Update, which includes water shortage contingency analysis and recommendations to the Board of Directors regarding the necessary procedures, rules, and regulations to carry out effective and equitable water conservation and water recycling programs.

PASSED AND ADOPTED by the Board of Directors of Nevada Irrigation District at a meeting duly called and held within the District on the 13th day of May, 2026, by the following roll call vote:

AYES:	Directors:	Heck, Stephens, Johansen, Fowler, Bierwagen
NOES:	Directors:	None
ABSENT:	Directors:	None
ABSTAINS:	Directors:	None

Chris Bierwagen
President of the Board of Directors

Attest:

Kris Stepanian
Secretary to the Board of Directors

Nevada Irrigation District

2025

Urban Water Management Plan

DATE

Prepared For:

Nevada Irrigation District
1036 West Main Street
Grass Valley, CA 95945

Prepared By:

WEST Consultants, Inc.
101 Parkshore Drive
Folsom, CA 95630-4726

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LIST OF ABBREVIATIONS AND ACRONYMS

°F	Degrees Fahrenheit
AAST	Annual Available Supply Total
ACWA	Association of California Water Agencies
Act	Agricultural Water Management Planning Act
AF	Acre-foot/-feet
AFY	Acre-foot/-feet per year
AMI	Automatic Metering Infrastructure
AMR	Automatic Meter Reading
AWMP	Agricultural Water Management Plan
CABY	Cosumnes, American, Bear, Yuba Integrated Regional Water Management Group
CII	Commercial, Industrial, and Institutional
CIMIS	California Irrigation Management Information System
CPUC	California Public Utilities Commission
CWC	California Water Code
District	Nevada Irrigation District
DMM	Demand Management Measure
DRA	Drought Risk Assessment
DWR	California Department of Water Resources
EIR	Environmental Impact Report
ETo	Reference Evapotranspiration
FERC	Federal Energy Regulatory Commission
ft	Foot/Feet
GPCD	Gallons Per Capita Per Day
Guidebook	2025 Urban Water Management Plan Guidebook
HEC	Hydrologic Engineering Center
HMS	Hydrologic Modeling System
kWh	Kilowatt Hour
Mg	Million gallons
mgd	Million gallons per day
N/A	Not Applicable
NID	Nevada Irrigation District
NTU	Nephelometric turbidity unit
PCWA	Placer County Water Agency
PFW	Plan for Water
PG&E	Pacific Gas and Electric
R-GPCD	Residential Gallons Per Capita Per Day
RHNA	Regional Housing Needs Allocation
SB	Senate Bill
SDWIS	Safe Drinking Water Information System
SSWD	South Sutter Water District
SWRCB	California State Water Resource Control Board
UWMP	Urban Water Management Plan
UWUO	Urban Water Use Objectives
WPGSA	West Placer Groundwater Sustainability Agency
WRCC	Western Regional Climate Center
WSCP	Water Shortage Contingency Plan
WSRA	Water Service Reliability Assessment
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

1 INTRODUCTION AND OVERVIEW

Lay Description

The Nevada Irrigation District (District or NID) was organized in 1921 under the California Irrigation District Act of 1897 as a nonprofit water agency and operates under Division 11 of the California Water Code (Water Code or CWC).

The District supplies treated and raw water to municipal and raw water customers. Most of the water usage is by the raw water customers. Raw water customers include commercial agriculture, small-scale agriculture, and other irrigation uses that contribute to the community's rural character.

The NID supply system relies on diverting snowmelt runoff and capturing runoff flows in District reservoirs for use during the summer irrigation when runoff is reduced. The District's water rights include diversion and storage totaling approximately 450,000 acre-feet, though the amount available for use is less due to timing differences between water rights, runoff season, and irrigation season needs.

As a mostly rural area primarily dependent on its snowmelt-based supply, the District faces unique challenges in projecting its future supplies and demands. The character of the area and water management practices of the past may be different in the future. In 2024, NID completed a long-term visioning and planning effort to better understand potential future conditions and needs, and to identify management and operational practices to meet those needs. The Nevada Irrigation District's Plan for Water (PFW) is a long-range, community-driven water planning initiative designed to guide the District's water management strategy over the coming decades. The PFW is discussed throughout this Urban Water Management Plan (Plan or UWMP). Demand and population projections for this UWMP are mostly based on data developed for the PFW, unless more recent information was provided by cities and counties.

NID is currently undergoing a multi-year Federal Energy Regulatory Commission (FERC) relicensing process for its Yuba-Bear Hydroelectric Project (see Section 1.2.2). Changes in requirements for future environmental instream flow are currently unknown. The 2020 UWMP increased unrecoverable flow requirements from the existing 7,665 acre-feet to 59,527 acre-feet. Since those values are still unknown, the 2025 UWMP assumes no changes from historical values (9,410 acre-feet).

In 2025, total demand was equal to 143,693 acre-feet. However, this demand is not representative of a normal year since a 2024 infrastructure failure at Pacific Gas and Energy's (PG&E's) Lake Spaulding facilities severely restricted water supplies to NID, prompting mandatory conservation measures. While critical repairs were underway to restore flow, customers were required to reduce water usage, with conditions impacting both Placer and Nevada County residents. The emergency water shortage started in 2024 and remained in place during 2025. The demand shown in the 2020 UWMP of 161,678 acre-feet is more representative of the District's current demand.

Overall water demands are not projected to increase significantly over the next 25 years under the assumption that environmental flows do not change. However, water supply is expected to significantly change due to climate change.

The District's water supplies are sufficient to meet customer and other demands during normal hydrologic years. However, the District projects supply-to-demand shortages during 1- and 5-year drought periods due to projected reduced watershed runoff. To address these shortages, the District's Water Shortage Contingency Plan (WSCP) identifies six drought stages that include actions for the District and customers to implement to either reduce demand and/or increase supplies. Drought year impacts can be mitigated through purchase of supply from PG&E. However, the PG&E supply is highly variable, making it unreliable during dry years. In addition, the District's supply strategy relies heavily on carryover storage in its reservoirs. Depending on management of the storage from year to year, supply shortages may vary from values reported in this Plan.

The California UWMP is a state-mandated planning document that urban water suppliers must prepare every five years to ensure reliable water supplies and long-term resource planning. This UWMP was prepared for the District in cooperation with NID staff.

The UWMP requirement was established under the Urban Water Management Planning Act, which was added to the Water Code through Assembly Bill 797. Any urban water supplier that serves more than 3,000 customers or delivers more than 3,000 acre-feet of water per year must prepare and submit their UWMP to the California Department of Water Resources (DWR). The UWMP includes information on water supplies, water use, and planning efforts to meet current and future water needs.

Other topics in the UWMP originating from legislative requirements include reporting on energy intensity, an expanded WSCP, and a 5-Year Drought Risk Assessment.

The core requirements for the UWMP include:

- An overview description of reliability of supplies, projected supplies, and the strategy for meeting water needs.
- A description of the water service area.
- A description of the existing and planned supply sources.
- Estimates of past, present, and projected water use.
- Documentation of compliance with 20% reduction target by 2020.
- A description of water conservation Demand Management Measures (DMMs) already in place and planned, and other conservation measures.
- A 5-Year Drought Risk Assessment.
- A description of the Water Shortage Contingency Plan/Conservation Program.

The 2025 UWMP must submit data in specific tables to DWR. DWR has provided these tables, and this UWMP uses the provided tables with minor changes to format or organization where applicable. NID's 2025 UWMP presents each required element per DWR's Urban Water Management Plan Guidebook 2025 (Guidebook). A copy of the DWR checklist for compliance is included in Appendix A.

1.1 Urban Water Management Plan Organization

Chapter 1 – Introduction and Overview. This chapter provides a discussion on fundamentals of the UWMP and provides the newly required lay description.

Chapter 2 – Plan Preparation. This chapter provides information on the processes used for developing the UWMP, including efforts in coordination and outreach.

Chapter 3 – System Description. This chapter describes the District's water system, including maps of the service area, an explanation of the service area and climate, details on the public water system, and an overview of the District's organizational structure and history.

Chapter 4 – Water Use Characterization. This chapter describes and quantifies the current and projected water uses within the District's service area.

Chapter 5 – SB X7-7 Baselines, 2020 Targets, and 2025 Reporting. In this chapter, the District reports its compliance with the 2020 Senate Bill (SB) X7-7 per capita water conservation mandate.

Chapter 6 – Water Supply Characterization. This chapter of the UWMP describes and quantifies current and projected potable and non-potable water supplies of District. Also provided is a narrative description of each supply source and quantification of the supply availability for each source identified.

Chapter 7 – Water Service Reliability and Drought Risk Assessment. This chapter describes the District's water system reliability through a 20-year planning horizon for normal, single dry year, and five consecutive dry years. This chapter also includes the Drought Risk Assessment (DRA). The water system reliability differs from the DRA by allowing a different basis for characterizing the five consecutive dry years.

Chapter 8 – Water Shortage Contingency Plan. This chapter provides the District's structured plan for dealing with water shortages, incorporating prescriptive information and standardized action levels, along with implementation actions in the event of a catastrophic supply interruption.

Chapter 9 – Demand Management Measures. This chapter outlines the District's efforts to promote conservation and reduce water demand, with a narrative on implementing key DMMs.

Chapter 10 – Plan Adoption, Submittal, and Implementation. This chapter describes and documents the steps taken to make the District's UWMP publicly available as well as the steps taken to adopt and submit the UWMP in accordance with the Water Code. This chapter also describes the District's plan to implement the UWMP.

Appendices – To produce a well-supported planning document, this UWMP includes appendices (listed in the Table of Contents) with additional information beyond the main chapters.

1.2 UWMPs in Relation to Other Efforts

This Plan provides in-depth and practical knowledge of the NID water system management and planning. Regulatory conditions and projects that may directly/indirectly impact District supplies include:

- Water Use Objectives: state-mandated efficiency standards
- Bay-Delta Plan Update: the State Water Resources Control Board's process to revise water-quality and flow standards for the delta
- State Water Resource Control Board (SWRCB) Mandatory Conservation Orders: regulations requiring water suppliers and users to reduce water consumption during drought emergencies
- FERC Project No. 2266 Relicensing: regarding the hydropower license for the Yuba-Bear Hydroelectric Project
- NID Plan for Water: the strategic planning initiative created by NID to evaluate long-term water supply reliability and future infrastructure needs
- NID Raw Water Master Plan: the planning document that evaluates the District's raw water delivery system
- General Plans: long-term land-use planning documents for:
    - Placer County
    - Nevada County

- Yuba County
- City of Lincoln

1.2.1 Plan for Water

The District's PFW is a long-range, community-driven water planning initiative designed to guide the District's water management strategy over the coming decades. Initiated in late 2021, the PFW process engages stakeholders and the public in evaluating current and future water supply and demand, integrating climate impacts, infrastructure limitations, regulatory factors, and community values into a comprehensive planning framework.

The PFW effort included a series of workshops and technical analyses spanning multiple stages—from system overview, water rights, watershed conditions, and risk assessment to detailed modeling of hydrology, demand projections, and supply needs. These analyses informed development of strategic alternatives for meeting future water needs under a range of scenarios.

In August 2024, NID released the *Plan for Water Final Technical Memorandum* (WEST Consultants, Inc. [WEST] et al., 2024), which documents the modeling results and evaluates how future supply and demand scenarios could be integrated into the District's water management practices and capital planning. This memorandum reflects extensive community participation and technical input and provides a foundation for Board decisions on long-term water supply strategies.

One key outcome of the process was the Board's direction in September 2024 to discontinue pursuit of the proposed Centennial Reservoir project and instead pursue other alternatives, including but not limited to, raising existing dams, revising carryover targets, extending the irrigation season—decisions informed by the strategic evaluation conducted through the PFW process.

Overall, the PFW serves as a decision-support and planning tool that helps ensure NID can reliably meet the community's water needs well into the future by integrating supply, demand, infrastructure, and environmental considerations.

The PFW served as a base to estimate projected water demand and supply for the UWMP and Agricultural Water Management Plan (AWMP).

1.2.2 FERC Project No. 2266 Relicensing

The District is in the midst of a multi-year Federal Energy Regulatory Commission (FERC) relicensing process for its Yuba-Bear Hydroelectric Project, one of California's most complex hydropower systems. Originally licensed in 1963, the project's 50-year license expired in April 2013, and NID has operated under annual interim licenses while seeking a new long-term authorization.

NID entered FERC's Integrated Licensing Process in 2008 to pursue a new long-term license (up to 50 years). The relicensing process incorporates environmental flow requirements and habitat protections that affect how water is managed for ecological and recreational purposes.

NID is currently working on a full Environmental Impact Report (EIR), which is a necessary step to complete the California Environmental Quality Act evaluation for the relicensing. Once the EIR and certification are complete, NID will work toward final FERC approval of a new long-term license, which will establish operational requirements (flows, recreation, habitat protections) and infrastructure commitments for decades.

The District's water supplies are subject to environmental instream flow requirements established under its water rights and Federal Energy Regulatory Commission (FERC) License No. 2266 for the Yuba-Bear Hydroelectric

Project. These instream flow requirements represent the minimum flows the District must release or bypass in specific stream reaches using its water supplies to support environmental and ecological resources. These requirements may be modified as part of the ongoing FERC relicensing process; however, the updated flow requirements have not yet been finalized. Therefore, for the purposes of this Plan, environmental instream flow requirements are assumed to remain unchanged.

1.2.3 Regional Housing Needs Allocation (RHNA)

The Regional Housing Needs Allocation (RHNA) is a state mandated planning requirement that determines how many housing units each city or county in California must plan to accommodate over an eight-year cycle. It is not a construction mandate, but it requires jurisdictions to show they have adequate zoning, land capacity, and planning policies in place to meet the projected housing need across all income levels.

California's new RHNA requires Nevada County to plan for 7,055 additional housing units between 2027 and 2035 and Placer County to plan for 7,854 additional housing units between 2021 and 2029. RHNA compels local jurisdictions to zone for substantial future growth, which directly informs long-term water demand expectations within areas served by NID.

While NID is closely coordinating with county and city planning agencies on water supply to ensure infrastructure capacity planning aligns with future development needs, NID does not expect to experience substantial impacts associated with RHNA requirements. NID serves a predominantly rural area with relatively low population density and limited urban development. RHNA will mainly affect rapidly urbanizing or high-growth regions that are outside of the NID service area. Additionally, when growth is required in unincorporated Nevada and Placer counties communities, these houses often use private wells as a water supply.

1.3 UWMP Review Process

After UWMP submittal, the DWR reviews the Plan to determine whether it meets the requirements of the Water Code. Following its review, DWR issues a formal review letter describing the outcome. These letters are publicly available through DWR's Water Use Efficiency Data portal. If DWR identifies missing or incomplete information, the agency will work with the water supplier to clarify or correct the UWMP.

DWR review outcomes generally fall into the following categories:

- **Requirements Addressed**: The UWMP meets Water Code requirements, and the supplier remains eligible for state funding.
- **Requirements Addressed with Recommendations**: The UWMP meets requirements, but DWR provides suggestions for improvement in future plans.
- **Advisory Letter**: The UWMP may be missing required information. The supplier is given an opportunity to submit revisions or additional documentation.
- **Requirements Not Addressed**: The UWMP does not meet Water Code requirements, typically due to unresolved deficiencies.
- **Indeterminate**: DWR cannot confirm compliance due to insufficient or unclear information.

If needed, suppliers may submit revisions to address any deficiencies and achieve compliance.

1.4 UWMPs and Grant or Loan Eligibility

For a water supplier to be eligible for any water grant or loan administered by the DWR, the supplier must have a current UWMP on file that has been determined by DWR to address the requirements of the Water Code. In addition, these requirements must be maintained by the supplier throughout the term of any grant or loan administered by DWR. A current UWMP may also be required to be eligible for other state funding, depending

on the conditions that are specified in the funding guidelines. In addition to other benefits, adoption of this UWMP ensures that NID remains eligible for funding assistance.

1.5 Background and Purpose

The UWMP is the legal and technical water management foundation for supplies throughout California. A well-constructed UWMP provides staff, the public, and elected officials with an understanding of past, current, and future water conditions and management. It integrates local and regional land use planning, regional water supply, infrastructure, and demand management projects, as well as statewide issues of concern like climate change and regulatory revisions. The UWMP provides a water management action plan that can be referred to as conditions change and management decisions arise. It can also demonstrate the reliability of water supplies and how that might affect local growth and the economy.

Additionally, the UWMP provides DWR, SWRCB, and the State of California Legislature (Legislature) with a representation of water reliability so that a full picture of statewide water reliability may be constructed. It also allows NID to characterize conditions to improve its water reliability and drought risk assessments.

The UWMP further provides the opportunity to consider additional options for managing water assets to enhance NID's long-term water reliability and other management objectives. This water asset reliability information can allow NID to make sound management decisions regarding asset management and infrastructure planning to help mitigate long-term water management conditions attributable to climate change, regulatory change, and local water quality conditions.

The UWMP reflects short-term and long-term land use planning assumptions and goals, accounts for specific planned and in-fill development projects over the course of the UWMP planning period, addresses the dynamic nature of water supplies and demands through sound water shortage contingency planning, and informs the state and NID's customers about its water management practices.

The 2025 UWMP must provide water supply planning for a 20-year planning period in 5-year increments; identify and quantify adequate water supplies for existing and future demands during normal, dry, and drought years; and assure efficient use of urban water supplies. This 2025 UWMP addresses all Water Code requirements for such a plan as shown in the completed DWR UWMP checklist provided in Appendix A.

This 2025 UWMP accomplishes the following:

- Assesses changes in natural hydrology, climate, and groundwater conditions
- Anticipates the implications of regional, state, and federal regulations
- Considers supply conditions and water use variability
- Identifies regional constraints on, or opportunities for, shared water resources
- Integrates local land use changes, development, plans, and population growth
- Prepares for water shortages and unforeseen emergencies
- Anticipates infrastructure improvements
- Recognizes project funding needs and opportunities

NID has used the following water planning fundamentals in preparing the UWMP:

- A detailed look at current and future water use, including assessing and error-checking available baseline data, and examining long-term planning documents like NID's PFW
- Analysis of potable and non-potable water supplies, including water rights and contracts, water deliveries, restrictions on water availability under certain regulatory and hydrological conditions, and other opportunities or limitations
- Analysis of water supply reliability by integrating water use analyses with water supply

analyses to provide a water service reliability picture under normal conditions, single dry-year conditions, and five consecutive dry years through at least 2045

- A realistic DRA that includes integrated water supplies and projected water use in a hypothetical five-year drought condition
- An effective WSCP that identifies opportunities to reduce demand and augment supplies under numerous, and even unpredictable, water shortage conditions

1.6 Updated Guidance for the 2025 Urban Water Management Planning

Since the Act was passed in 1983, it has undergone significant expansion and revision. Prolonged droughts, groundwater overdraft, regulatory revisions, and changing climatic conditions not only affect a Supplier's water reliability determinations, but also the broad picture of statewide water reliability overseen by DWR, SWRCB, and the Legislature. Accordingly, the Act has grown to address changing conditions as it guides California's water resource management.

There were no new legislative requirements added for the 2025 UWMPs in comparison to the 2020 UWMPs. Only minor adjustments were made to the 2025 Guidebook guidance, including the following:

- No changes to codes that alter 2025 UWMP requirements
- Consistent guidance for when suppliers with multiple Public Water Systems must submit UWMPs
- Improvements for accuracy and clearer identification of required vs. optional data
- Requirements to report progress toward the 2028 Water Loss Standard
- Minor updates to supply and demand tables supporting water reuse reporting
- New optional guidance for projecting water use associated with lower income housing
- New clarification preventing double-counting of short-term storage (water stored and recovered in same year)

2 PLAN PREPARATION

Lay Description

This chapter describes the basis of the development of the UWMP; the requirements for preparation; the processes used, including efforts in notification, coordination, and outreach; the regional planning involved; and the calendar year and units of measure used.

2.1 Basis for Plan Preparation

The District supplies treated water within portions of the service area. Based on the number of connections and total volume delivered, NID is considered an urban retail water supplier and is required to update the UWMP. Based on the small volume of wholesale water supplied to other water providers, the District is not considered an "urban wholesale water supplier" as defined by CWC § 10608.12(t). Table 2-1 (DWR Submittal Table 2-1) presents the public water system name and number for each of the District's public water systems as well as their 2025 number of total municipal connections and volume of water supplied.

Table 2-1. Public Water Systems

Submittal Table 2-1 Retail: Public Water Systems			
Has there been a change in the number of affiliated Public Water Systems since the 2020 UWMP? (OPTIONAL)			No
Public Water System Number	Public Water System Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025 (AF)
CA2910004	Nevada ID - E. George, Banner Mountain	6,472	2,880
CA2910006	Nevada ID - Loma Rica	5,107	1,900
CA2910014	Nevada ID - Lake of Pines	2,566	1,183
CA2910023	Nevada ID - Lake Wildwood	3,264	1,057
CA3110026	Nevada ID - North Auburn	2,572	1,740
CA5810005	Nevada ID - Smartsville	43	15
	Total	20,024	8,774
NOTES: Total volume supplied represents potable water supplied only and does not include recyled water or raw water supplies. These are active connections only. Non-revenue water for each municipal system is included and estimated based on their 2024 water loss audit.			

2.2 Individual or Regional Planning and Compliance

While NID supports and participates in regional water supply planning, it has opted to prepare an individual UWMP for its service area. Individual UWMPs address all requirements of the Water Code including water use targets and baselines (for SB X7-7 Water Conservation Act of 2009 reporting). NID has notified and coordinated

with the appropriate regional agencies and constituents. Table 2-2 (DWR Submittal Table 2-2) defines the type of plan for this 2025 UWMP.

Regional planning can deliver mutually beneficial solutions to all agencies involved by assessing water resources at the appropriate geographic scale, allowing for solutions that cross jurisdictional boundaries, and reducing costs for the individual agency. In support of regional UWMPs and regional water conservation targets, the UWMP portion of the Water Code provides mechanisms for participating in area-wide, regional, watershed, or basin-wide urban water management planning.

NID recognizes the value in regional water supply planning and, to the extent practicable, has participated in regional efforts to improve and diversify water supplies. In the past, NID has been an active member of Cosumnes American Bear Yuba (CABY) Group. NID is a member of the Mountain Counties Water Resources Association, whose mission is to promote the statewide importance of Sierra Nevada water resources through advocacy and collaboration. NID is an active member of the Regional Water Authority, which was created in June 2001 and currently has 21 member agencies in Sacramento, Placer, El Dorado, Yolo, Sutter, and Nevada counties. NID is also an active member of the Association of California Water Agencies (ACWA) as part of Region 3. ACWA is the largest statewide coalition of public water agencies and is an organization that serves the water industry and the public by promoting local agencies, sharing reliable scientific and technical information, tracking and shaping state and federal water policy, advocating for sound legislation and regulation, and facilitating cooperation and consensus among all interest groups.

Table 2-2. Plan Identification Type

Submittal Table 2-2: Plan Identification			
Select One or Both	**Type of Plan**		**Name of Regional Alliance or RUWMP** (Drop Down List)
☑	**Individual UWMP**		
	☐	Water Supplier is also a member of a SB X7-7 Regional Alliance	
☐	**Regional Urban Water Management Plan (RUWMP)**		

A group of suppliers agreeing among themselves to plan, comply, and report as a region on the urban water use target requirements of SB X7-7 is referred to as a Regional Alliance. A Regional Alliance allows water suppliers to work toward cooperatively developing programs and meeting regional water conservation targets but not necessarily submitting a Regional Plan. Since NID opted not to join a Regional Alliance, this section does not apply.

2.3 Fiscal or Calendar Year and Units of Measure

NID reports on a calendar year basis and uses acre-feet (AF) throughout this Plan as the unit of measurement when reporting water volume.

Table 2-3 (DWR Submittal Table 2-3) provides agency identification information, type of year reporting, and units of measure used by NID to report water data and assessments.

Table 2-3. Supplier Identification

Submittal Table 2-3: Supplier Identification	
Type of Supplier (select one or both)	
☐	Supplier is a wholesale supplier
☑	Supplier is a retail supplier
Fiscal or Calendar Year (select one)	
☑	UWMP Tables are in calendar years
☐	UWMP Tables are in fiscal years
Units of measure used in UWMP (Select from the drop down list).	
Unit	AF

2.4 Coordination and Outreach

The District coordinated this UWMP with other agencies and the community. Notice to the cities of Grass Valley, Lincoln, and Nevada City, as well as Nevada, Placer, and Yuba counties was provided on December 2, 2025, regarding the District's intentions of updating the UWMP, fulfilling the requirement to provide notice at least 60 days prior to the public hearing.

The District conducted one public workshop at a Board of Directors meeting to review and discuss the Plan. A public hearing for the Plan was held on [DATE]. Public notification regarding these workshops and the hearing was advertised on the District's website and in news releases. For the public hearing, in addition to providing official notification in a news publication, the District notified the cities of Grass Valley, Lincoln, and Nevada City, as well as Nevada, Placer, and Yuba counties. Outreach and notification materials are presented in Appendix B.

The public workshops resulted in public interaction and comments received. Public comments were incorporated into the UWMP accordingly. Transcripts of the workshops and public hearing are included in Appendix B.

The public hearing and adoption were conducted on [DATE]. The NID Board of Directors Resolution [RO NUMBER] adopting this 2025 UWMP is included in Appendix C.

2.4.1 Wholesale and Retail Coordination

Table 2-4. Water Supplier Information Exchange

Submittal Table 2-4 Retail: Water Supplier Information Exchange Water Code Section 10631(h)
The retail Supplier has informed the following wholesale supplier(s) of projected water use in accordance with Water Code Section 10631 (h).
Wholesale Water Supplier Name
PG&E

2.4.2 Coordination with Other Agencies and the Community

In December 2025 and January 2026, notices of preparation and intent to update the UWMP were sent to the applicable agencies as required through email more than 60 days in advance of the public hearing. A copy of the notice is in Appendix B and was sent to 48 entities including cities, counties, companies, and agencies.

In addition to providing the notice of intent to update its UWMP, NID notified applicable surrounding water districts via email more than 60 days prior to the public hearing. NID also notified the public on January 20, 2026, via YubaNet.com and Grass Valley's *The Union*. NID disseminated notice to KVMR, KNCO, Lincoln News Messenger, the Nevada County and Placer County Agricultural Commissioners, and the Nevada County and Placer County Farm Bureau on this date as well.

Notification to the general public was published in *XXX*, the local newspaper with the largest circulation in NID, for two successive weeks, as per DWR requirements (14 days and 7 days in advance of the public hearing). Copies of the notice can be found in Appendix B of this UWMP. Notification was also posted at City Hall, in XXX public libraries, , and on the District's website.

On May 13, 2026, NID convened the public hearing at its regular meeting to receive comments on the 2025 UWMP. After comments were received, the UWMP and WSCP were adopted and then submitted to the DWR. Prior to the hearing, copies of the Draft 2025 UWMP were available for public review and comment at the XXX, public libraries, and on the District's website.

Prior to and during the preparation of the Plan, NID encouraged the active involvement of diverse social, cultural, and economic elements of its population within the service area through public noticing.

2.4.3 Notice to Cities and Counties

The CWC § 10621(b) requires that agencies notify the cities and counties they serve water to that the 2025 UWMP is being updated and reviewed. The Water Code specifies this must be done at least 60 days prior to the public hearing. The District owns, operates, and governs its own municipal water system, so formal notice was not issued to NID. Written notice was provided to the Cities of Nevada City, Grass Valley, and Lincoln, and to Nevada, Placer, and Yuba counties in accordance with requirements.

The full list of cities and counties to which NID sent the 60-day notification is reported in Table 10-1 in Chapter 10 of this UWMP.

3 SYSTEM DESCRIPTION

Lay Description

This section describes the service area and climate, historical and projected connections and population, as well as land uses within the service area.

3.1 General Description

Located on the western slope of the Sierra Nevada Mountain range, the District encompasses 287,000 acres and covers portions of three counties—Nevada, Placer, and Yuba—as shown on Figure 3-1. The District's watershed is located on the upper reaches of the Yuba River, Bear River, and Deer Creek. The District's highest point is English Mountain, at an elevation of 8,373 feet (ft) The District transports water from high elevation mountain reservoirs to the lower elevation foothills and into portions of the northern Sacramento Valley near the City of Lincoln.

NID was established as an irrigation district in 1921 and is governed by a five-member Board, which is elected by District voters. Each Board member, representing a division with the District, serves a four-year term.

The District supplies treated water for municipal, domestic, and industrial purposes. Water management infrastructure includes storage, treatment, and conveyance facilities. Many areas and residents within the service area are not served NID water, receiving their water through private groundwater wells or other sources. NID does provide wholesale supply to Nevada City, Grass Valley, and Placer County Water Agency, which maintain their own water treatment and distribution systems. The District also serves approximately 4,924 raw water customers, with a total reported irrigated acreage of 31,947 acres in 2025.

The District owns and operates hydroelectric generation and recreational facilities. The hydroelectric facilities have a capacity of 87.9 megawatts, and generation ranged between 129 and 453 million kilowatt hours (kWh) over the last ten years. NID began producing power in 1966 with the completion of the Yuba-Bear Power Project, which includes Chicago Park, Dutch Flat, Bowman, and Rollins powerhouses. Recreational facilities owned by the District provide camping, fishing, and boating at Rollins Lake, Scotts Flat Reservoir, and Jackson Meadows – Bowman Lake areas.

3.2 Service Area Boundary

The District's retail potable water system consists of six service areas. The retail water system connections are predominantly single-family, but also consist of multi-family, commercial, industrial, and institutional customers. The maps in Figures 3-1 and 3-2 present the NID service area and the six NID Public Water Systems: 1) CA2910004 – Elizabeth George, 2) CA2910006 – Loma Rica, 3) CA2910014 – Lake of the Pines, 4) CA2910023 – Lake Wildwood, 5) CA3110026 – North Auburn, and 6) CA5810005 – Smartsville. The NID Service Area shapefile and the Public Water Systems areas shapefile were provided by the District. Figure 3-2 presents boundaries updated to represent the soft service area of each water system and may differ from boundaries available from public sources.

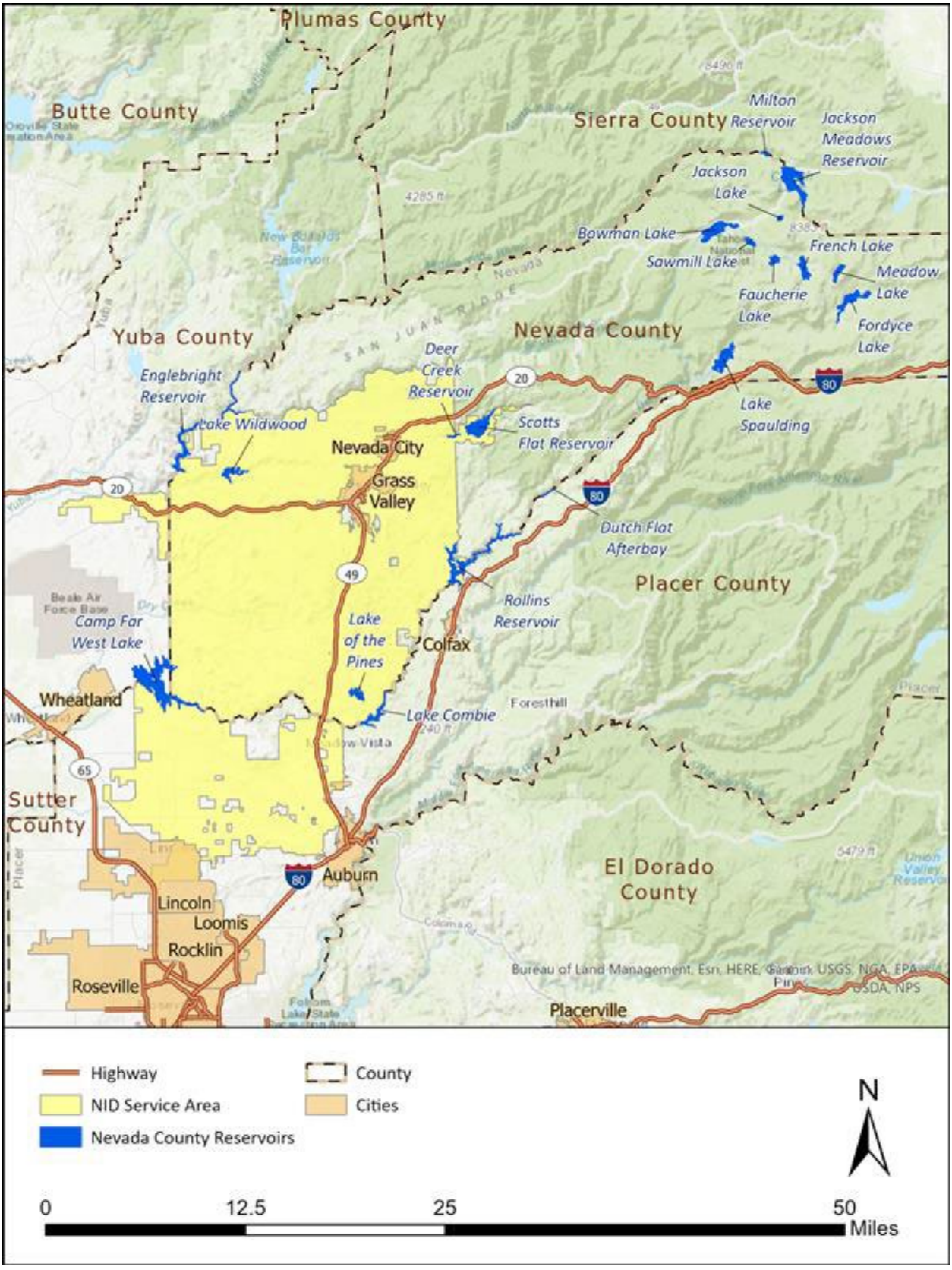

Figure 3-1. NID Service Area Map (Source: Figure created by WEST, 2026)

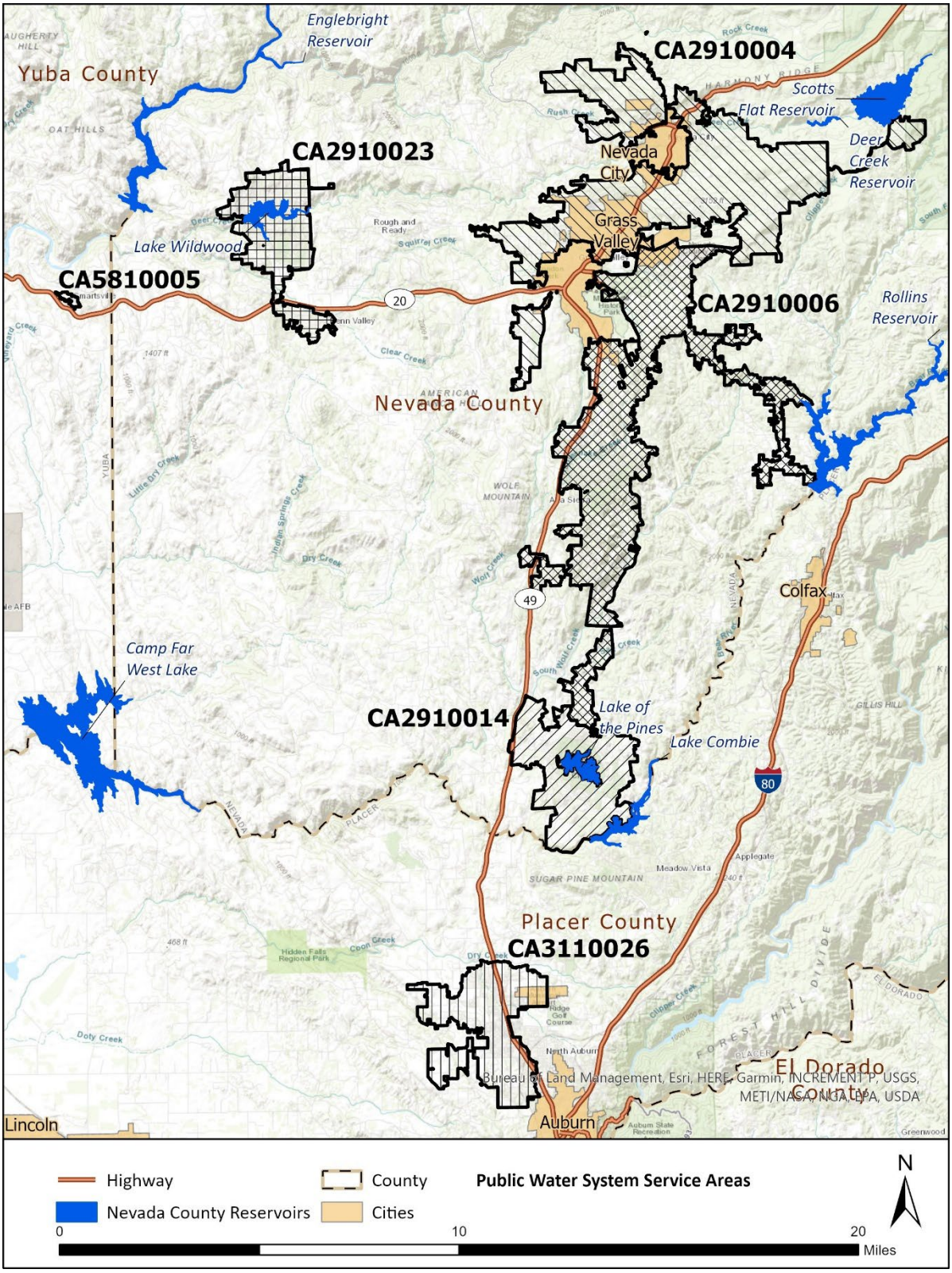

Figure 3-2. Public Water Systems (Source: Figure created by WEST, 2026)

3.3 Service Area Climate

Summers are generally dry with mild to hot temperatures. Winters are relatively wet, especially in the upper elevations around Nevada City and Grass Valley, with snow levels usually around 3,500 ft and occasionally as low as 1,000 ft. Based on the historical data obtained from the California Irrigation Management Information System (CIMIS) and the Western Regional Climate Center (WRCC), the District's service area average minimum and monthly maximum temperatures are 26.6 and 93.1 degrees Fahrenheit (°F), respectively. Table 3-1 summarizes the District's climate conditions in representative areas based on the CIMIS and WRCC databases of monthly averages of historic information.

Table 3-1. District Service Area Climate Characteristics

Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann.	Wet Season Nov–Mar	Dry Season Apr–Oct
Auburn (CIMIS Station No. 195, WRCC Station No. 040383), 935' elevation															
Avg. ETo[1], in	1.27	1.93	3.17	4.78	6.41	7.56	8.29	7.53	5.58	3.76	1.75	0.99	53.02	9.11	43.91
Avg. max temp[2], °F	54.1	58.2	62.4	68.3	76.5	85.5	93.1	91.9	86.2	76.5	63.9	55.6	72.7	58.8	82.6
Avg. min temp[2], °F	36.0	38.7	41.2	44.4	49.9	56.2	61.4	60.6	56.4	50.0	42.5	36.7	47.7	39.0	54.1
Avg. rainfall[2], in	6.80	5.73	5.24	2.63	1.23	0.37	0.05	0.06	0.43	1.70	3.95	5.65	35.05	27.37	6.47
Avg. snowfall[2], in	0.6	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	1.1	1.5	0.2
Grass Valley No. 2 (WRCC Station No. 043573)[3], 2,400' elevation															
Avg. ETo, in	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Avg. max temp, °F	53.9	55.5	57.6	62.8	71.4	80.4	88.2	87.0	82.2	72.3	59.9	53.0	68.7	56.0	77.8
Avg min temp, °F	32.3	33.5	36.2	39.2	45.8	52.1	57.2	55.8	51.2	43.4	36.4	32.0	42.9	34.1	49.2
Avg rainfall, in	9.45	8.49	8.17	3.86	1.82	0.58	0.09	0.10	0.76	2.76	6.52	9.64	52.35	42.27	9.97
Avg snowfall, in	1.7	2.3	2.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.9	8.4	8.4	0.6
Nevada City (WRCC Station No. 046136)[4], 2,780' elevation															
Avg. ETo, in	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Avg. max temp, °F	51.2	53.8	57.3	63.5	71.2	80.2	88.5	87.6	81.7	71.4	59.4	51.8	68.0	54.7	77.7
Avg. min temp, °F	30.5	31.0	33.7	36.9	42.5	48.3	52.8	51.5	47.3	41.2	34.7	30.8	40.0	32.1	45.8
Avg. rainfall, in	10.13	9.26	8.27	4.28	2.12	0.64	0.04	0.14	0.77	2.90	6.36	9.45	55.76	43.47	10.89
Avg. snowfall, in	7.4	5.8	5.4	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.6	3.7	21.2	22.9	1.0
Bowman Dam (WRCC Station No. 041018)[5], 5,390' elevation															
Avg. ETo, in	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Avg. max temp, °F	45.2	46.7	49.1	55.2	63.4	72.1	79.8	79.8	74.4	64.3	52.7	46	60.7	48.0	69.9
Avg. min temp, °F	26.6	26.7	28.5	32.5	39.0	47.0	53.5	53.2	48.4	41.3	33.7	28.7	38.4	28.8	45.0
Avg. rainfall, in	11.92	10.38	9.17	4.88	3.42	1.18	0.19	0.37	0.99	3.98	8.27	10.81	64.94	50.55	15.01
Avg. snowfall, in	49.5	49.8	48.7	22.1	6.7	0.2	0.0	0.0	0.3	24	18.3	38.8	235.5	205.1	31.7

N/A = not available

[1]Period of record is 2/16/2005 through 12/15/2025.

[2]Period of record is 1/1/1905 through 12/11/2025.

[3]Period of record is 10/1/1966 through 12/11/2025.

[4]Period of record is 2/1/1893 through 12/10/2025.

[5]Period of record is 6/1/1896 through 10/31/2025.

3.3.1 Climate Change Impacts on Water Demands, Supplies, and Reliability—NID's Plan For Water

To investigate the impacts that climate change may have on the District, NID implemented a long-term visioning and planning effort called the PFW. The NID PFW is a decision-support tool designed to guide development of a long-term, sustainable strategy for managing NID's water resources under projected changes in climate, runoff patterns, water demands, and regulatory conditions. The PFW process included comprehensive analyses of NID's hydrology, climate change scenarios, projected water demands, regulatory context, and reservoir operations.

Figure 3-3 illustrates the technical framework of NID PFW, highlighting two modeling periods: historical and projected. Because NID's snowpack-based supply and delivery system is sensitive to changes in temperature and precipitation, the PFW investigated potential impacts to water supplies under a warming climate. This analysis involved projecting future temperature and precipitation patterns and assessing their effects on watershed runoff and water demand.

Since observed data is not available for the projected period, a physically based hydrological model was used to estimate projected unimpaired flows based on projected precipitation and temperature. The Hydrologic Engineering Center (HEC) – Hydrologic Modeling System (HMS) was used to simulate projected unimpaired flows. Historical flow data was used to calibrate HEC-HMS. HEC-HMS is a physically based hydrologic model developed by the U.S. Army Corps of Engineers Hydrologic Engineering Center. Chapter 2 of the NID *Plan for Water Final Technical Memorandum* (WEST et al., 2024) describes the HMS model development, calibration, and validation for the PFW.

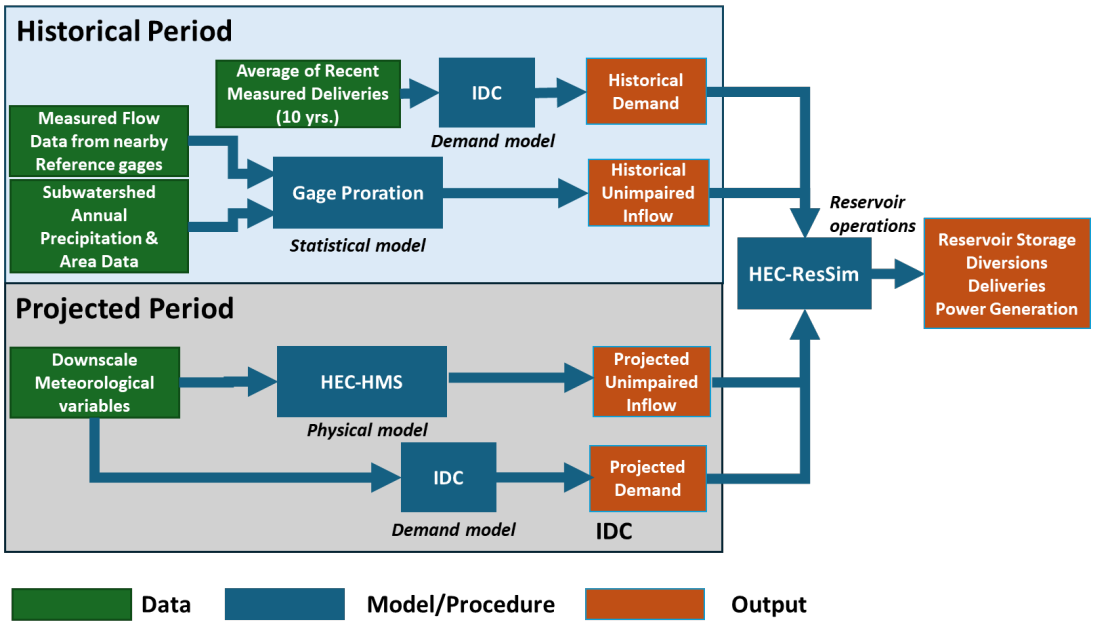

Figure 3-3. NID Plan for Water Technical Framework

Modeling results indicate that NID should expect changes to the existing runoff patterns. In addition to direct impacts on NID's water supply and demand, climate change could also affect NID through broader statewide water management needs and impacts to local agriculture.

As demonstrated by the modeling results, runoff characteristics are projected to change under future climate conditions. Because California's water management strategies rely heavily on snowpack, similar changes are expected to affect statewide water supplies and operations. Earlier snowmelt, increased winter runoff, and a higher frequency of rain-on-snow events may complicate reservoir operations and flood management

statewide. Resulting policy, regulatory, and legal responses could, in turn, influence NID's water supply availability for local use.

Local climate change impacts may also affect current water supply source options within NID's service area. Of the approximately 52,000 parcels in the District, about 25,000 currently receive treated or raw water from NID, while the remaining parcels are assumed to rely on self-supplied fractured-rock groundwater wells or remain undeveloped. Prolonged droughts or increased winter runoff could reduce groundwater recharge into fractured-rock aquifers, potentially leading to declining well yields or well failures. As private wells become insufficient, additional properties may seek connection to the NID water system, increasing overall demand. While some users may be too distant from existing infrastructure to feasibly connect, increased demand is anticipated in "soft service areas" located near existing facilities. These potential shifts increase uncertainty in future demand forecasts and may require adaptive planning approaches.

Local climate changes could also affect the community's longstanding agriculture presence. Changes in temperature and precipitation patterns could affect crop types, irrigation demands, growing seasons, and crop yields; enable cultivation at higher elevations; and require adjustments to agronomic practices. More frequent extreme heat or drought conditions could further increase irrigation demands during periods of reduced water availability. These changes could have implications for NID's water supply requirements, operational strategies, and infrastructure planning.

Beyond water supply and demand considerations, NID also expects impacts to its other responsibilities. Climate-driven watershed changes may affect forest management practices, implementation of the FERC license requirements, and the risk of catastrophic wildfire. More intense precipitation events and post-fire conditions may also increase erosion, sediment transport, and debris flows, potentially affecting water quality and infrastructure operations. Recreational opportunities may be reduced or unavailable under certain conditions. Hydropower generation, which provides significant revenue to the District, may be shifted into less beneficial market pricing periods or decline overall if reduced summertime water availability limits generation during traditionally high-value periods.

Enhancing climate change resilience is a critical component of water resources planning at all levels statewide. California is pursuing multiple efforts to quantify climate risks and develop mitigation alternatives. NID will follow these efforts and participate as available. Regionally, agencies and stakeholders are collaborating on climate resilience initiative, including CABY, the American River Basin Study, the ACWA Headwaters initiatives, and others. Locally, NID is committed to controlling its own water resources in a self-determining manner per its strategic plan. The PFW provides a flexible, adaptive framework to evaluate these risks and identify operational, infrastructure, and policy responses under a wide range of future climate conditions

3.4 Service Area Population, Demographics, and Socioeconomics

This section summarizes demographic and socioeconomic characteristics within NID's retail service area. The service area spans portions of multiple counties, cities, and census-designated places as defined by the U.S. Census Bureau and the California Department of Finance. These areas include a diverse range of land use types, including natural, rural, and urbanized areas. Because NID's service area boundaries do not align directly with census geographies, the population within the service area is represented by portions of multiple census tracts and blocks. In addition, not all residents within the geographic boundary of the service area receive retail water service from NID, as some properties rely on private wells or are served by other water providers.

Due to these limitations, service area population was estimated using a utility-based approach rather than direct aggregation of census data. Specifically, population projections were developed based on the historical rate of increase in active service connections and the average number of persons per connection. This approach provides a more accurate representation of the population served by NID and ensures consistency between projected population and projected water demand, as described in the following sections.

The population reported in the Safe Drinking Water Information System (SDWIS) system as of the preparation of this report (2026) is used as baseline for population projections. Links to the information are provided in Table 3-2.

Table 3-2. SDWIS System Links

Public Water System	Links
CA2910004	https://sdwis.waterboards.ca.gov/PDWW/JSP/WaterSystemDetail.jsp?counter=0&tinwsys_is_number=3250&tinwsys_st_code=CA
CA2910006	https://sdwis.waterboards.ca.gov/PDWW/JSP/WaterSystemDetail.jsp?counter=0&tinwsys_is_number=3252&tinwsys_st_code=CA
CA2910014	https://sdwis.waterboards.ca.gov/PDWW/JSP/WaterSystemDetail.jsp?counter=0&tinwsys_is_number=3260&tinwsys_st_code=CA
CA2910023	https://sdwis.waterboards.ca.gov/PDWW/JSP/WaterSystemDetail.jsp?counter=0&tinwsys_is_number=3264&tinwsys_st_code=CA
CA3110026	https://sdwis.waterboards.ca.gov/PDWW/JSP/WaterSystemDetail.jsp?tinwsys_is_number=3438&tinwsys_st_code=CA&wsnumber=CA3110026
CA5810005	https://sdwis.waterboards.ca.gov/PDWW/JSP/WaterSystemDetail.jsp?counter=0&tinwsys_is_number=6228&tinwsys_st_code=CA

3.4.1 Service Area Population

NID serves a predominantly rural area with relatively low population density and limited urban development (see Figure 3-2). As a result, NID is not expected to experience substantial impacts associated with RHNA requirements, which are generally more significant in rapidly urbanizing or high-growth regions. While some localized development may occur, overall changes in water demand related to RHNA-driven housing growth are anticipated to be modest within the District's service area.

For consistency with treated water demand projections, population projections shown in this section were calculated based on the assumptions of the PFW, but slightly modified based on the most recent years' records. The PFW assumes that growth within NID's treated water service areas is expected to occur at a rate similar to the historical average, approximately 50 new customers per year. The growth in the PFW was estimated based on an analysis of NID delivery records from 2013 through 2022.

Between 2021 and 2025, the average number of new single and multi-housing connections increased to 61 per year. Population projections in this UWMP were based on this recent growth rate. The PFW estimated the persons-per-connection ratio to be 2.7 based on data from 2013 to 2022. This value did not change significantly from 2022 to 2025. The 2025 Urban Water Use Objectives (UWUOs) reported population was equal to 54,196, and total number of connections in 2025 was equal to 20,025. Therefore, the number of people per connection is equal to 2.7. The 2025 UWUO reported population was used as the baseline for population projections. Additionally, 2.7 persons per connection falls in the census reported ranges for Lincoln, California. In Lincoln, the census reporter estimates 2.6 ± 0.1 persons per household.[1]

Projected population was estimated using the assumed average annual rate of new service connections (61 connections per year) and an average of 2.7 persons per connection. Based on these assumptions, the

[1] https://censusreporter.org/profiles/16000US0641474-lincoln-ca/

population is projected to increase, reaching a total of 58,314 people by 2050. This growth corresponds to approximately 1,994 new service connections over the planning period.

NID currently maintains 887 standby connections within its treated water service area. Based on the projected connection growth rate, the existing inventory of standby connections is anticipated to be fully allocated before 2040.

Table 3-3 (DWR Submittal Table 3-1) only accounts for the population within the District. NID also sells treated and raw water to other communities like Lincoln (Placer County), as well as Grass Valley and Nevada City (Nevada County), which might experience higher growth. Those will be considered in the estimation of projected demand, but the population is not accounted for in Table 3-3.

Table 3-3. Retail Population – Current and Projected

Submittal Table 3-1 Retail: Population - Current and Projected Water Code Section 10631(a)						
Population Served	2025	2030	2035	2040	2045	2050(opt)
	54,196	55,020	55,843	56,667	57,490	58,314

NOTES:

1- Current population based on the 2025 Urban Water Use Objective reported population.

2 - Projections performed based on similar assumptions used by the PFW, but with updated parameters to reflect statistics from most recent years (2021-2025). The same years were used on the estimation of treated water demand. PFW assumed 50 new treated water custormers/year and 2.7 people/connection. Average number of connection per year was updated and now estimated based on 2021 to 2025 data, with an average of 61 new connections/year.

3 - A persons-per-connection ratio of 2.7 was adopted to be consistent with the PFW, which estimated that value based on 2013 to 2022. This value did not change significantly from 2022 to 2025, and in 2025, the persons-per-connection ratio was 2.7. This value was validated against the person per household estimates from the census reporter for Lincoln, CA. This value was used to estimate population into the future.

3.5 Other Social, Economic, and Demographic Factors

Social and demographic factors that affect water management planning include the uncertainty in estimating future customer connections and water use per customer. Additional economic factors in and around the District's service areas add to the uncertainty in estimating future customer connections and water use per customer. The District primarily lies in Placer and Nevada counties, which have a respective median household income of $115,998 and $89,882 and a respective poverty rate of 6.8% and 9.6% per the QuickFacts of the 2024 U.S. Census Bureau.

Future customer connection growth for both treated water and raw water customers are impacted by new construction and existing houses/parcels becoming customers. Water demand does not always increase at the same rate as population growth, because some demand is "hidden" or delayed. Those hidden or delayed demand are called latent demand. Some examples include new developments that are approved but not yet built, or infrastructure limitations affecting demand. Latent demand can weaken the direct relationship between population growth and water demand, as some demand is deferred or not immediately realized. For example, from 2021 through 2025, approximately 79% of the new treated water customer connections were classified as in-fill connections, adding new demand from existing housing stock.

Treated water use per customer can be affected by many factors, including plumbing codes, landscaping trends, and—indirectly—the recent state-required water budgets. The State Water Board's Making Conservation a Way of Life regulation (§ 965 et seq., Title 23, California Code of Regulations) establishes UWUOs and overall water budgets that define the maximum allowable water use across residential indoor and outdoor, landscape, non-residential, and water loss categories, using the 2020 Target as a backstop. The District is currently meeting its UWUO and associated water budget, as reported in its annual UWUO submission. Additional information on actions to achieve urban water use goals is provided in Chapter 9. For example, for treated water customers, the indoor budget is set at 47 gallons per capita per day (gpcd), reducing to 42 gpcd in 2030. These regulatory requirements may impact future water use trends, affecting the overall future demands.

Raw water customers represent the largest customer category by water volume for NID. Raw water customers include commercial agricultural, small agricultural, personal/hobby farms and gardens, golf courses, and other water uses that contribute to the rural character of the service area. Changes to the demographics of the raw water customer may also affect raw water use, depending on new or next-generation owners and their intended water use. Changes to the land uses within the service area may also affect raw water use. Raw water customer unit water demands are further discussed in Chapter 4.

3.6 Land Uses Within Service Area

The NID service area includes mainly areas of Nevada County and Placer County, with a small portion in Yuba County. The service area is a unique blend of treated and raw water customers that includes urban, suburban, rural, and agricultural settings.

The Placer County General Plan indicates that land uses for the portion of the service area within Placer County primarily consist of Agriculture/Timberland, except for the North Auburn Highway 49 corridor, which mainly includes various densities of Residential[2], with scattered Rural Estate, Mixed-Use, and Professional Office. According to Placer County Goal 1.H (and supporting policies), Placer County "shall seek to ensure that new development and public works projects do not encourage expansion of urban uses into designated agricultural areas" (Placer County, 2013). NID assumes no major changes to current land use plans in Placer County for the near-term future; however, it should be noted that the Placer County 2050 General Plate is in progress and is expected to be adopted in 2029.

A portion of the District's service area lies within the City of Lincoln's sphere of influence. As the City grows, land use is being modified, and developments are actively moving through the planning process. Land use planning for this area is addressed through the City's General Plan (adopted in 2008) and its specific planning process. Water service options for the District's service within the City of Lincoln continue to be investigated. For the 2025 UWMP, the City of Lincoln provided the most current Total Water Use Projections for seven Villages and three Special Use Districts. NID services areas either completely or partially cover three Villages and zero Special Use Districts. Growth across these Villages was assumed to be uniformly distributed spatially. Additionally, growth over a 25-year timeframe was assumed to only occur within current city boundaries. Using these assumptions, the District was able to estimate the portion of water use growth in each of the three applicable Villages attributable to NID customers. More information on Water Use Projections for the City of Lincoln is included in Chapter 4.

Nevada County is primarily composed of residential, commercial, industrial, agricultural, and public land uses (Nevada County, 2020). Nevada County's Land Use Element of the General Plan reports that 56 percent of the county is classified as "Forest," while 30 percent is classified as "Rural." These two land use designations are the two largest categories by acreage. Goal 1.3 of the Land Use Element states, "Within Rural Regions, maintain and

[2] Residential land use sub-groups include a mixture of Low Density (0.4-0.9 acre minimum), Low-Medium Density (2-5 dwelling units/acre), Medium Density (5-10 dwelling units/acre), Rural Low Density (0.9-2.3 acre minimum), and Rural (1-10 acre minimum).

enhance the County's pastoral character, existing land use pattern, rural lifestyle, and economy in their natural setting." This goal and its supporting policies aim to provide related benefits for the conservation of a rural character and preservation of natural resources (Nevada County, 2020). As presented in Nevada County's Land Use Element, the predominant land use within the service area is Rural. Uses for this designation include rural residential, agricultural operations and supporting agricultural production, natural resource production and management, and low-intensity recreation.

NID deliveries to customers in Yuba County are made pursuant to the California Railroad Commission Order 15926. The District purchased the Excelsior Water And Power Company's Yuba County holdings in the 1920s and is required to deliver water to the area's customers. Treated water customers are supplied by the Smartsville water treatment plant (WTP), while raw water customers are delivered water through the Meade, Town, Ousley Bar, and Farm canals. The Yuba County General Plan identifies this area served by NID as a "Rural Area." Goal CD9 (and supporting policies) aims to maintain the rural nature by preserving the existing character through strategic developmental designs and standards (Yuba County, 2011).

3.6.1 Future Projects

Planned projects within the District's service area impact the projected number of customer connections and overall treated water demands. Table 3-3 lists the other planned projects the District is aware of that would connect to the treated water system when built. These projects include treated water service for domestic and commercial purposes as well as private fire services. The projects are at various levels of the planning and implementation process. The number of units, lots, and connections identified in Table 3-3 is subject to change as these are preliminary and based on current information. The District maintains a development and new connection procedure to evaluate each proposed project, approve, and coordinate the implementation with the respective project owner.

The project types listed in Table 3-3 include potential waterline extensions, master meter, approved projects (not submitted), private fire services, and potential private fire services. Potential waterline extension projects are defined as projects requiring an extension of an existing waterline that are in a pre-planning phase (District has been made aware of the project. No City/County permitting has been achieved). Master meter projects are projects that will be provided a master meter, with individual meters yet to be installed. Approved Projects by City/County have been approved, although no application for water service has been submitted to the District. Private fire service projects will be provided water through dedicated meters for fire service, while potential fire service projects are in the pre-planning phase.

Table 3-3. Planned Projects within NID Service Area

Project Name/Location	No. of Units, Lots, or Connections[1]
Potential Waterline Extension	
EG to LWW Pipeline Project	unknown
Rustic Woods	9
Domschot	4
Kemper Oaks 2 Subdivision	47
Timberline Phase 2	49
Gracie Commons	12
Queen Lil Place	4 to 8
Red Dog Road	16
The Grove	59
PCGC, private development	unknown
Pine Homes on E. Bennet	258
Master Meter	
Lone Oak Ph 2	31
Holiday Market Penn Valley	1
Penn Valley Community Center	1
Olympic Park Road	2
Auburn Grace	1
Comfort Inn and Suites	1
Approved Projects by City/County (not submitted)	
Berriman Ranch	unknown
Rincon del Rio	346
Hidden Creek Subdivision	18
Kemper Woods Subdivision	17
Joeger 20 Subdivision	17
Kenny Ranch	100
Pendagio Vineyard Estates	95
Sunset Grove Homesites	5
Trees Resort at Darkhorse	34
Dorsey Marketplace	172
West Olympia Hotel	74 rooms
Habitat for Humanity Subdivision	16
Private Fire Services	
DS Welding PFS	1
Jada Windows	1
Country Inn and Suites	1
Park Court	1
Lone Oak Ph 2	1
Potential Private Fire Services	
Higgins Gas Station	1

[1]Preliminary numbers, subject to change.
Source: NID, 2026

4 WATER USE CHARACTERIZATION

Lay Description

This section presents the past and current treated and raw water system demands, demand characterization, and projected demands.

The Water Code requires a description and quantification of water uses within the agency's service area. This chapter describes and quantifies NID's past, current, and future water use projections through the year 2050, based on the best currently available data.

In 2024, NID approved the PFW, a long-range, community-driven water planning initiative designed to guide the District's water management strategy over the coming decades. Initiated in late 2021, the PFW process engages stakeholders and the public in evaluating current and future water supply and demand, integrating climate impacts, infrastructure limitations, regulatory factors, and community values into a comprehensive planning framework. In August 2024, NID released the *Plan for Water Final Technical Memorandum* (WEST et al.), which documents the modeling results and evaluates how future supply and demand scenarios could be integrated into the District's water management practices and capital planning. This memorandum reflects extensive community participation and technical input and provides a foundation for Board decisions on long-term water supply strategies. The PFW will serve as base to estimate projected water use through the year 2050.

This chapter also includes a thorough analysis of each water use sector for a variety of factors, then aggregates the information into a comprehensive projection of customer water use. Information from this chapter and Chapter 6 have been used to prepare the reliability assessments in Chapter 7.

4.1 Non-Potable Versus Potable Water Use

The District's service area is a unique blend of potable and non-potable water customers. NID's raw water demand and raw water system accounted for 93.89% of the total 2025 actual water use volume. The District provides potable water for its various permitted public water systems and wholesales potable water to the Lake Vera Mutual Water Company and the City of Grass Valley. The District provides non-potable water to its raw water (agricultural) customers and wholesales non-potable water to the City of Nevada City, the City of Grass Valley, the Nevada City School of the Arts (formerly Bitney Springs LLC), and the City of Lincoln through Placer County Water Agency (PCWA).

The District uses recycled water exclusively for deliveries to the District's raw water customers. As such, recycled water usage is included in this UWMP and is subtracted from the raw water customer duty to avoid double-counting. A full discussion of recycled water and its potential for use in the NID service area is included in Chapter 6.

4.2 Past, Current, and Projected Water Use by Sector

For the demand analysis, NID provided metering data from 2015 through 2025, water use sectors, monthly water consumption, and additional information for historical and projected use analyses. Additionally, WEST collected projected demand data from the PFW, which projects water demand for multiple use categories from 2022 to

year 2072. Historical and PFW datasets were used to determine past, current, and projected water use for NID's eight water use sectors, in five-year increments through 2050.

4.2.1 Past Water Use

Past water use was reported in previous UWMPs. The 2020 UWMP reported a total 2020 Actual volume of 161,678 AF. This volume is larger than what is reported in this 2025 Plan. The 2025 volume, reported in Table 4.1 (DWR Submittal Table 4-1), is lower due to water shortages, caused by the PG&E infrastructure emergency, in the Raw Water Customer Duty and Raw Water Losses categories.

Historical water uses, from 2015 through 2025, are included for treated retail water use (Figure 4-1), treated wholesale use (Figure 4-2), raw wholesale use (Figure 4-3), and agricultural raw water use (Figure 4-4) in the figures below. Figure 4-4 also includes the total of all other uses, which are discretized in Figures 4-1 through 4-3. As seen in Figure 4-1, most categories are relatively stable with small and stable growth, except for Industrial use, which has seen a recent increase and is now expected to remain stable, with little to no growth. While past water use for the City of Grass Valley (Treated) has been relatively volatile, as seen in Figure 4-2, these values are small compared to other water uses and show no obvious trend. Figure 4-3 shows stable historical use for wholesale raw water use. However, it should be noted that PCWA water use is anticipated to increase, as explained in Section 4.2.3. For other uses, the recent historical growth and how it is used to estimate projected water use is described in detail in Section 4.2.3. Figure 4-4 shows a steady and recent (2019–2023) increase in growth in agricultural raw water growth until 2024, when the PG&E infrastructure emergency began.

Historical water use was used and applied throughout the entire PFW process and document. However, the PFW only used data through 2022. When applicable, this document uses the PFW to project future water use. When more recent data (2022 through 2025) are available and relevant, this document describes the update to the PFW.

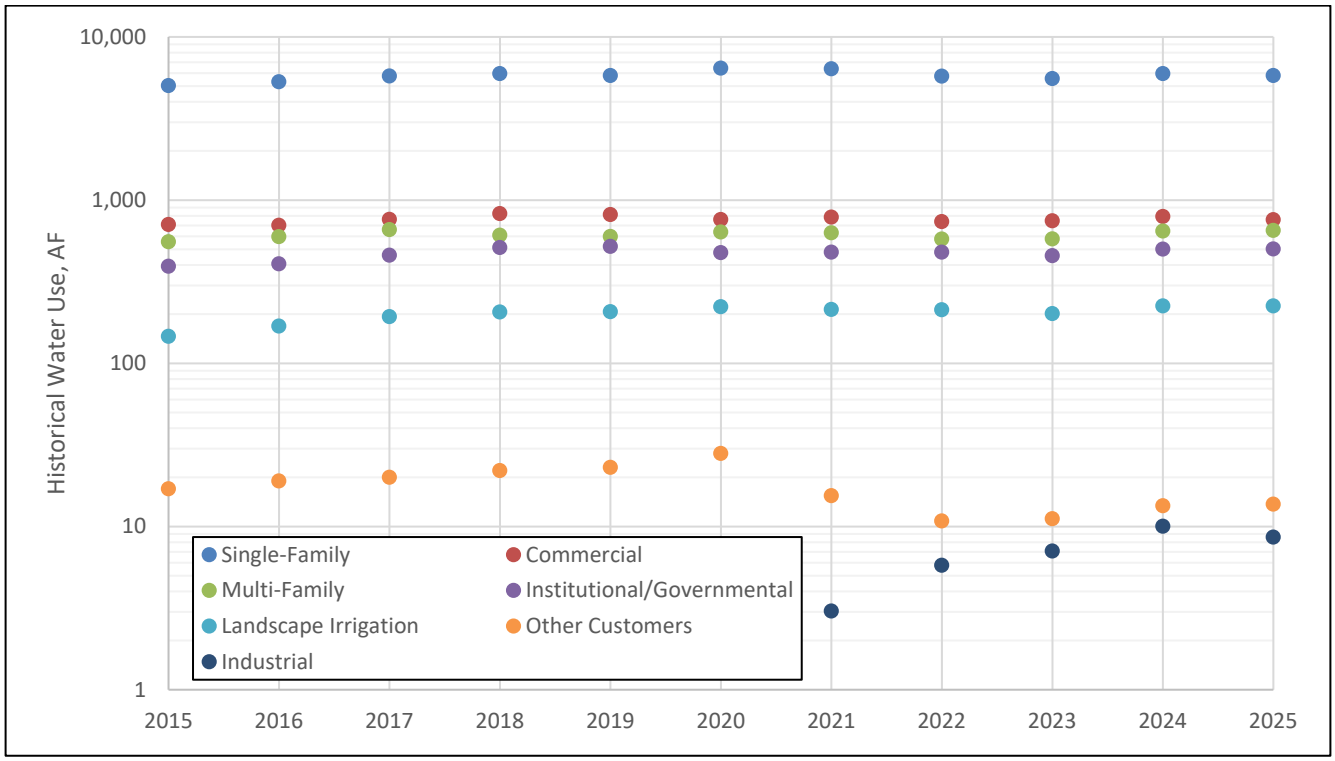

Figure 4-1. Historical Use, Categories in the Public Water Systems

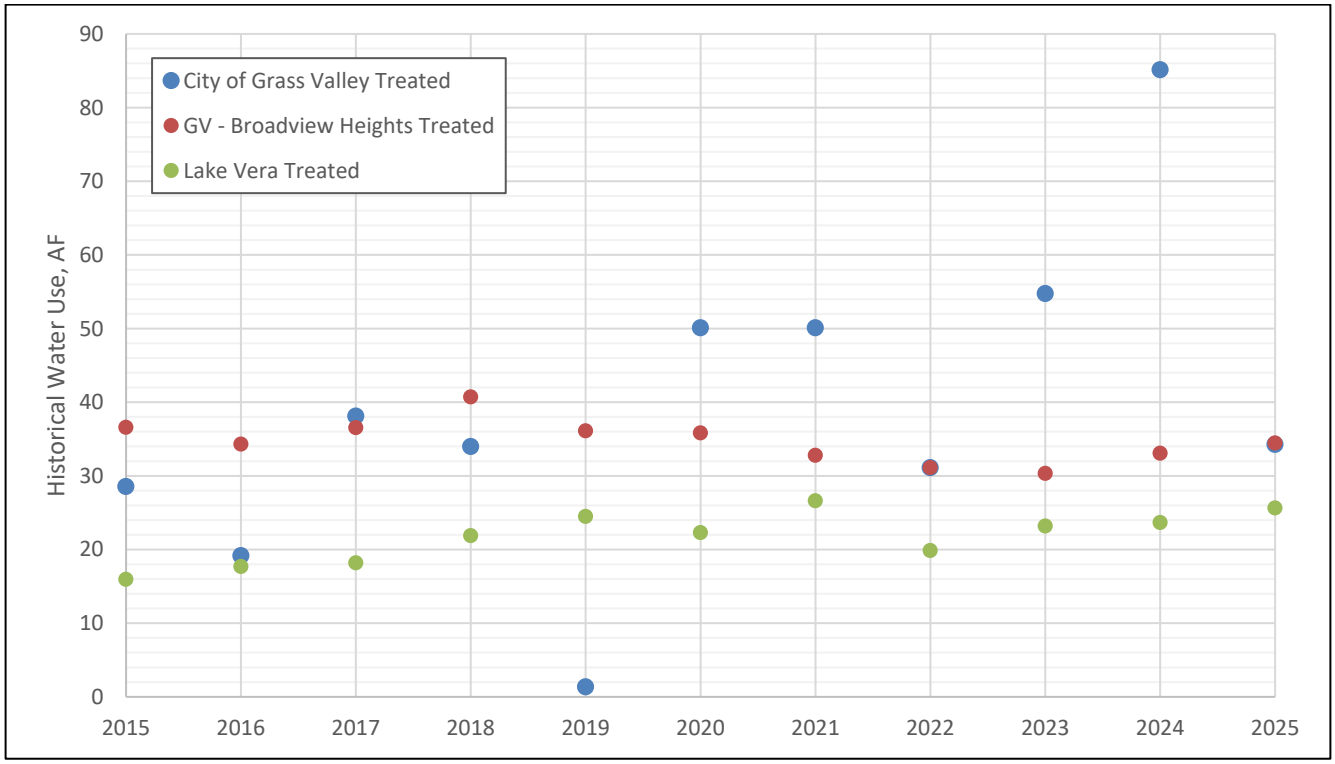

Figure 4-2. Historical Use, Wholesale Treated Water

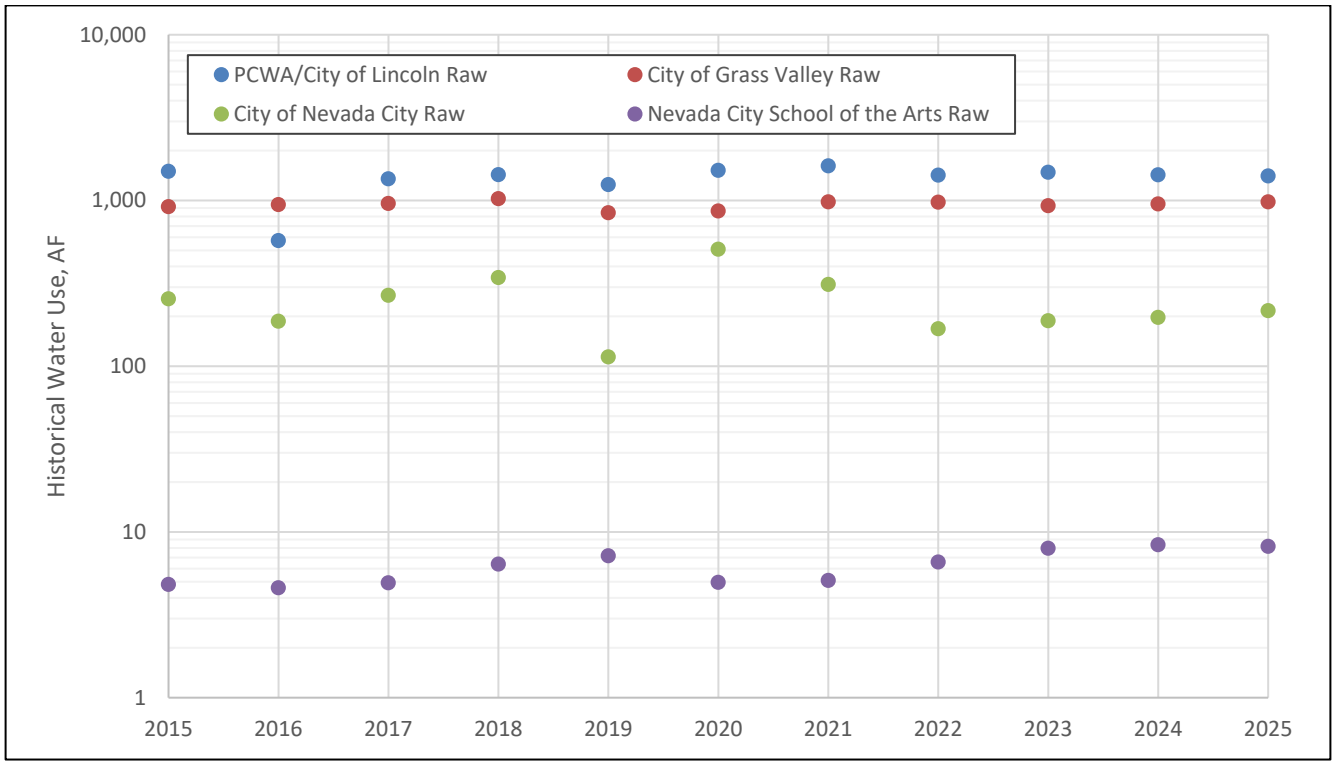

Figure 4-3. Historical Use, Wholesale Raw Water

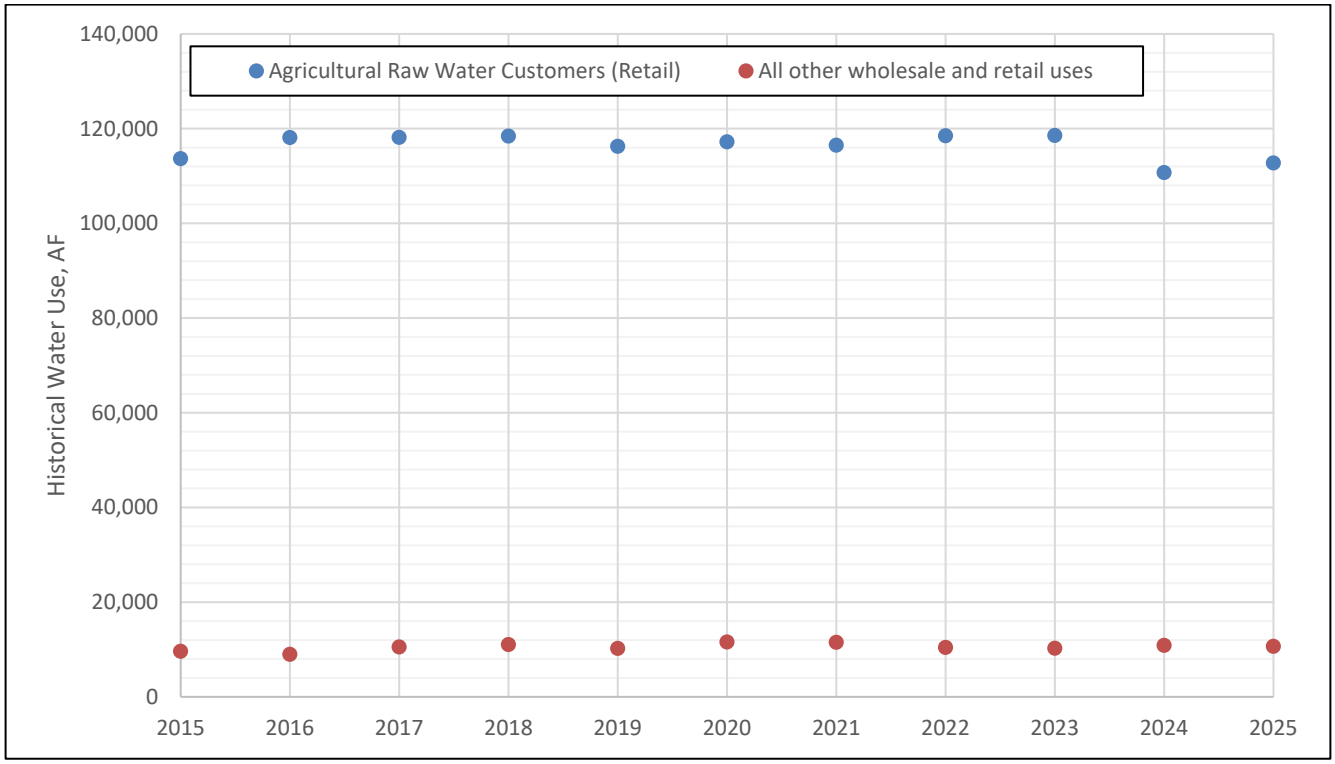

Figure 4-4. Historical Use, Agricultural Water Use

4.2.2 Current Water Use

As shown in Table 4-1 (DWR Submittal Table 4-1), in fiscal year 2025, water use in NID totaled 8,774 AF of potable water and 134,919 AF of non-potable water.

Retail services provided by the District make up the majority of customer connections as well as total use. The retail services provided by NID include treated water for consumption and raw water deliveries for various purposes (commercial agricultural, small agricultural, etc.). In 2025, NID's potable water consumption was distributed among customer sectors as follows:

- 66.06% to single-family residential
- 7.43% to multi-family residential
- 8.63% to commercial
- 0.10% to industrial
- 2.56% to landscape
- 0.16% to other uses
- 5.71% to institutional
- 8.28% to losses
- 1.08% to wholesale treated water

This section presents current water use determined by analyzing information such as NID Public Water Systems Stats, wholesale Municipal Consumption data, total treated and raw sales and deliveries data, and the 2024 water loss audit. Table 4-1 (DWR Submittal Table 4-1) summarizes these data on current gross water use.

As discussed above, the number of treated connections has increased from 2020. However, demand for treated water decreased in 2025 compared to 2020. The number of raw water customers and raw water demand have

also decreased. It should be noted, however, that the retail raw (agricultural) water customers were increasing through 2023. In 2024, an emergency water shortage affecting raw water customers was declared after severe damage occurred to PG&E's infrastructure. The District acknowledges this decrease as unrepresentative of future raw water customer growth. Rather than using past data to estimate retail raw water growth, the District used the PFW. The approaches for projecting each category are discussed in more detail in Section 4.2.3.

Water Use Sectors Listed in Water Code

The retail treated water categories include: Single Family, Multi-Family, Commercial, Industrial, Institutional/Governmental, Landscape, and others. More details regarding the District's retail treated water customer base are included below. From 2020 to 2025, the District's retail treated water customer base increased from 19,648 to 20,025.

During the same period, NID's retail raw water customers decreased from 5,188 to 4,924. It should be noted, however, that the retail raw water customers were increasing through 2023. In 2024, an emergency water shortage affecting raw water customers, was declared after severe damage to infrastructure owned by PG&E. More details regarding the District's retail raw water customer base are included below.

New retail treated connections can be attributed to "in-fill" or "mainline extension" projects. "In-fill" projects include standby connections (see below), variances, and temporary service lines. "Mainline extension" projects require infrastructure improvements and are associated with planned District projects and developer projects. From 2021 through 2025, 79 percent of the new meter installations are classified as "in-fill" projects, with the remaining 21 percent classified as "mainline extension" projects.

Single Family

NID's treated customer base primarily consists of single-family connections, which include various land use zoning classifications with Placer, Nevada, and Yuba counties. Single-family customers make up 72.89% of NID's retail treated and raw customer connections in 2025 while accounting for 66.06% of treated water demands. Proportionally, this customer class represents the largest share of treated water connections and use.

Multi-Family

Multi-family connections make up approximately 0.89% of the District's 2025 total treated and raw water retail connections, while accounting for 7.43% of treated water demands. The majority of the multi-family connections are located in North Auburn, specifically Auburn Greens.

Commercial

A total of 757 commercial customers were served in 2025, making up 2.95% of NID's retail customer connections, while accounting for 8.63% of treated water demands.

Industrial

The District has increased their industrial customer count from 1 in 2020 to 7 in 2025. This category accounts for 0.03% of NID customers while accounting for 0.10% of treated water demand.

Institutional/Governmental

Institutional and governmental customer connections total 7 for 2025. This represents 0.43% of the District's retail customers, while accounting for 5.71% of treated water demand.

Landscape

In 2025 there were 133 customers on dedicated landscape meters. This represents 0.53% of the District's retail customers, while accounting for 2.56% of the treated water demand.

Other Customers

The other customer classification includes connections used for standby fire services. Per regulatory requirements, these connections are required for new and remodeled developments. There were a total of 631 other connections in 2025. This represents 2.53% of the District's retail customers, while accounting for 0.16% of treated water demand.

Environmental Instream Flow Requirements

The current total instream flow requirement is 7,665 acre-feet per year (AFY) per current FERC's license. The typical operating protocol exceeds the minimum. In recent years the District has met 9,410 AFY instead of 7,665 AFY.

Agricultural/Raw Water Customers

Retail raw water customers make up the majority of total water use while representing the second largest retail customer class (by number of connections). As such, NID has also completed an AWMP (adopted on March 25, 2026). NID provides retail service to its raw water customers during the irrigation season (April 15 through October 14), fall/winter, and annually. For fall/winter and annual service, the District requires irrigation season service. As a result of this policy, the number of fall/winter and annual customers is a subset of, and included in, the total number of irrigation season customers.

In 2025, the District had a total of 4,924 raw water customers, accounting for 19.74% of the District's retail customers. In 2020, there were a total of 5,188 raw water customers. It should be noted that the retail raw water customers were increasing through 2023. In 2024, an emergency water shortage, affecting raw water customers, was declared after severe damage to infrastructure owned by PG&E.

Standby Customers

Standby customers represent parcels fronting treated water distribution lines but are not yet receiving service. At the end of 2025, there were a total of 843 standby connections. The total number of standby customers fluctuates throughout the year. Projections for these customers are assumed to be captured by the projections of other customer connections as a standby customer is converted to a treated water customer. Therefore, there are no projections for standby customer counts.

Water Use Sectors in Addition to Those Listed in Water Code

City of Lincoln

The City of Lincoln maintains its own retail water distribution system. In the past, the District has investigated constructing its own WTP to serve its service area in the City of Lincoln. Currently, the District supplies raw water to PCWA for treatment, which in turn provides the treated water to the City of Lincoln for retail. For the purposes of this Plan, it is assumed that this operation will continue in the near future and therefore is represented by one raw water wholesale connection to PCWA for the benefit of the City of Lincoln.

Wholesale Customers

Wholesale services include treated and raw water deliveries. Raw water wholesale connections include the City of Grass Valley WTP, Nevada City WTP, and Nevada City School of the Arts. Treated water wholesale connections include City of Grass Valley and Lake Vera Mutual Water Company. For this analysis, the total number of wholesale customers is not expected to increase during the planning horizon.

Table 4-1. Total uses for Potable and Non-Potable Water – 2025 Actual

Submittal Table 4-1 Retail: 2025 Actual Total Uses for Potable and Non-Potable Water Water Code Section 10631(d)(1)			
Use Type	Additional Description (as needed)	2025 Actual Water Use	
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUEdata online submittal tool		Level of Treatment When Delivered (OPTIONAL) Drop down list	Volume (AF)
Single Family		Potable	5,796
Multi-Family		Potable	652
Commercial		Potable	757
Industrial		Potable	9
Landscape		Potable	225
Other (optional)		Potable	14
Institutional/Governmental		Potable	501
Distribution System Water Loss		Potable	726
Sales/Transfers/Exchanges to other Suppliers	City of Grass Valley, Grass Valley Broadview Heights, and Lake Vera Mutual	Potable	94
Sales/Transfers/Exchanges to other Suppliers	City of Grass Valley, City of Nevada City, Nevada City School of Arts	Non-Potable	1,204
Sales/Transfers/Exchanges to other Suppliers	PCWA/City of Lincoln	Non-Potable	1,402
Agricultural	Agricultural Raw Water Customer Duty	Non-Potable	111,392
Other (optional)	Agricultural Raw Water Loss	Non-Potable	6,194
Agricultural	Agricultural Recycled Water	Non-Potable	1,341
Other (optional)	Instream Flow Requirements	Non-Potable	9,410
Other (optional)	Water sent to carryover storage	Non-Potable	3,976
		Subtotal Potable	8,774
		Subtotal Non-Potable	134,919
		Total	143,693

NOTES: Raw Water Customer Duty partially met with recycled water. Distribution System Water Loss estimated as non revenue water for each system based on the 2024 water loss audits. The instream flow requirements represents the District's current FERC flows. Water sent to carryover storage is calculated as the 2025 carryover storage minus the 2024 carryover storage.

4.2.3 Projected Water Use

This section presents projected water use for each sector, in five-year increments through 2050. The methodology used to generate projected demand for each use type is described below.

The PFW provided demand projections discretized into four broad categories: Raw Water, Treated Water, Municipal Water, and Total Water Losses. The PFW projections for Raw Water and Total Water Loss were used to generate demand projections for the 2025 UWMP. Updated projections for Treated Water and Municipal Water were used in this Plan.

For Treated Water demand, the PFW used the average number of new connections per year and average demand per connection to project increase in demand. In the PFW, the average number of new connections per year was estimated based on historical data up to 2022. For this UWMP, the average number of new connections per year was updated to include recent trends from 2022 through 2025.

For Municipal (Wholesale) Water demand, the PFW used the same assumptions as were reported in the 2020 UWMP. These assumptions have been updated based on both recent trends from 2022 through 2025 and water demand projections received from the City of Lincoln.

The PFW evaluated demand and hydrologic uncertainty over a 50-year horizon (2022–2072) using three hydrologic scenarios (dry, median, and wet) and three demand scenarios (low, baseline, and high). The UWMP projections adopt the baseline demand and median hydrology scenario, as it is most representative of likely future conditions. This scenario represents median projected conditions for both climate and demand.

The PFW demand projection categories are described in more detail below. Only projections for Raw Water (PFW1) and Water Losses (PFW4) are used in this Plan.

- Raw Water: **PFW1**. These projections are based on the expansion to soft service areas at rates similar to historical levels (approximately 20 acres/year developed land).
- Treated Water: **PFW2**. These projections only include single-family and multi-family housing categories. Projections are based on the expansion to soft service areas at rates similar to historical levels (approximately 50 customers/year developed land).
- Municipal Water: **PFW3**. These projections are the sum of the raw and treated water sales/transfers/exchanges to other suppliers categories. Projections were based on the 2020 UWMP.
- Total (treated and raw) Water Losses: **PFW4.** Total water losses in the system, including raw and treated water, that occurs downstream from the reservoirs. Values vary from 13 to 17% depending on the month and year. This variation was determined based on the calibration of the reservoir model during the development of the PFW.

The projections for Treated Water (PFW2) were not directly extracted from the PFW, even though a similar methodology was used in the calculation of the projections using updated statistics. For Treated Water, the number of new connections per year was updated based on considering recent records (2022 to 2025) in the calculation of the average. Based on the updated statistics, the number of new customers per year increased from 50 to 61 new customers per year.

The projections for Municipal Water (PFW3) were not directly extracted from the PFW since those were based on 2020 UWMP. More information on the methods used to estimate projected demand for Municipal Water are available later in this section.

The PFW provides the demand for each year from 2020 to 2072. Year-specific demands are susceptible to climate variability in the modeling. A regression line was used to determine average projections using data from 2020 to 2072. Projections for each category are shown in Figure 4-5.

Projections for the PFW1 and PFW4 categories for 2030, 2035, 2040, 2045, and 2050 were calculated using the regression equations shown in the plots of Figure 4-5 and are shown in Table 4-2.

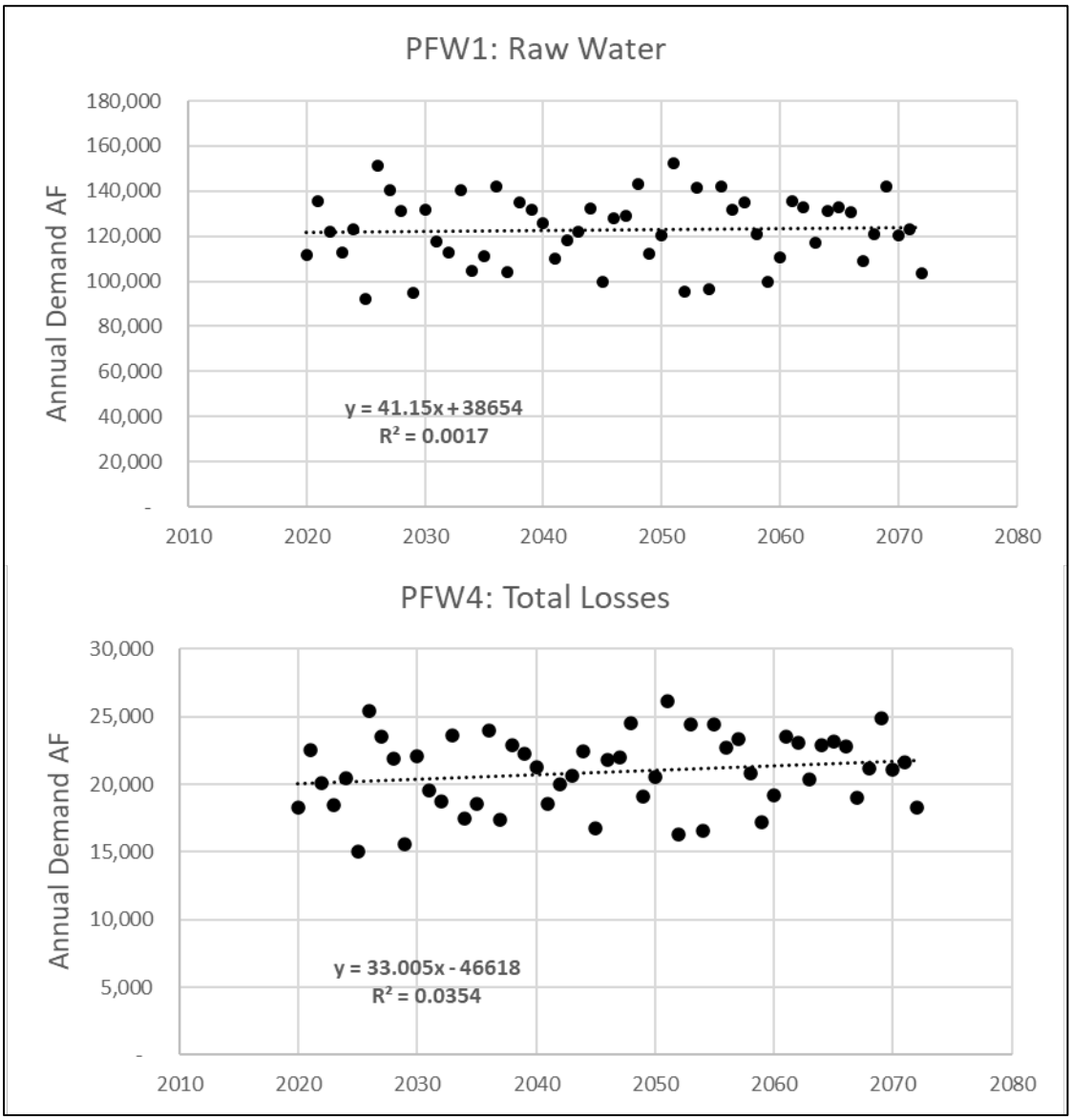

Figure 4-5. Plan For Water Projections

Table 4-2. Plan For Water Projections

PFW Category	2030	2035	2040	2045	2050
	AF	AF	AF	AF	AF
PFW1: Raw Water (Ag/Irrigation)	122,189	122,394	122,600	122,806	123,012
PFW4: Total Loss	20,382	20,547	20,712	20,877	21,042

Treated Retail Water – Single and Multi-Family

Residential use accounted for 5.23% of total retail water demand in 2025 and has remained stable over the past decade, with single-family homes representing about 90% of residential demand. This distribution reflects the rural, low-density character of the service area, where development consists primarily of single-family homes on larger lots, with limited multi-family housing and relatively slow, incremental growth.

Although Nevada County and Placer County's RHNA allocation includes additional housing units, most of this growth is expected to occur outside the NID service area. Additionally, when growth is required in unincorporated Nevada and Placer counties communities, these houses often use private wells as a water supply. Because the District primarily serves rural areas, future population growth and associated water demand are expected to increase gradually and at rates consistent with historical trends, rather than accelerating beyond past patterns.

Demand projections for single-family and multi-family treated retail water were developed using similar assumptions from the PFW, with updated parameters based on recently recorded data for the years of 2022 to 2025. The PFW assumed an average of 50 new connections per year estimated based on data from 2013 to 2022. Based on data from 2022 to 2025, 61 new connections per year were established. That updated number was applied to estimate multi-family and single-family projected demand. The number of people per connection and per capita water use have remained stable over the past decade and are assumed to remain unchanged. The 2025 UWUO reported population was equal to 54,196 and total number of connections in 2025 was equal to 20,025. Therefore, the number of people per connection is equal to 2.7. The 2025 values of 2.7 people per connection and 0.12 AF per capita were applied to estimate future demand.

Based on these assumptions, treated residential demand is projected to increase gradually from 6,448 AF in 2025 to 6,942 AF in 2050. This total demand was allocated between single-family and multi-family housing using historical demand patterns, which have remained consistent over the past 10 years. Single-family residential use accounts for approximately 90 percent of the demand, while multi-family housing accounts for the remaining 10 percent.

Treated Retail Water – Commercial

Commercial demand was not included in the PFW. Commercial demands averaged 9.5 percent of treated retail demand between 2014 and 2025, representing the second largest customer category by total use. Average commercial demand during this period was 1.04 AFY per connection, which was used to project future demands. From 2022 to 2025, approximately five new commercial connections were added annually, resulting in an incremental demand increase of 5.20 AF/year. Given the rural character of the District's service area, commercial growth is expected to remain consistent with historical trends. Using an average baseline demand of 758 AF/year (2022–2025) and an annual increase of 5.20 AF/year, commercial demand is projected to reach approximately 888 AF/year by 2050.

Treated Retail Water – Industrial

Industrial demand was not included in the PFW. Industrial water use within the District's retail service area is minimal. No use was reported from 2014 through 2019, and only 0.22 AF was reported in 2020. From 2021 to 2025, the number of connections remained constant at two, while annual demand increased from 3 to 9 AFY. The District does not anticipate a further increase in Industrial water use. Thus, this Plan holds the Industrial water use constant at 9 AFY.

Treated Retail Water – Institutional/Governmental

Institutional/governmental demand was not included in the PFW. Institutional and governmental demand averaged 6 percent of treated retail demand for the period 2022 through 2025. This demand has been constant since 2014. Two new connections were added since 2021, one in 2024 and another in 2025, with an average rate of change in number of connections of 0.5 per year. Total use per connection for the same period averaged 4.59 AFY/connection. This unit demand factor is used in projecting demands through 2050, resulting in an increase from a baseline of 484 AFY (average 2022–2025) to approximately 541 AFY by 2050.

Treated Retail Water – Landscape

Landscape demand was not included in the PFW. Dedicated landscape connections are used by various NID customers, including residential and non-residential commercial customers. Landscape water use averaged 2.73 percent of total treated retail use for the period 2022 through 2025. An average of 2 new connections was added by year, with an average use per connection of 1.65 AFY, which results in an increased demand of 3.3 AFY. This unit demand factor is used in projecting demands through 2050, resulting in an increase from a baseline of 216 AFY (average 2022–2025) to approximately 298 AFY by 2050.

Treated Retail Water – Other and Undefined

Other and undefined demands were not included in the PFW. The “other” category includes meters dedicated to fire services. “Undefined” accounts for connections that have not yet been classified across the existing water uses. Those two categories combined account for less than 0.15% of the water use from 2022 to 2025. An average of 11.25 new connections were added by year, with an average increase in demand of 0.20 AFY. This unit demand factor is used in projecting demands through 2050, resulting in an increase from a baseline of 12 AFY (average 2022–2025) to approximately 17 AFY by 2050.

Environmental Instream Flow Requirements

The current total instream flow requirement is 7,665 AFY. The District is currently in the process of renewing its FERC license (see Section 1.2.2), which might affect future environmental instream flow requirements. However, future changes in requirements are currently unknown. This Plan does not take into account any increase in unrecoverable flow requirements and instead uses NID’s existing FERC requirements plus their typical buffer to ensure compliance (9,410 AFY).

Treated Wholesale Water

NID provides treated and raw water to wholesale customers through master meters in accordance with individual service agreements. Each treated-water customer agreement, historical usage value, and assumption used to estimate projected demand is described below.

Wholesale treated water demand projections rely primarily on existing customer agreements and anticipated population growth. Demands from wholesale customers are expected to remain relatively stable. Demand projections are discussed below in more detail.

City of Grass Valley / Treated Water

NID provides treated water to the City of Grass Valley as well as the Broadview Heights area of Grass Valley. The water is metered through a master meter that NID then bills to Grass Valley. An agreement between the District and City of Grass Valley, dated April 2013, allows for supply as needed and as available from NID. The City of Grass Valley did not provide demand projections for this connection for the UWMP. The District assumes a future demand of 84 AFY, based on past combined account usage from 2022 to 2025.

Lake Vera Mutual Water Company

NID provides treated water to Lake Vera Mutual Water Company. The water is metered through a master meter that NID then bills to the company. An agreement between the District and Lake Vera Mutual Water Company, dated June 1995, allows for supply as needed from NID. This number has stayed consistent with only small variations throughout the period of 2022 to 2025. The District assumes a future demand of 23 AFY for the demand projections.

Raw Wholesale Water

As mentioned above, NID provides treated and raw water to wholesale customers. Each raw-water customer agreement, historical usage value, and demand projection is described below and summarized in the following subsections.

Wholesale raw water demand projections rely primarily on existing customer agreements and anticipated population growth. Demand is expected to remain stable for Grass Valley, Nevada City, and Nevada City School of the Arts, but to increase for PCWA due to increased population in the City of Lincoln as a result of RHNA and other local developments. The data and methods used to project the City of Lincoln increase in demand are presented in the City of Lincoln subsection below. More information on the reasoning for estimating projected demand for raw water wholesale customers is also provided in the following subsections.

City of Grass Valley / Raw Water

NID sells surplus raw water to the City for use in their WTP. Grass Valley operates a water treatment and distribution system. The agreement between the District and the City of Grass Valley, dated April 2013, allows for supply as available from NID. There is no volume requirement. From 2012 to 2025, the supply varied from 841 AF to 1,209 AF. An average of 959 AF was observed from 2022 to 2025. The District assumes that this average will not change in the future.

Nevada City

NID sells surplus raw water to Nevada City for use in their WTP. Nevada City operates a water treatment and distribution system. The agreement is executed annually, with the annual volume to be delivered not exceeding 800 AFY. For the period 2022 through 2025, annual deliveries averaged approximately 192 AFY. The raw water is sold to Nevada City only if surplus to NID's needs, and the upper limit of 800 AFY is not a required supply delivery. Nevada City did not provide projected supply needs for this UWMP. Based on historical trends, the District assumes that the 2022-2025 average of 192 AFY will not change in the future.

Nevada City – School of the Arts

The Nevada City School of the Arts is supplied raw water for on-site treatment and redistribution. The deliveries have been made in the past pursuant to an agreement since 1991 and are separate from the annual agreement with Nevada City (described above). Historical use from 2012 to 2025 ranged from 4.6 to 8.35 AFY. NID is contracted to provide up to 36 AFY for the School of the Arts. Although the School of the Arts has yet to exercise the full contractual amount, projected demands reported in this UWMP incorporate NID's contractual amount of 36 AFY.

Lincoln/PCWA

NID sells raw water to PCWA for treatment and subsequent delivery to customers within NID's service area located in the City of Lincoln.

As a part of the 2025 UWMP efforts, the City of Lincoln provided the most current Total Water Use Projections for seven Villages and three Special Use Districts, as shown in Table 4-3. NID service areas either completely or partially cover three Villages (Village 1, Village 2, Village 3) and zero Special Use Districts. Growth over the next 25 years is assumed to only occur within existing city boundaries. Additionally, growth in the three Villages of interest is assumed to be uniformly distributed spatially. Using these assumptions, the District determined the following:

- 91.0% of Village 1 lies in the NID service area and in the current city limits.
- 2.0% of Village 2 lies in the NID service area and in the current city limits.
- 0.0% of Village 3 lies in the NID service area and in the current city limits.

It should be noted that a greater percentage of each Village lies in NID territory than reported in Table 4-3, as portions of each Village lie in NID territory but outside current city limits. For example, the entirety of Village 3 lies in the NID service area but outside the current city limits. Future 25-year growth is assumed only to occur within existing city boundaries. As such, future buildout in this Village is assumed to occur after 2050. Future buildout in Village 2 is assumed to occur by 2050 for the 2.0% of NID/City overlap. Using these assumptions, the District estimated the portion of water use growth in the applicable three Villages that NID would be responsible for, as shown in Table 4-5. Currently, NID sells raw water to PCWA for treatment and subsequent delivery to customers within NID's service area located in the City of Lincoln. For planning purposes, the District assumes that the entirety of NID Customer water demands, as listed in Tables 4-4 and 4-5, will be met by NID water in the same manner.

Table 4-3. City of Lincoln Water Projections per Development Area

Development Area	5-Year	10-Year	15-Year	20-Year	Buildout	Total	Percentage of Development Area in NID Territory and the Current City Boundaries
	AF	AF	AF	AF	AF	AF	
Village 1	1,050	1,391	201	35	-	2,678	91.0
Village 2	-	-	-	-	2,242	2,242	2.0
Village 3	-	-	-	-	3,233	3,233	0.0
Village 4	-	-	-	-	4,137	4,137	0.0
Village 5	224	1,083	2,453	2,020	-	5,780	0.0
Village 6	-	-	-	-	4,062	4,062	0.0
Village 7	897	260	403	-	147	1,707	0.0
SUD-A	-	-	-	-	2,925	2,925	0.0
SUD-B	161	96	56	-	-	313	0.0
SUD-C	-	-	-	-	1,493	1,493	0.0

Table 4-4. NID Customer Incremental Water Projections per City of Lincoln Development Area

Development Area	2030	2035	2040	2045	2050	Total
	AF	AF	AF	AF	AF	AF
Village 1	956	1,266	183	32	-	2,437
Village 2	-	-	-	-	45	45
Village 3	-	-	-	-	-	-
Total	956	1,266	183	32	45	2,482

Table 4-5. NID Customer Total Water Projections – City of Lincoln

2022–2025 Average	2030	2035	2040	2045	2050
1,431	2,387	3,653	3,836	3,868	3,913

Raw Retail Water

NID provides raw water to customers during three time-periods; (1) the irrigation season (April 14–October 15); (2) fall/winter period; and (3) annually. As described in Chapter 2, the fall/winter and annual customers are subsets of the irrigation season customers, as required by NID.

The PFW performed an in-depth study of raw water demand for irrigation, accounting for the effects of a changing climate. This UWMP applies the PFW1 Raw Water projections, which were based on the expansion to soft service areas similar to historical rates (~20 acres/year developed land).

Actual raw water customer usage is difficult to quantify on an individual basis as customers order a maximum volume of water, while the actual amount diverted is based on customer practices. The raw water system infrastructure is used throughout NID to deliver water to raw water customers, water treatment plants, and wholesale customers. The infrastructure system incurs water loss, further complicating the quantification of actual retail raw water use. To maintain proper flow in the canals to ensure adequate delivery, the District generally supplies the canals with more water than is ordered by customers. This "carriage water" is picked up

by other canal systems or lost to the District. While the carriage water is not necessarily a consumptive demand, it is required to maintain the ability to supply customers' ordered amounts, and is, therefore, built into the water demands as part of the agricultural raw water loss category.

Other Water Sales

South Sutter Water District (Raw)

In years with a wholesale water supply surplus, the District has sold some of the surplus supply to the South Sutter Water District (SSWD). Although this water sale occurred in 2011 through 2013, only limited water was available to sell to SSWD. Since then, such sales have occurred in only two months during 2016 and not at all between 2021 and 2025. For planning purposes, this UWMP projects a total of 0 AFY to be provided to the SSWD, although this water demand is subject to the availability of future surplus supplies.

Out of Area Sales

In years of surplus water availability, the District provides water service to a small number of customers outside the service area boundaries. As of 2005, the District does not allow the establishment of any new services outside the District; however, when surplus is available, NID recognizes those established before the 2005 cutoff.

System Losses

The PFW4 estimated total (treated and raw) water losses in the system. For this Plan, treated water loss was estimated based on the water audits from 2020 to 2024. Total system non-revenue water amounts to 10.40% of authorized consumption. The 2028 State Water Board Water Loss Standards require NID to reduce their system's real water loss by 21.6%. For the projections, apparent water loss and additional non-revenue water loss were held steady as a percentage of total treated water consumption. Factoring in reducing only the real water loss, the total water loss for the system is now assumed to be 8.77% rather than 10.40% of the total treated water consumption.

The PFW4 estimated total (treated and raw) water losses in the system, which included the treated water loss without improvements per the 2028 State Water Board Water Loss Standards requirements. The following was performed to calculate raw water loss based on PFW4:

1. The PFW4 was corrected by removing the expected treated water loss reductions per the Standards.
2. Treated water loss was estimated to be 8.77% of the total treated water consumption.
3. Raw water loss was estimated as the difference between the corrected PFW4 (item 1) and the treated water loss (item 2).

The methods and assumptions described throughout section 4.2.3 were used to develop Table 4-6 (DWR Submittal Table 4-2).

Table 4-6. Demands for Potable and Non-Potable Water – Projected

Submittal Table 4-2 Retail: Total Uses of Potable, and Non-Potable Water - Projected Water Code Section 10631(d)(1)							
Use Type	Additional Description (as needed)	**Projected Water Use** (Report To the Extent that Records are Available)					
Drop down list		Level of Treatment When Delivered (OPTIONAL) Drop down list	**2030**	**2035**	**2040**	**2045**	**2050** (opt)
			(AF)	(AF)	(AF)	(AF)	(AF)
Single Family		Potable	5,892	5,981	6,070	6,159	6,248
Multi-Family		Potable	655	665	674	684	694
Commercial		Potable	784	810	836	862	888
Industrial		Potable	9	9	9	9	9
Landscape		Potable	232	249	265	282	298
Other (optional)	Other or undefined use of potable water	Potable	13	14	15	16	17
Institutional/Governmental		Potable	496	507	519	530	541
Distribution System Water Loss		Potable	718	732	745	758	772
Sales/Transfers/Exchanges to other Suppliers	City of Grass Valley, Grass Valley Broadview Heights, and Lake Vera Mutual	Potable	107	107	107	107	107
Sales/Transfers/Exchanges to other Suppliers	City of Grass Valley, City of Nevada City, Nevada City School of Arts	Non-Potable	1,187	1,187	1,187	1,187	1,187
Sales/Transfers/Exchanges to other Suppliers	PCWA/City of Lincoln	Non-Potable	2,387	3,653	3,836	3,868	3,913
Agricultural	Agricultural Raw Water Customer Duty	Non-Potable	120,823	121,029	121,235	121,441	121,646
Other (optional)	Agricultural Raw Water Loss	Non-Potable	19,531	19,680	19,829	19,978	20,127
Agricultural	Agricultural Recycled Water	Non-Potable	1,365	1,365	1,365	1,365	1,365
Other (optional)	Instream flow requirements	Non-Potable	9,410	9,410	9,410	9,410	9,410
Other (optional)	Water sent to carryover storage	Non-Potable	0	0	0	0	0
		Subtotal Potable	8,906	9,073	9,240	9,407	9,575
		Subtotal Non-Potable	154,703	156,324	156,861	157,248	157,648
		Total	163,608	165,396	166,101	166,655	167,223

NOTES:

The baseline for projection was the demand averages for years 2022-2025. For some categories, use in 2025 was larger than the baseline.

1-2 - Single and Multi-family water projections were based on average rate of new connections from 2022 to 2025 (61 new residential connections per year), and historical values of people per connection (2.7) and per capita use (0.12 AF). First a total increase in residential demand is calculated using 61 new residential connections per year and 0.12 acre-feet per year per connection. Then that total number is divided between single and multi-residential demand based on historical use profile. Single-family residential use accounts for approximately 90 percent of the demand, while multi-family housing accounts for the remaining 10 percent.

3-7 - Commercial, Industrial, Landscape, Other, Institutional/Governmental projections were based on assuming the same historical rate of increase from 2022 to 2025 will be observed for the period projected period.

8 - Total system water loss was estimated based on the PFW. Distribution System Water Loss were estimated based on current losses, and loss reduction requirements per the 2028 Water Loss Standard.

9 - Sales/Transfer/Exchanges of potable water are expected to not change. Average historical demands for the period of 2022 to 2025 were assumed over the projected period.

10-11 - Sales/Transfer/Exchanges of non-potable water are split into two rows based on if the accounts are expected to grow (City of Grass Valley, City of Nevada City, Nevada City School of Arts) or not (PCWA). For the accounts not expected to grow, average historical demands for the period of 2022 to 2025 were assumed over the projected period. The City of Lincoln provided incremental projected water use by Village and Special Use District (Table 4-4). The portion NID territory in each Village was calculated and applied to the City of Lincoln projections to calculate incremental PCWA projected water use (Table 4-5). Average historical PCWA demand for the period of 2022 to 2025 was assumed as a baseline, to which the incremental PCWA projected water use was added. Currently, NID provides raw water to PCWA and PCWA provides treated water to customers in the City of Lincoln. This water use category assumes this process will remain unchanged.

12-13 - Projections for Agricultural Raw water are based on the PFW. Final Technical Memorandum is available at https://www.nidwater.com/plan-for-water-final-technical-memorandum-is-released-796a377#docaccess-15dbde583d7259b6eff6fcd631e843202578be0b44a04bbbfd180a63add39466. Projections for Raw Water Loss are based on the PFW. Projected Agricultural Raw Water Customer Duty and Raw Water Loss increases from 2025 reported use (DWR Submittal Table 4-1). The 2025 year does not refelect normal operation due to the raw water infrastructure emergency of 2024-2025, which has been resolved.

14 - Agricultural recycled water is estimated based off of the 2021-2025 average agricultural recycled water. The District does not expect an increase in recycled water use.

15 - The instream flow requirements projections are based on the District's current FERC flows. This row does not include California Department of Fish and Game purchase, which is instead included in the Agricultural Raw Water Customer Duty row.

16 - The District assumes in an average year that no water will be sent to carryover storage. This use type is included since this use type was used in 2025 (DWR Submittal Table 4-1). Similarly, the average year supply from carryover storage in DWR Submittal Table 6-9 is also assumed to be 0 AF.

4.2.4 Characteristic Five-Year Water Use

A critical component of the statutory language in CWC § 10635(b) is the requirement to prepare the five-year DRA, found in Chapter 7. This five-year DRA can also be used to provide the water service reliability assessment for a drought lasting five years.

As a first step, DWR recommends that the expected gross water use for the next five years without drought conditions (also known as unconstrained demand) be estimated. These numbers can then be adjusted to estimate the five-year cumulative drought effects.

Due to a raw water infrastructure emergency that occurred in the years 2024 and 2025, the reported 2025 water demand in Table 4-1 (DWR Submittal 4-1) is not considered unconstrained. Rather than calculating the characteristic five-year water demand by interpolating between the 2025 observed values and the projected 2030 values, the District interpolated down to 2026 using the projected 2030 and 2025 volumes. The water use projections without drought conditions for 2026–2030 are thoroughly discussed in Section 7.3.1.

4.3 Distribution System Water Loss

The distribution system losses from the previous five years are included in Section 4.4, Table 4-7 (DWR Submittal Table 4.5) per the validated water audit links. The percentage of non-revenue water has ranged from 8.8% to 12.5% between 2020 and 2024, with the most recent year presenting a value of 8.8%.

The projected water use described in Section 4.2 assumes that NID will achieve the 2028 water loss performance standard. Table 4-8 (DWR Submittal Table 4-6) in Section 4.4 describes NID progress towards the 2028 loss standard. Of the six public water systems, five are large enough to have calculated standards. All five of these public water systems met their apparent water loss standard. Two of the five public water systems met the real water loss standard.

4.4 Worksheets and Reporting Tables

The DWR Submittal Tables relevant to customer water use have been included in the appropriate subsections of this chapter. While the tables are similar to those completed by NID for its 2020 UWMP, the 2025 tables contain some modifications to reflect Water Code changes and the 2025 timeframe, as well as to provide additional details. In addition to including the tables in this 2025 UWMP document, an electronic version of the tables was submitted to DWR.

4.4.1 Optional Planning Tool Use Analysis Worksheet

The District did not use the optional DWR Planning Tool.

4.4.2 DWR 2025 Submittal Tables

The tables presented in Chapter 4 are part of DWR's electronic reporting system for data input and are used by DWR to evaluate regional and statewide water use information and summarize data for DWR-required Legislative reports. These are the standardized tables for electronic submittal of NID's 2025 UWMP.

Earlier in this chapter, Table 4-1 (DWR Submittal Table 4-1) presents NID's actual total 2025 water per water use sector. Table 4-6 (DWR Submittal Table 4-2) shows the projected demand for potable and non-potable water for the period of 2030 to 2050, in five years increments. Water use projections were developed using the PFW for the use type categories that were included in it and historical rate of growth for the use types not directly included in the PFW or that required updates based on recent year data.

Table 4-7 (DWR Submittal Table 4-5) shows NID's validated water audit links. The 2024 non-revenue water across the six public water systems was 726 AF, 8.8% of the 8,243 AF water consumed across the system. Table 4-8

(DWR Submittal Table 4-6) shows the progress NID has made toward the 2028 Water Loss Standards. The values for the Distribution System Water Loss in Table 4-6 (DWR Submittal Table 4-2) assume this goal will be met by 2028.

Table 4-7 Last Five Years of Water Loss Audit Reporting

Submittal Table 4-5 Retail: Water Loss Audit Reporting Water Code Section 10631(d)(3)(A)			
Public Water System ID # Reported in Table 2-1 R	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)	Link to Submitted to DWR Water Loss Audit Program
Report submittal status for all five years for each Public Water System as available. Add rows as needed			
CA2910004	2020	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/8301206290/NID%20E.%20George%20CY2020_v2%20%28v5.0%29.xls
	2021	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/8940473258/NID%20E.%20George%20CY2021%5Fv2%20%28v5.0%29.xls
	2022	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/5771466910/NID%5FE.George%5F2022%5Fv2.xlsx
	2023	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/6961423575/NID%5FE.George%5F2023%5Fv2.xlsx
	2024	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/5514112174/NID%5FE.George%5F2024%5Fv2.xlsx
CA2910006	2020	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/6598188102/NID%20Loma%20Rica%20CY2020%5Fv2%20%28v5.0%29.xls
	2021	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/3349256217/NID%20Loma%20Rica%20CY2021%5Fv2%20%28v5.0%29.xls
	2022	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/8660321891/NID%5FLoma%20Rica%5F2022%5Fv2.xlsx
	2023	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/4810025870/NID%5FLoma%20Rica%5F2023%5Fv2.xlsx
	2024	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/4742047965/NID%5FLoma%20Rica%5F2024%5Fv2.xlsx
CA2910014	2020	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/7852140128/NID%5FLOP%5F2020%5Fv2%20%28v5.0%29.xls
	2021	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/5665998160/NID%20LOP%202021%5Fv2%20%28v5.0%29.xls
	2022	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/9222684562/NID%5FLake%20of%20the%20Pines%5F2022%5Fv2.xlsx
	2023	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/4310147941/NID%5FLake%20of%20the%20Pines%5F2023%5Fv2.xlsx
	2024	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/6235462784/NID%5FLake%20of%20the%20Pines%5F2024%5Fv2.xlsx
CA2910023	2020	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/4305439591/NID%20Lake%20Wildwood%20CY2020%5Fv2%20%28v5.0%29.xls
	2021	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/8384977042/NID%20Lake%20Wildwood%20CY2021%5Fv2%20%28v5.0%29.xls
	2022	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/1557523429/NID%5FLake%20Wildwood%5F2022%5Fv2.xlsx
	2023	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/4158673942/NID%5FLake%20Wildwood%5F2023%5Fv2.xlsx
	2024	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/2906095206/NID%5FLake%20Wildwood%5F2024%5Fv2xlsx.xlsx
CA3110026	2020	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/4987455070/NID%20N%2DAuburn%5F2020%5Fv2%20%28v5.0%29.xls
	2021	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/4074079215/NID%20North%20Auburn%5F2021%5Fv2%20%28v5.0%29.xls
	2022	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/5354123771/NID%5FNorth%20Auburn%5F2022%5Fv2.xlsx
	2023	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/9071210563/NID%5FNorth%20Auburn%5F2023%5Fv2.xlsx
	2024	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/5988034904/NID%5FNorth%20Auburn%5F2024%5Fv2.xlsx
CA5810005	2020	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/4299848258/NID%5FSmartsville%5F2020%5Fv2%20%28v5.0%29.xls
	2021	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/2667103409/NID%5FSmartsville%5F2021%5Fv2%20%28v5.0%29.xls
	2022	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/4068586051/NID%5FSmartsville%5F2022%5Fv2.xlsx
	2023	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/2678540885/NID%5FSmartsville%5F2023%5Fv2.xlsx
	2024	Yes	https://wuedata.water.ca.gov/public/awwa_uploads/1473752677/NID%5FSmartsville%5F2024%5Fv2.xlsx

Table 4-8. Progress Toward 2028 Water Loss Standard

Submittal Table 4-6 Retail: Progress Towards 2028 Water Loss Standard Water Code Section 10631(d)(3)(C)											
Public Water System ID # Reported in Submittal Table 2-1 R	Did the Water Board Calculate a Water Loss Standard for this Public Water System? (y/n) If no, Supplier will not complete this row.	Real Water Loss					Apparent Water Loss				
		State Water Board Standard		Most Recent AWWA Water Loss Audit		Real Water Loss Per Unit per Day	State Water Board Standard		Most Recent AWWA Water Loss Audit		Apparent Water Loss Per Unit per Day
		2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss Drop down list	Number of Units (Connections or Miles corresponding with units selected)	Volume of Total Real Loss (from AWWA Water Loss Audit) (AF)		2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss	Number of Connections	Volume of Total Apparent Loss (from AWWA Water Loss Audit) (AF)	
CA2910004	Yes	27.5	Gallons per Service Connection per Day (GPSCD)	6667.5	249.9	33.5	9.2	Gallons per Service Connection per Day (GPSCD)	6667.5	68.7	9.2
CA2910006	Yes	26.8	Gallons per Service Connection per Day (GPSCD)	5466.5	261.6	42.7	7.7	Gallons per Service Connection per Day (GPSCD)	5466.5	47.0	7.7
CA2910014	Yes	25.7	Gallons per Service Connection per Day (GPSCD)	2764.3	89.1	28.8	8.7	Gallons per Service Connection per Day (GPSCD)	2764.3	26.9	8.7
CA2910023	Yes	14.6	Gallons per Service Connection per Day (GPSCD)	3397.8	55.6	14.6	6.8	Gallons per Service Connection per Day (GPSCD)	3397.8	26.0	6.8
CA3110026	Yes	16.5	Gallons per Service Connection per Day (GPSCD)	2528.0	46.6	16.5	15.2	Gallons per Service Connection per Day (GPSCD)	2528.0	43.0	15.2
CA5810005	No	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A
Water Board's Calculated Water Loss Standards											

4.5 Water Use for Lower Income Households

Lower income residential demands are included in the District's demand projections. Based on the Housing Element of the Nevada County General Plan (Nevada County Table 8.14, 2019), 44 percent of the population is low income. This includes very low- and low-income dwelling units, defined as those with household incomes up to 80 percent of the area median income. For Placer County, 33 percent of the population is very low- and low-income (Placer County Housing Element Table 18, 2020). The majority of the lower income households are in urban cities that are densely populated or in rural locations in the northeast part of the county where population density is low.

Water usage for lower income housing units is included in the overall water demand projections, shown in Table 4-9 (DWR Submittal Table 4-3). DWR Optional Submittal Table 4-4 was not created and is not included in this Plan.

Table 4-9. Inclusion in Water Use Projections

Submittal Table 4-3 Retail: Inclusion in Water Use Projections Water Code Section 10631 (a), 10631 (d)(4)(A), and 10631 (d)(4)(B)	
Are Future Water Savings Included in Projections? (Refer to Appendix K of UWMP Guidebook) **Drop down list (y/n)**	No
If "Yes" to above: State the section or page number, in the cell to the right, where citations of the codes, ordinances, or otherwise are utilized in demand projections are found. **OPTIONAL** Suppliers may complete Optional Submittal Table 4-4 R to quantify the expected savings.	N/A
Are Lower Income Residential Demands Included In Projections? (Refer to Appendix K of UWMP Guidebook) **Drop down list (y/n)**	Yes
OPTIONAL If the method for accounting Lower Income Residential Demands has been included, provide page number where this accounting can be found. (An example is included in Appendix K.)	N/A

5 SB X7-7 BASELINES, 2020 TARGETS, AND 2025 REPORTING

The Water Conservation Act of 2009, also known as Senate Bill (SB) X7-7, mandated a 20% reduction in urban per capita water use across California by 2020. To achieve this goal, the Act required each Retail Supplier to establish an urban water use target, contributing to the State's collective efforts. The Legislature stated that the combined reductions from all Retail Suppliers would fulfill the statewide legislative mandate.

The goal of this chapter is to allow the Retail Supplier to report on their progress toward meeting their urban water use targets in their UWMP, pursuant to CWC § 10608.40. Suppliers that did not meet their 2020 target in 2020 are required to compare their 2025 water use to the 2020 target.

Retail water suppliers are required to comply with SB X7-7 individually or as a region in collaboration with other retail water suppliers or demonstrate they have a plan or have secured funding to comply, to be eligible for water-related state grants and loans.

When determining water use in the UWMP, two terms are often used interchangeably:

- Daily Per Capita Water Use. The amount of water used per person per day. In the UWMP calculations, this is total water use within a service area, divided by population, and it is measured in gallons.
- Gallons Per Capita Per Day (GPCD). This is the "daily per capita water use" measured in gallons. Therefore, the term commonly used when referring to "daily per capita water use" is "gallons per capita per day" or GPCD.

It is important to distinguish GPCD (as used in UWMPs) from the Residential GPCD (R-GPCD) that is used in some reporting to the State Water Board. GPCD is the total water use from all sectors within a service area (residential, commercial, institutional, and any others) minus allowable exclusions (as defined in SBx7-7), then divided by the population. This is used in UWMPs. R-GPCD is only a part of the GPCD; it is the estimated residential water use in a service area divided by population.

5.1 Reporting Requirements

A discussion of programs implemented to support achievement of the District's per capita water reduction goals is provided in Chapter 9 – Demand Management Measures. The District met their 2020 Target in 2020. The following table with information taken from the 2020 UWMP verifies that they met the SB X7-7 requirement.

Table 5-1: SB X7-7 2020 Target Progress

Submittal Table 5-1 Retail: SB X7-7 2020 Target Progress Water Code Section 10608.40						
☐	Check the box if the Supplier was not an Urban Water Supplier during or before the 2020 UWMP reporting cycle. Proceed to the next table.					
Was Supplier part of a merger or consolidation since 2020?	Regional Alliance Target or Individual Target? Drop down list	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?	Only for suppliers that did not meet the Target in 2020 See DWR NOTES below.	
					Actual 2025 GPCD (From SB X7-7 Compliance Form)	Did Supplier meet the 2020 Target in 2025?
No	Individual Target	197	167	Yes	N/A	Yes

5.2 Nexus to State Water Board Urban Water Use Objectives

The State Water Board's Making Conservation A Way of Life Regulation on Urban Water-Use Efficiency Standards, Objectives, and Performance Measures (§ 965 et seq., Title 23, California Code of Regulations) uses the 2020 Target as a back-stop for the UWUO calculations. The District is currently meeting their UWUO as reported in their current annual UWUO report. Information about NID's actions toward achieving its urban water use goals can be found in Chapter 9.

6 WATER SUPPLY CHARACTERIZATION

Lay Description

This section characterizes NID's system supplies, including (as applicable) purchased or imported water, groundwater, surface water, stormwater, wastewater, recycled water, desalinated water, exchanges or transfers, future water projects, and climate change impacts.

The water supply analysis focuses on characterizing each water asset to assess reliability and risk. The more accurately and detailed this characterization is, the better prepared NID will be to manage its water assets, assess supply reliability, perform a DRA, and prepare and implement the WSCP.

6.1 Water Supply Analysis Overview

The District's primary source of supply is local surface water. Also referred to as watershed supply throughout this UWMP, in the District, this is derived principally from the Yuba River, Bear River, and Deer Creek watersheds, and is further discussed in Section 6.2. Additionally, the District supplements its supply with water purchased from PG&E.

6.1.1 Special Considerations

Environmental Instream Flow Requirements

Possible changes in environmental instream flow requirements are discussed in Section 1.2.2.

Climate Change

The District's efforts to account for climate change through NID's PFW can be found in Section 3.3.1.

Other Locally Applicable Criteria: Water Rights

The District was originally organized for the purpose of storing and delivering irrigation water to farmers and ranchers. In the early 1920s, the District acquired storage and regulating facilities in the upper reaches of the Middle and South Yuba Rivers. In 1926, the District acquired most of its Canyon Creek holdings including the Bowman, Sawmill, French, and Faucherie Reservoirs.

Associated water rights were also obtained. Deer Creek water rights were obtained in the 1920s for the development of Scott's Flat Reservoir. The District's surface water supply water rights are divided into two main categories (1) Direct Diversions, and (2) Diversions to Storage.

1. **Direct Diversions**

This supply includes water rights to runoff from the District's watershed. Watershed runoff is the District's primary water supply. The amount of runoff and the way it is used depends upon the amount of water contained in the

snowpack and the rate at which the snowpack melts. District water rights include 24 pre-1914 rights acquired from mining interests, along with 28 post-1914 rights filed with the State of California to provide for domestic, municipal, industrial, recreational, power, and irrigation uses, along with 3 riparian rights. These include rights for both consumptive and power purposes. The total water right volumes consist of storage rights, direct diversion rights, and rights that are a combination of both. The total quantity estimated for direct diversions and diversions to storage under current consumptive water rights is approximately 450,000 AF on an annual basis. Because of hydrologic variability and temporal water rights limitations, NID does not regularly exercise the full allotment of 450,000 AF. Based on the PFW, the average annual maximum supply is smaller than 450,000 AF due to hydrologic variability and seasonality.

The system of storage reservoirs and conduits used to transport water to the District's service area boundary is referred to as the Upper Division. The Upper Division is operated in conjunction with PG&E under the terms of a joint agreement. Average runoff from the Upper Division watershed, including the watershed area feeding Scotts Flat Reservoir, is approximately 232,600 AFY. Over the last few decades, runoff has fluctuated from less than 89,800 AF in a dry calendar year (2013) to 541,100 AF in a wet calendar year (2017). Runoff has fluctuated from 64,200 AF in a dry water year (2021) to 582,800 AF in a wet water year (2017).

Due to provisions in the PG&E Coordinated Operations Agreement, hydrologic variability and seasonality, and the fact that the District is not the senior water right holder, the historical runoff data evaluated to estimate the District's average runoff supply does not include supplies from the Bear River and the South Yuba River. The District is likely to receive some water from the Bear River and South Yuba River sources in dry years. Due to the uncertainty of the amount of supply available from these two sources, it has not been quantified in this UWMP.

The District's Yuba-Bear Project's Federal Energy Regulatory Commission (FERC) license (No. 2266) expired in July 2013. The Project is presently undergoing relicensing. The current proposed license will likely include increased environmental flow requirements. Since the exact increase is not yet established, it will not be taken into consideration in this UWMP. However, any increase in requirements will cause a reduction in supply available to meet customer demands.

2. Diversions to Storage

The second largest component of District's supply is diversions to storage, which contribute to the volume of water left in storage reservoirs at the end of the irrigation season, usually at the end of September. The District's main storage reservoirs can contain a maximum of 280,085 AF of water. Per the District's WSCP (Chapter 8), carryover storage should be held at a level not less than 85,000 AF. This includes a total 41,800 AF of minimum pool requirements reserved for environmental needs (not including new pending FERC requirements) and dead storage volume (includes siltation estimates) that cannot be counted upon as a supply resulting in an available storage capacity of 195,085 AF. As with most reservoirs, the District's reservoirs are slowly being filled with sediment. The District will continue to monitor and consider removal of sediment from the District's reservoirs as a supply enhancement strategy.

The water supply is dependent on snowmelt and rain to fill storage reservoirs, and the District manages its system based on the timing of those events. While there is some natural runoff during normal summer months, the irrigation season (April 15–October 14) demand is met primarily with withdrawals from storage reservoirs. Careful management and operation of the storage reservoirs is required to capture the maximum amount of runoff, minimizing spillage from the reservoirs, through the variable spring snowmelt season. Carryover storage is also affected by fall/winter customer demands. Fall water deliveries effectively use carryover storage, meaning less water could be available for the following irrigation season.

As part of NID's water supply strategy aimed at maintaining a reliable supply, a storage carry-over target is utilized. The end of September target amount of 130,000 AF is determined as 75 percent of historical end of September

average. This storage within the District's supply reservoirs is used as a basis for identifying a water supply shortage (see Chapter 8 – Water Shortage Contingency Plan).

The target is used by the District to identify necessary operational and strategic changes the District may employ in maintaining reliable supplies to meet expected customer demands. Carry-over storage supplies are relied upon by the District in meeting raw and treated water demands. It is anticipated that this water will also be utilized in meeting future FERC requirements during dry-months, as the natural portion of watershed runoff during this period may be insufficient. Due to infrastructure capacity, as well as timing of runoff and other more senior water rights, not all surface water that falls within the District is available for water supply.

6.2 Water Supply Characterization

NID's water supply portfolio is described and quantified in the following subsections, including imported supplies and recycled water.

6.2.1 Purchased or Imported Water

The hydropower potential of its water led the District to enter into an agreement with PG&E in 1924 to use of a portion of the District's water through PG&E facilities. At the same time the District secured the option to purchase PG&E water to augment its own supply. Over the years, this agreement has been modified to meet the changing conditions and requirements of both organizations. In 1963, the District and PG&E agreed to develop additional storage capacity on both Middle Yuba and the Bear River.

The PG&E supply is similar in quality as the District's own supply since it originates from the same sources and is co-mingled with the District supply. The District's contracted water supply is dependent on the Sacramento Valley Index. Therefore, it is subject to reduction. The maximum amount available for District purchase is 60,148 AF.. The maximum amount the District has used is 19,464 AF during the worst drought year. Purchase is only available in monthly allotments in which many of the months are during the winter, when the District would not need the supply. For planning purposes, the District assumes a minimum use of 3,000 AF.

6.2.2 Groundwater

Most of the Sierra Nevada foothills located in the District's service area has a fractured rock groundwater system (CABY, 2020), including granitic and metavolcanic (U.S. Geological Survey, 1984). NID views the fractured rock groundwater system as low yielding and unreliable for a District supply source. The District does not utilize groundwater as an existing or planned source of water supply or recharge due to limited groundwater availability. The majority of the District's service area has no groundwater aquifer per DWR *Bulletin 118* except for the very small portion of the District's service area in Lincoln, which is on the eastern boundary of the Sacramento River Basin, North American Sub-Basin. NID is aware there are private wells in the area used for domestic purposes, but NID does not track private groundwater well inventory or use at this time.

Basin Description

NID's service area overlaps with a small portion of the North American Sub-Basin of the Sacramento Ground Water Basin; however, the District is solely a surface water agency.

Basin Management Information

The District previously had been an active member of the West Placer Groundwater Sustainability Agency (WPGSA). As of November 10, 2021, NID withdrew from the WPGSA. NID continues to support the WPGSA team with publicly available data when requested.

Past Five Years Groundwater Pumping

As shown in Table 6-1 (DWR Submittal Table 6-1), groundwater **has not been used** as a source of supply during the 2021–2025 period.

Table 6-1. Groundwater Volume Pumped

Submittal Table 6-1 Retail: Groundwater Volume Pumped Water Code Section 10631(4) and 10631(4)(c)	
☑	Check the box if the Supplier does not pump groundwater. Proceed to the next table.
☐	Check the box if all or part of the groundwater described below is desalinated. (OPTIONAL)

6.2.3 Surface Water

The District's primary source of supply is local surface water derived principally from the Yuba River, Bear River, and Deer Creek watersheds. The water is diverted and stored under the District's pre-1914 and post-1914 appropriative water rights. The water rights allow for diversion and/or storage of approximately 450,000 AFY. Because of hydrologic variability and temporal water rights limitations, NID does not regularly exercise the full allotment of 450,000 AFY. The District has an extensive system of storage reservoirs that provides surface water supply to the District's six WTPs as well as to the raw water customers. The District also maintains a contract with PG&E to purchase surface water that originates from the same supply sources as the District water rights supply.

6.2.4 Stormwater

The District currently has a policy to not actively collect stormwater runoff as presented in the current stormwater policy (District Policy #6655). However, based on current system configurations, the District may incidentally divert stormwater into the canal system due to uncontrolled runoff outside of NID's control.

6.2.5 Wastewater and Recycled Water

Municipal recycled water is municipal wastewater that has been treated to a specified quality to enable it to be used again for beneficial purposes. For this UWMP, recycled water means only municipal recycled water, that is, water that has been treated and discharged from a municipal wastewater facility. This subsection describes the coordination of wastewater collection, treatment, and disposal, as well as recycled water, within the District's water service area.

Recycled Water Coordination

NID does not coordinate with other entities. The District uses recycled water exclusively for deliveries to the District's raw water customers.

Wastewater Collection, Treatment, and Disposal

Wastewater collection, treatment, and discharge in the District's service area is the responsibility of Nevada City, Grass Valley, and Auburn. The District has no authority or control over wastewater management in the District's service area. The District understands that reuse is an important element of integrated water supply planning and is open to investigations with any of the wastewater utilities to support further development of a reuse supply component.

Municipal wastewater is generated within the District from a combination of residential and commercial sources. The wastewater is collected by gravity and force mains in a series of main, trunk, and interceptor sewers owned and operated by the three municipalities within the District service area: the City of Grass Valley, Nevada City, and the City of Auburn. The wastewater treatment and discharge within the service area in 2025 are shown in Table 6-2 (DWR Submittal Table 6-2) and 6-3 (DWR Submittal Table 6-3). The District's use of recycled water within the service area is based on the irrigation season of mid-April through mid-October total effluent from the waste water treatment plant (WWTP).

- **City of Grass Valley**: The City of Grass Valley operates a tertiary wastewater treatment plant, and is permitted for treating 2.78 mgd. Grass Valley maintains 60 miles of pipeline within the collection system and seven wastewater lift stations. Treated wastewater is discharged to Wolf Creek.
- **Nevada City**: Nevada City is permitted to collect and treat an average dry weather flow of 0.69 mgd. The plant went through a multi-million-dollar upgrade which was completed in 2007. It is a tertiary treated activated sludge plant. The Nevada City Wastewater Treatment Plant's treated wastewater is discharged to Deer Creek.
- **City of Auburn**: The City of Auburn's treatment plant is located west of Auburn in the Ophir area. The plant is permitted to discharge its treated effluent into Auburn Ravine Creek to a maximum flow of 1.65 mgd. The effluent is treated to tertiary levels. The City of Auburn also maintains 11 sewer lift stations and over 85 miles of wastewater collection lines throughout Auburn. This network of pipes collects sewage from residences and businesses within the City of Auburn and transports it to the treatment plant.

The amount of wastewater collected within NID's service area is reported as the influent of the three wastewater treatment plants (WWTPs) listed in Table 6-2 (DWR Submittal Table 6-2). Estimated wastewater flows generated within the District in 2025 are presented in Table 6-2. Table 6-3 (DWR Submittal Table 6-3) lists the treatment and discharge volumes for 2025.

Table 6-2. Wastewater Collected Within Service Area in 2025

Submittal Table 6-2 Retail: Wastewater Collected Within Service Area in 2025 Water Code Section 10633(a)				
☐	Check the box if there is no wastewater collection system. Proceed to the next table.			
Wastewater Collection			**Recipient of Collected Wastewater**	
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? OPTIONAL **Drop Down List**	Volume of Wastewater Collected from UWMP Service Area 2025 (AF)	Name of Wastewater Treatment Plant (WWTP) and Place ID Number **Drop down list**	Is WWTP Located Within UWMP Area? **Drop Down List**
City of Grass Valley	Estimated	1,667	Grass Valley City WWTP, Place ID 227818	Yes
Nevada City	Estimated	466	Nevada City WWTP, Place ID 244141	Yes
City of Auburn	Estimated	1,267	Auburn WWTP, Place ID 206733	Yes
Total Wastewater Received from UWMP Service Area in 2025:		3,400		

Table 6-3. Wastewater Treatment and Discharge Within Service Area in 2025

Submittal Table 6-3 Retail: Wastewater Treatment and Outcomes Within UWMP Service Area in 2025
Water Code Section 10633(a)

☐ **Check the box if no wastewater is treated or disposed of within the UWMP service area.**
Proceed to the next table.

Wastewater Treatment Plant Name and Place ID Number **Drop down list**	Does This Plant Treat Wastewater Generated Outside the UWMP Service Area? (OPTIONAL) **Drop down list**	2025 Volume of Wastewater Received from UWMP Service Area (As Reported in Submittal Table 6-2 R)	Total 2025 Volume of Water Treated	2025 Outcomes of Treated Wastewater										
				Water Recycled Within UWMP Service Area (enter data as applicable)		**Water Recycled Outside of UWMP Service Area** (enter data as applicable)		**Effluent Discharge that is not a Permitted Recycled Water Use** (enter data as applicable)		**Required Discharge for Instream Flow** (enter data as applicable)		**Delivered to Another Entity for Additional Treatment** (enter data as applicable)		
				Treatment Level **Drop down list**	Volume	Treatment Level **Drop down list**	Volume	Treatment Level **Drop down list**	Volume	Treatment Level **Drop down list**	Volume	Treatment Level **Drop down list**	Volume	Name of other entity
		(AF)	(AF)		(AF)		(AF)		(AF)		(AF)		(AF)	
Add additional rows as needed														
Grass Valley City WWTP, Place ID 227818	Yes	1,667	1,838	Tertiary	630		unknown	Tertiary	1,208		0		0	
Nevada City WWTP, Place ID 244141	Yes	466	478	Tertiary	223		unknown	Tertiary	255		0		0	
Auburn WWTP, Place ID 206733	Yes	1,267	1,317	Tertiary	487		unknown	Tertiary	830		0		0	
	Total	3,400	3,633		1,341		0		2,292		0		0	

NOTES: Amount of recycled use outside of service area is not tracked by NID. Total 2025 Volume of Water Treated is greater than 2025 Volume of Wastewater Received from UWMP Service Area due to various issues including: a new pipeline coming in from the south side of Auburn not yet reading into the report system; different meter systems reading effluent and influent flow; etc.

Recycled Water System Description

All wastewater treated within the District service area is discharged to local watercourses. Once discharged, the flow is available for appropriation by the District. Recycled water discharge mixes with District water being transported in those water courses. The combined waters are then diverted from the creeks into canals. This supply of water augments the District's overall water supply. The District uses recycled water exclusively for deliveries to the District's raw water customers. Below is a description of the use of recycled water from each of the three wastewater treatment municipalities within the District service area.

The District utilizes recycled wastewater effluent from the Nevada City sewage treatment plant for raw water system customers through its diversion at Deer Creek. The District utilizes recycled sewage effluent from the Grass Valley sewage treatment plant for raw water system customers through its diversion at Wolf Creek. The District utilizes recycled sewage effluent from the Auburn sewage treatment plant for raw water system customers through its diversions located along Auburn Ravine.

Current, Potential, and Projected Recycled Water Use

Due to current system configurations, potential uses for recycled water are limited to deliveries to raw water customers, and mainly occur during the summer months. There are no facilities in place to distribute recycled water to other customers or end-users. The District actively monitors the viability of such facility improvements as opportunities arise.

Table 6-4 (DWR Submittal Table 6-4) presents the current and projected reuse water demands in the District's service area. The extent to which recycled water is available in the future depends upon the capacity and regulatory environment of the three WWTPs, and the District's current recycled water strategy. Recycled water supplies could potentially be reduced based on the assumption that discharges of natural waterways from the wastewater treatment facilities would be reduced. The projected recycled water supply assumes the average of recycled water supply from 2021 through 2025 is representative of future conditions with respect to recycled water utilized by the District. The projected recycled water use reported in the table may not reflect the potential for increases originating from a change in the District's current recycled water strategy. The number of potential uses of recycled water is the five-year average of recycled water discharged by the WWTP's.

Table 6-4. Recycled Water Direct Beneficial Uses Within Service Area

Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area										
☐	Check box if recycled water is not used and is not planned for use within the service area of the supplier. The supplier will only complete the column on "Potential Recycled Water Use" and submit an accompanying narrative on the feasibility of that potential recycled water use.									
Name(s) of Facility/ies Producing (Treating) the Recycled Water			Grass Valley, Nevada City, City of Auburn							
Use Type **Drop down list**	**Potable or Non-Potable** (after treatment if treated)	Additional Information (as needed)	2025	2030	2035	2040	2045	2050	**Potential Recycled Water Use**	
									Volume	
Agricultural irrigation	Non-Potable	Raw water deliveries	1,341	1,365	1,365	1,365	1,365	1,365	3,428	
		Total	1,341	1,365	1,365	1,365	1,365	1,365	3,428	

NOTES: The amount of recycled water is based on the WWTP effluent during the mid-April through mid-October 2025 irrigation season. The amount of potential uses of recycled water is based on the average of January through December WWTP effluent for the period 2021 through 2025. Projection for 2030 through 2050 based on average of total recycled water for the period 2021 through 2025.

Table 6-5 (DWR Submittal Table 6-5) provides a comparison of recycled water use projected to occur in 2025 based on the 2020 UWMP and the actual recycled water use that occurred in 2025. As seen in this table, the projected volume of recycled water utilized by the District was 1,408 AF, while the actual use was 1,341 AF. The less-than-anticipated recycled amount is attributed solely to the natural yearly variances in which influent flows into the three WWTPs.

Table 6-5. 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual

Submittal Table 6-5 Retail: 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual Water Code Section 10633 (e)		
☐	Check the box if recycled water was not used in 2025 nor previously projected for use in 2020. Proceed to the next table.	
Use Type Drop Down list	2020 Projection for 2025	2025 Actual Use
	(AF)	(AF)
Agricultural irrigation	1,408	1,341
Total	1,408	1,341
NOTES: 2020 Projection from Table 4-3 of NID's 2020 UWMP, Subittal Table 6-4.		

Actions to Encourage and Optimize Future Recycled Water Use

The District does not have the authority or control to optimize the use of reclaimed water. Therefore, the District does not have an optimization reuse plan. The District utilizes recycled water to meet raw water demands exclusive of the potable distribution service area. This is more cost effective than the installation of a dual distribution system within its retail potable water system. Recirculating uses of water will continue to occur within the District service area. The District does not maintain incentives to use reclaimed water, and is documented as such in Table 6-6 (DWR Submittal Table 6-6).

Table 6-6. Methods to Encourage Future Recycled Water Use

Submittal Table 6-6 Retail: Methods to Encourage Future Recycled Water Use Water Code Section 10633 (f)	
☑	Check the box if the Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.

6.2.6 Desalinated Water Opportunities

The District has no sources of ocean water, brackish water, or groundwater that provide viable opportunities for development of desalinated water as a long-term supply.

6.2.7 Water Exchanges and Transfers

The District will consider the feasibility of water transfers on a short-term basis as opportunities arise. There were no exchanges or transfers from 2021 through 2025.

Exchanges

NID does not currently include, nor does it plan to include in the future, water exchanges in its water supply portfolio.

Transfers

NID does not currently utilize, nor does it plan to utilize in the future, water transfers as a temporary or long-term water supply to meet normal demand.

Emergency Interties

NID has established emergency interties with neighboring agencies (PG&E and PCWA) and the cities of Grass Valley and Nevada City to facilitate the short-term transfer of water in the event of an emergency such as an earthquake or other disruption in normal supply.

6.2.8 Supply From Storage

NID did not remove water from surface storage and instead added to the system carryover storage during fiscal year 2025.

6.2.9 Future Water Projects

As a mostly rural area primarily dependent on its snowmelt-based supply, the District faces unique challenges in projecting its future supplies and demands. The character of the area and water management practices of the past may be different in the future.

Regarding raw water supply, the final analysis of the PFW recommended that the District explore options such as raising Rollins Dam. However, NID has no active projects or studies related to raw water supply underway. No projects are anticipated in the next five years. While implementation of raw water supply projects could be anticipated over the next 20-year planning horizon, no water supply increase has yet been quantified.

Regarding treated water supply, the projects mentioned in the 2020 UWMP have had no substantial movement in the last five years. Instead, the Lake Wildwood WTP is in the process of a design analysis to compare a full plant rebuild to the possibility of intertying it to the E. George WTP. Construction for either project is not anticipated to begin in the next five-year window. Lastly, the remaining WTP projects mentioned in the 2020 UWMP have progressed even less. No design analyses are expected after the Lake Wildwood and E. George WTPs analyses in the next five-year window. Implementation within the 20-year planning horizon is uncertain.

This narrative is represented in Table 6-7 (DWR Submittal Table 6-7).

Table 6-7. Expected Future Water Supply Projects/Programs

Submittal Table 6-7 Retail: Expected Future Water Supply Projects or Programs Water Code Section 10631 (f)	
☐	Check the box if there are no expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Procees to the next table.
☑	Check the box if some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.

6.2.10 Summary of Existing and Planned Sources of Water

The District's primary supply comes from surface water, including watershed runoff and carryover storage. The District assumes purchasing an average of 3,000 AFY of the PG&E supplies during normal or near-normal years. The PG&E supply availability is subject to hydrologic variability and available District funding. As stated earlier, the projected recycled water supply assumes the average from 2021-2025 is representative of future conditions with respect to recycled water utilized by the District. A summary of actual supply sources and quantities in 2025 are provided in Table 6-8 (DWR Submittal Table 6-8). The water supplies projected from 2025 through 2050 are provided in Table 6-9 (DWR Submittal Table 6-9). Section 7.2.1 describes the methodology applied to project water supply totals based on the PFW results.

Description of Supplies

In Tables 6-8 (DWR Submittal Table 6-8) and 6-9 (DWR Submittal Table 6-9), the District includes five water supply categories: Surface water (watershed runoff, treated), Surface water (watershed runoff, untreated), Supply from Carryover Storage, Recycled Water, and Purchased Water. In 2025, the District did not supply any water from carryover storage. The District did purchase a percentage-wise small amount from PG&E and supplemented their supplies with a percentage-wise small amount of recycled water. The remaining water required to meet the District demands, summarized in Chapter 4, were supplied from the watershed runoff. Not all of the watershed runoff was included as a supply as not all of the watershed runoff was needed for demand in 2025. For future projections, similar calculations were made to identify what amount of average watershed runoff would be used as supply.

Table 6-8. Water Supplies – Actual

Submittal Table 6-8 Retail: Water Supplies — 2025 Actual Water Code Section 10631 (b)			
Water Supply	Additional Description (as needed)	**2025**	
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool		**Water Type** (after treatment if treated) (OPTIONAL) **Drop Down list**	**Actual Volume** (AF)
Surface water (not desalinated)	Watershed runoff, treated for consumption	Potable	8,774
Surface water (not desalinated)	Watershed runoff, untreated	Non-Potable	128,705
Supply from Storage	Carryover storage	Non-Potable	0
Recycled Water	Tertiary treated	Non-Potable	1,341
Purchased or Imported Water	PG&E contracted water	Non-Potable	4,873
		Subtotal Potable	8,774
		Subtotal Non-Potable	134,919
		Total	143,693

NOTES: See DWR Submittal Table 4-1 for more information regarding how these supplies were used. The amount of watershed runoff supplied for treated consumption is the sum of the potable demands. The amount of watershed runoff supplied for untreated demands, the amount of recycle water, and the amount of purchased water from PG&E is the amount required to meet total non-potable demands. The sum of the 2025 carryover storage was larger than 2024 carryover storage, yielding 0 AF supply during 2025. The volume added to storage in DWR Submittal Table 4-1 is included in the watershed runoff, untreated category.

Table 6-9. Water Supplies – Projected

Submittal Table 6-9 Retail: Water Supplies — Projected Water Code Section 10631 (b)												
Water Supply			**Projected Water Supply (Report to the Extent Practicable)**									
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool	Additional Detail on Water Supply	**Water Type** (after treatment if treated) (OPTIONAL) **Drop Down list**	**2030**		**2035**		**2040**		**2045**		**2050 (opt)**	
			Reasonably Available Volume	Total Entitlement (OPTIONAL) See "DWR Notes" below	Reasonably Available Volume	Total Entitlement (OPTIONAL) See "DWR Notes" below	Reasonably Available Volume	Total Entitlement (OPTIONAL) See "DWR Notes" below	Reasonably Available Volume	Total Entitlement (OPTIONAL) See "DWR Notes" below	Reasonably Available Volume	Total Entitlement (OPTIONAL) See "DWR Notes" below
			(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)
Add additional rows as needed												
Surface water (not desalinated)	Watershed runoff, untreated	Non-Potable	150,338	289,059	151,959	284,054	152,496	279,050	152,883	274,045	153,283	269,040
Surface water (not desalinated)	Watershed runoff, treated for consumption	Potable	8,906	N/A	9,073	N/A	9,240	N/A	9,407	N/A	9,575	N/A
Supply from Storage	Carryover storage	Non-Potable	0	91,987	0	90,835	0	89,682	0	88,529	0	87,376
Recycled Water	Tertiary treated	Non-Potable	1,365	N/A	1,365	N/A	1,365	N/A	1,365	N/A	1,365	N/A
Purchased or Imported Water	PG&E contracted water	Non-Potable	3,000	60,148	3,000	60,148	3,000	60,148	3,000	60,148	3,000	60,148
		Subtotal Potable	8,906	0	9,073	0	9,240	0	9,407	0	9,575	0
		Subtotal Non-Potable	154,703	441,194	156,324	435,037	156,861	428,880	157,248	422,722	157,648	416,564
		Total	163,608	441,194	165,396	435,037	166,101	428,880	166,655	422,722	167,223	416,564

NOTES: See DWR Submittal Table 4-2 for more information regarding how these projected supplies are used. The amount of watershed runoff supplied for treated consumption is the sum of the potable demands. The amount of watershed runoff supplied for untreated demands is the amount required to meet total non-potable demands. Water rights in the watershed equal 450,000 AF, a larger amount than the historical watershed runoff availability. The total average watershed runoff is included instead as the entitlement. Projected recycled water is the 2021-2025 average. An estimation of the entitlement is not included, as any available recycled water is already included in the watershed runoff entitlement. The PG&E contract water is assumed as an average minimum of 3,000 AF. These purchases are subject to hydrologic conditions; the maximum contracted amount is 60,148 AF and is included as an entitlement. Watershed runoff and carryover storage projected total entitlements are decreasing - consistent with the results observed in the PFW.

6.3 Energy Intensity

The "Total Utility Approach" was used to report water-related energy consumption data for the District. Calendar Year 2024 was selected as the one-year reporting period, as the final utility bills for November and December 2025 were not yet accessible. Utility bills for 41 separate accounts were used as the basis for the District's consumed energy. Table 6-10 (DWR Optional Submittal Table O-1B) presents the District's energy usage, volume entering the District's WTPs, and resulting energy intensity for calendar year 2024.

The District implemented an energy generation and tariff strategy with PG&E in which the District utilizes its renewable energy generated at the Scotts Flat Powerhouse to supply nearly all the District's energy needs. The table below also does not consider the energy required to move and deliver raw water supply as that system is gravity fed.

Calculated energy intensity in 2024 (1,163 kWh/MG) was larger than what was previously reported in the 2020 UWMP for 2018 (992.6 kWh/MG). 2024 is not a year representative of normal operations, as the WTP gravity-driven influent infrastructure was affected by damaged PG&E infrastructure.

Table 6-10. Energy Intensity For Potable Deliveries

Optional Submittal Table O-1B: Recommended Energy Reporting - SINGLE DELIVERY PRODUCT - TOTAL UTILITY				
Water Delivery Product drop down list (If delivering more than one type of product recommend using Table O-1C)	Retail Potable Deliveries	**Only for Water Delivery Products Under the Urban Water Supplier's Operational Control**		
Start Date of Reporting Period	1/1/2024	**Sum of All Water Management Processes**	**Non-Consequential Hydropower**	
End Date of Reporting Period	12/31/2024			
Is upstream embedded energy in the values reported?				
Units of Measure for Water	AF	**Total Utility** See DWR NOTES	**Hydropower**	**Net Utility**
Volume of Water Entering Process		9,717		9,717
Energy Consumed (kWh)		3,681,907		3,681,907
Energy Intensity (kWh/vol. converted to MG)		1,163	-	1,163

DWR NOTES:

Total Utility: The volume of water entered in the "Total Utility" column should equal the volume of water entering the distribution system (excluding recycled water); in most cases, this is the total volume calculated in UWMP Table 4-1: 2025 Actual Total Uses for Potable and Non-Potable Water. Note if recycled water is included in your Submittal Table 4-1, you must exclude it from your volume in this table.

Quantity of Self-Generated Renewable Energy

N/A	kWh

Data Quality (Estimate, Metered Data, Combination of Estimates and Metered Data)

Metered Data

Data Quality Narrative:

Utility bills for the associated time period from 41 accounts are used as the source for energy consumption data.

Narrative:

Total energy consumption represents the energy consumed for pumping and distribution of drinking water. The energy consumption for the entirety of CY2025 is not available. The District does not yet have access to all November and December utility bills. Instead, this table analyzes values from CY2024. CY2024 is not a year representative of normal operations, as the WTP gravity-driven influent infrastructure was affected by damaged PG&E infrastructure.

7 WATER SERVICE RELIABILITY AND DROUGHT RISK ASSESSMENT

Lay Description

Information on the District's supply and service reliability is presented in this chapter. Longer-term reliability is assessed using the Water Service Reliability Assessment (WSRA), where drought conditions are assumed over the planning horizon. Per UWMP Guidelines, DRA provides an opportunity to test near-term reliability by assuming the next five consecutive years are dry. Since NID has implemented drought evaluation within the PFW covering a horizon of 50 years, NID is able to investigate DRA over a longer horizon by assuming the 5 consecutive drought years can occur any time between now and 2050.

7.1 WSRA Constraints on Water Sources

Water supply reliability is an important component of the water management planning process. Factors contributing to inconsistency in the District's water supplies include legal limitations due to water rights and contracts limiting the quantity of water available to the District, regulatory and environmental constraints, and reductions in availability due to climatic factors. The surface water supply to the District is subject to reductions during single and multiple dry years (seasonal and climatic shortages). The District holds senior water rights to the majority of its supply and can manage carryover storage quantities based on domestic, municipal, and irrigation needs.

Anticipated constraints on the District's water supply sources due to climate change are described in Section 3.3. The District's PFW climate modeling indicates a decrease in available watershed runoff, and a shift in the timing and duration of watershed runoff, which will affect the availability of District carryover storage. Regulatory conditions that may impact the District's water supply include Water Use Objectives, the 2025 Bay-Delta Plan Update, SWRCB Mandatory Conservation Orders and Water Rights Curtailments, as well as the District's FERC Project No. 2266 Relicensing. Although these regulations have been identified to potentially affect NID's supply, the magnitude of each impact will vary between regulation and year types.

The District's contracted water supply from PG&E is dependent on the Sacramento Valley Index and therefore is subject to reduction based on the index.

Federal and state regulations governing drinking water quality set the standards the District must comply with for its treated water supply. One of those requirements is to prepare a Watershed Sanitary Survey every five years. As summarized in the District's 2021 Watershed Sanitary Survey Update (Starr Consulting et al., 2022) the District expects no loss of water used for urban purposes due to water quality impacts. The water purchased from PG&E is similar in quality to the District's supply since it originates from the same sources and is co-mingled with the District supply.

The following primary observations were listed in the 2021 Watershed Sanitary Survey Update field assessment of the watershed. The District can address these potential raw water quality issues through the treatment process at the water treatment plants. The District is prioritizing the conversion of open canals to closed pipelines for conveying water to a WTP.

- Areas in the upper watersheds are, in general, minimally impacted by current human activities. However, previous mining era activities have had an impact.
- Current and historic mining operations distributed over large areas in the watersheds have a combined high potential to impact raw water quality. There is one new and one pending gold mine operating in the Bear River watershed. The intensity of mining activity has decreased remarkably over time. While mining-related constituents have been detected in sediment and organic material, constituents in source water taken into NID canals and delivered to WTPs have not been detected at levels of human health concern.
- During summer months, recreation in the upper watersheds, including body contact recreation, motorized recreation, and camping and hiking, bring large numbers of visitors into the area. This increases the potential for source water contamination. There is widespread but stable activity through the watersheds.
- Major highways, local access roads, and railroads are located throughout the watersheds, increasing the risks to source water quality.
- Various licensed pesticides and herbicides are used for weed control around the District's canals. Additionally, outdoor cannabis cultivation has grown exponentially in the watershed in the past five years and each county in the watershed has independent ordinances and regulations to manage any potential impacts, including impacts from pesticides and herbicides, from outdoor cultivation.
- Most canals are open; they receive untreated drainage from uphill slopes and are not protected from vandalism or other potential sources of contamination.
- The median turbidity of raw water influent varies by WTP, ranging from 2.5 Nephelometric turbidity unit (NTU) to 9.5 NTU, with the highest values occurring during winter months. All treated turbidity standards were met.

Natural disasters can also impact water quality. The quality of water supplies can be dramatically affected by fire. Storm damage to the District conveyance facilities may consist of the following elements:

- Damage to parts of canal intakes
- Collapse or weakening of some sections of canal flumes
- Erosion and sedimentation of, and landslides into, sections of the canals
- Damage by falling trees
- Flying debris into the canals
- Filling of reservoirs by sediments through runoff

The above-listed damages can cause some temporary adverse water quality effects, and some short-term losses of the District's water supplies in extreme cases. Of greater concern to overall water quality are damage occurrences related to flood and precipitation that could cause longer term adverse water quality impacts such as excessive runoff and loading of surface contaminants (e.g., livestock manure, petroleum products, pesticides, and mineral wastes).

The District's watershed runoff water supply sources are covered by a combination of pre-1914 water rights, post-1914 water rights, and riparian water rights. In some California watersheds including the Sacramento River watershed, drought has resulted in diversion curtailment orders being issued in 2014, 2015, and 2016 on water rights going back to a 1903 priority date. Additionally, 2021 and 2022 yielded diversional curtailments going back to an 1850 priority date.

7.2 Water Service Reliability Assessment

The following sections describe NID's expected water service reliability for a normal year, single dry year, and five consecutive dry years in five-year increments between 2030 and 2050.

The WSRA aims to report on the District's ability to meet customer water demands under various conditions, including Normal Year, Single Dry, and Five-Consecutive-Year Drought scenarios. NID's assessment of water service reliability can be used to direct management actions, provide insight on funding allocations, and allows for project prioritization aimed at increasing service reliability under all scenarios. A description of available management tools and options aimed at maximizing local resources is also included in the following subsections.

7.2.1 WSRA Year Type Characterization

Reliability by year type addresses three hydrologic conditions: Normal Year, Single Dry Year, and Five Consecutive Dry Years. Modeling results from the PFW were adapted to be applicable to the WSRA format. For most years, available water supply is larger than water demand. To differentiate between available water supply and demand, in this chapter we use the following terms:

- Annual Available Supply Total (AAST): This represents the total water available for supply in the District's area, which includes three components, (1) annual watershed runoff, (2) carryover storage, and (3) an assumed 3,000 AF amount of purchased PG&E water.
- Annual Demand: This represents the District's total annual water demand, including all the water uses listed in Chapter 4. Note that in Chapter 6, demand is referred to as "Water Supplies."

The PFW-modeled historic (1976–2020) and projected (2022–2069) AASTs are shown in Figure 7-1. For the projected period the median scenario is applied. A linear trendline was fitted to the historic and projected AAST to extract average AAST for the period of 2030 to 2050. These values are included in Table 7-1a and represent projected average AAST, extracted from Figure 7-1. Annual Demand was extracted from Table 6-9, where it is referred to as "Water Supplies."

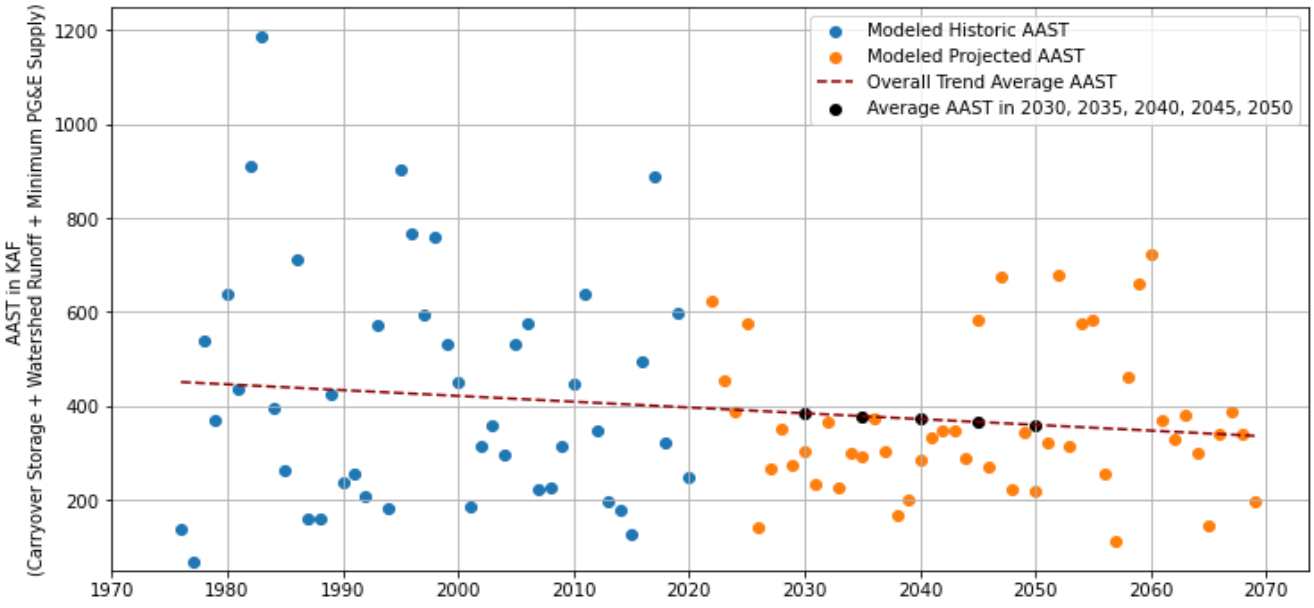

Figure 7-1. Modeled Historic and Projected AAST

Table 7-1a. Basis of Water Year Data (Reliability Assessment) – Normal Year Type

Year	Average AAST (AF)*	Annual Demand (AF)**
2030	384,047	163,608
2035	377,889	165,396
2040	371,731	166,101
2045	365,574	166,655
2050	359,416	167,223
*Extracted from the trendline in Figure 7-1 **From Table 6-9		

Modeling results from the PFW were not used to analyze the Single Dry Year condition, as the 1977 year was still the one with minimum AAST even when evaluating the historic and projected period. The 1977 observed AAST is shown in Table 7-1b, discretized by carryover storage, watershed runoff, and PG&E minimum supply. For the purpose of the WSRA, the District will assume that 3,000 AF of PG&E water supply is automatically available, with more supply available as a WSCP supply augmentation benefit. The total PG&E water supply observed in 1977 using 19,494 AF (16,464 +3,000 AF) is assumed as the maximum potential available supply provided by PG&E.

Table 7-1b. Basis of Water Year Data (Reliability Assessment) – Single Dry Year Type

Year	Carryover Storage (AF)	Watershed Runoff (AF)	PG&E Minimum Supply (AF)	Maximum Total Water Supply (AF)
1977	27,956	44,387	3,000	75,343

Next, all 5-Year AASTs were quantified as the rolling 5-year AAST sum for the historic (1976–2020) and projected (2022–2069) periods (see Figure 7-2). A linear trendline was fitted to the historic and projected 5-year AAST sum. Additionally, the worst observed 5-year AAST sum is highlighted in Figure 7-2. Characteristics of the historical drought, including the 5-year AAST sum (1,235,196 AF), are included in Table 7-1c. Lastly, the projected change (decrease) between the historical and projected 5-year AAST sum are shown in Figure 7-2 and tabulated and applied to estimate the projected 5-year drought in Table 7-1d.

The historical and projected 5-year drought calculated based on the methodology described are summarized in Table 7-1e.

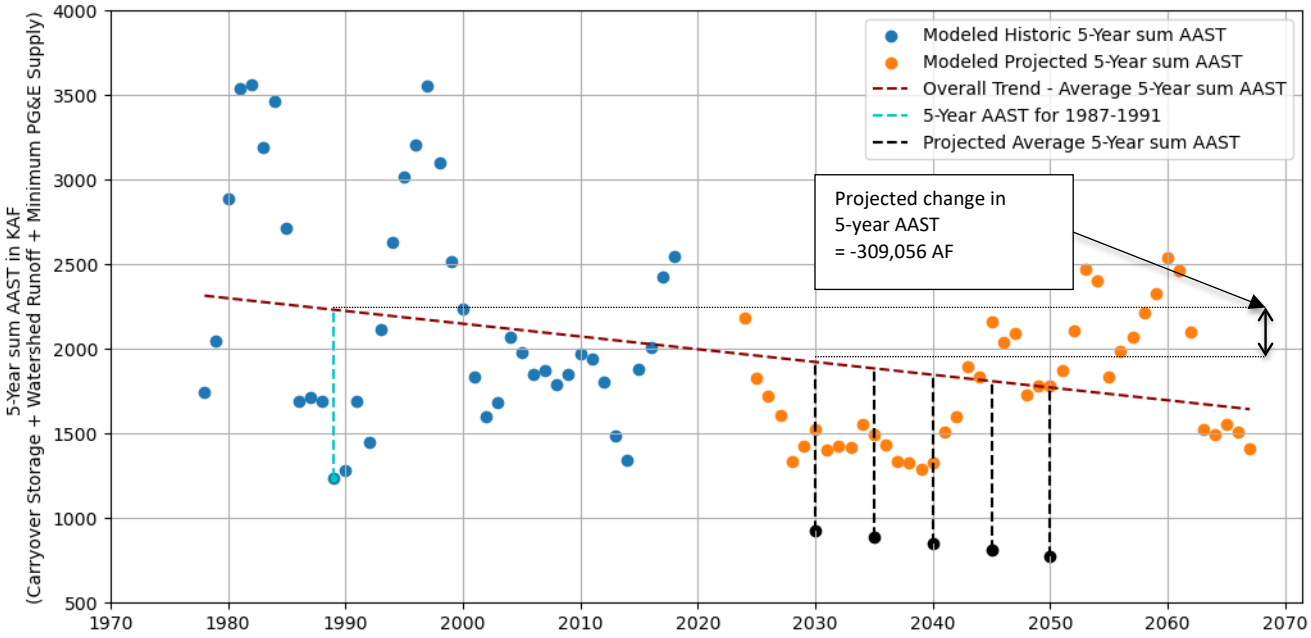

Figure 7-2. Modeled Historic and Projected 5-year AAST sum and Drought Supply Totals

Table 7-1c. Basis of Water Year Data (Reliability Assessment) – Historic 5-Year Drought

Year	Carryover Storage (AF)	Watershed Runoff (AF)	PG&E Minimum Supply (AF)	Maximum Total Drought Water Supply (AF)	Percentage of Total
1987	53,939	103,104	3,000	160,043	12.96
1988	54,918	101,128	3,000	159,046	12.88
1989	110,532	310,217	3,000	423,749	34.31
1990	100,668	135,070	3,000	238,738	19.33
1991	100,906	149,714	3,000	253,620	20.53
Total				1,235,196	100.00

Table 7-1d. Basis of Water Year Data (Reliability Assessment) – Historic and Projected 5-year AAST and Drought Scenario

Year	Historic Average 5-Year Sum AAST (AF)*	Projected Decrease in 5-Year Sum AAST (AF)	Projected 5-Year Sum AAST (AF)**
Average Historic	2,232,189	996,993	1,235,196
Drought Scenario: 5-year AAST (AF)			
2026	1,938,209	[redacted]	941,216
2030	1,923,133		926,140
2035	1,885,443		888,450
2040	1,847,754		850,761
2045	1,810,064		813,071
2050	1,772,374		775,381

*Extracted from the trendline in Figure 7-2

**Produced by subtracting the projected change in 5-year AAST sum from the historical drought

Table 7-1e. Basis of Water Year Data (Reliability Assessment) – Projected Five Consecutive Dry Years

2026		
Year	Max Water Supply (AF)	Percentage of 5-Year Total*
1	119,999	12.96
2	119,251	12.88
3	317,724	34.31
4	179,004	19.33
5	190,162	20.53
Total	941,216	100.00

2040		
Year	Max Water Supply (AF)	Percentage of 5-Year Total*
1	110,232	12.96
2	109,545	12.88
3	291,864	34.31
4	164,435	19.33
5	174,685	20.53
Total	850,761	100.00

2030		
Year	Max Water Supply (AF)	Percentage of 5-Year Total*
1	119,999	12.96
2	119,251	12.88
3	317,724	34.31
4	179,004	19.33
5	190,162	20.53
Total	926,140	100.00

2045		
Year	Max Water Supply (AF)	Percentage of 5-Year Total*
1	105,349	12.96
2	104,692	12.88
3	278,934	34.31
4	157,150	19.33
5	166,946	20.53
Total	813,071	100.00

2035		
Year	Max Water Supply (AF)	Percentage of 5-Year Total*
1	115,115	12.96
2	114,398	12.88
3	304,794	34.31
4	171,719	19.33
5	182,423	20.53
Total	888,450	100.00

2050		
Year	Max Water Supply (AF)	Percentage of 5-Year Total*
1	100,465	12.96
2	99,839	12.88
3	266,004	34.31
4	149,865	19.33
5	159,207	20.53
Total	775,381	100.00

*5-year totals are distributed across years 1 through 5 using the historic percentage of 5-year total described in Table 7-1c

The largest component of the AAST is the watershed runoff. As discussed in the PFW, and widely discussed in the California literature on the impacts of climate change, total watershed runoff is projected to decrease. It should be noted that the PFW modeling results also discuss other impacts of climate change, including earlier snowmelt, that cannot be fully captured by annual supply and demand analysis. NID is preparing for the possibility that the water supply is less reliable than described above. The WSRA analyzes the reliability of the District's supply based on best currently available data.

Tables 7-1a through 7-1e are provided in place of the optional DWR Submittal Table 7-1f to quantify and organize WSRA year types in a manner that is more consistent with the PFW framework.

Table 7-1f. Basis of Water Year Data (Reliability Assessment) – Optional Table

OPTIONAL Submittal Table 7-1 Retail: Basis of Water Year Data (Reliability Assessment)	
Available Supplies if Year Type Repeats	
☑	Check the box if quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. **Location:** Section 7.2.1

7.2.2 WSRA Supply and Demand Comparison

Demand projections from Chapter 4 are modified for use in the supply reliability analysis in this chapter. The supply reliability compares supplies and demands during a normal hydrologic year, a single dry year, and a multi-year drought. Table 4-6 (DWR Submittal Table 4-2) presents the projected demands during a normal hydrologic year.

Normal Year

Table 7-2 (DWR Submittal Table 7-2) shows the projected supply and demand totals for a normal year. Projected normal year maximum supply totals were calculated from the PFW results and described in detail in Figure 7-1 and summarized in Table 7-1c. The supply and demand totals in Table 7-2 are consistent with those in Table 6-9 and Table 4-6 (DWR Submittal Table 4-2), respectively. These totals from Table 6-9 and Table 4-6 (DWR Submittal Table 4-2) are smaller than the maximum supply totals. As such and per this WRSA, NID is expected to have adequate water supplies during normal years to meet its projected demands through 2050.

Table 7-2. Normal Year Supply and Demand Comparison

Submittal Table 7-2 Retail: Normal Year Supply and Use Comparison - Water Code Section 10635 (a)					
	2030	2035	2040	2045	2050 (Opt)
	(AF)	(AF)	(AF)	(AF)	(AF)
Supply totals (autofill from Submittal Table 6-9 R)	163,608	165,396	166,101	166,655	167,223
Use totals (autofill from Submittal Table 4-2 R)	163,608	165,396	166,101	166,655	167,223
Surplus/(shortfall)	0	0	0	0	0
NOTES: Use totals represent potable and non-potable normal year use per DWR Submittal Table 4-2. Supply totals are adjusted to meet use totals when available supplies are is larger than uses, as NID will not supply more than needed to meet total system demands. Supply total includes supplies from PG&E, watershed runoff, carrover storage and recycled water sources.					

Single Dry Year

Table 7-3 (DWR Submittal Table 7-3) presents the single dry year supply and demand totals in five-year increments through 2050. As seen in Table 7-1b, the single dry year supply is estimated from the historic drought year 1977. The Supply Totals, as seen in Table 7-1a, include 3,000 AF of PG&E imported water. However, a total of 19,464 AF of PG&E water was historically imported. The difference, 16,464 AF, is included as a supply augmentation benefit. In the future, the District hopes to be able to augment more water supply, but for planning purposes assumes that what was observed historically is the extent of what is reasonably available. The District then plans to utilize use reduction savings benefits to address the rest of the shortfall. The reduction savings benefits included in Table 7-3 assume Shortage Level 5 is reached (Table 8-3 (DWR Submittal Table 8-3)). The Demand Reduction Actions for Shortage Level 5 require raw water deliveries and municipal customers to reduce by up to 50%, yielding the necessary required reductions. NID's Demand Reduction Actions are further discussed in Chapter 8.

Table 7-2. Single Dry Year Supply and Demand Comparison

Submittal Table 7-3 Retail: Single Dry Year Supply and Use Comparison - Water Code Section 10635(a)					
	2030	2035	2040	2045	2050 (Opt)
	(AF)	(AF)	(AF)	(AF)	(AF)
Supply totals	75,343	75,343	75,343	75,343	75,343
Use totals	163,608	165,396	166,101	166,655	167,223
Surplus/(shortfall)	(88,265)	(90,053)	(90,758)	(91,312)	(91,880)
OPTIONAL Planned WSCP Actions					
WSCP - supply augmentation benefit	16,464	16,464	16,464	16,464	16,464
WSCP - use reduction savings benefit	71,801	73,589	74,294	74,848	75,416
Revised Surplus/(shortfall)	0	0	0	0	0
DWR NOTES : Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES: Single dry year supplies account for Watershed Runoff Supply, Carryover Storage Supply, and the average minimum expected PG&E Supply (3,000 AF) as shown in Table 7-1b. Single dry year recycled water supplies are not expected to differ from normal year supplies and are as reported in Table 6-9. Use totals represent normal year potable and non-potable use. The WSCP plans for additional supply augmentation. For this scenario, an augmentation of 16,464 AF is included; this is only part of the total 19,464 AF of PG&E water that was historically supplied in the single driest year on record in 1977. In the future, additional augmentations of supply will be sought after but they are not included in this table. The WSCP planned actions for use reduction savings assume that WSCP Stage 5 shortage is triggered; this requires treated, municipal, and raw water customers to reduce demand by up to 50%, which yields the necesary amount of use reduction to avoid shortfall.					

Five Consecutive Dry Years

Table 7-4 (DWR Submittal Table 7-4) presents NID's projected supply and demand totals for dry year periods extending five years. Table 7-4 uses the maximum water supply summarized in Table 7-1e as the basis of each supply total and the totals in Table 4-6 (DWR Submittal Table 4-2) as the basis of each use total. In cases where maximum water supply from Table 7-1e exceed total use from Table 4-2, supplies are assumed to be equal to use, as the District does not plan to supply more than is required for use totals. As demonstrated in the table below, the District is anticipating future shortfalls without implementing WSCP supply augmentation benefits and WSCP use reduction benefits. NID plans to always implement supply augmentation benefits. For the purpose of this assessment, the District assumes that up to an additional 15,000 AF will be available as augmentation. After this augmentation is exhausted, further augmented supply is not reliable. The District will require customers to implement use reductions. For the first two years of the five-year drought in 2030, NID assumes that Shortage Level 2 will be enacted, which leads to the required reduction of up to 20%. By 2050, the Shortage Level will grow to Level 3 or 4. During the historic 1987-1991 drought, the third year was the wettest of the five years. As these projected droughts are based on the historic drought, this hydrologic condition is observed as well. During the last two years of these five-year drought periods, the District also anticipates activating WSCP benefits, with the original shortfall growing larger from 2030 to 2050. The table below exemplifies the need for shared responsibility from the District (augmentations) and customer (reductions) during future drought periods. For simplicity, this part of the WSRA shows that the District plans to explore water supply augmentation benefits before exploring water use reduction savings, though in praxis, the District plans on using any benefit at their disposal. For a discussion of all the benefits, see Chapter 8.

Table 7-3. Multiple Dry Years Supply and Demand Comparison

Submittal Table 7-4 Retail: Multiple Dry Years Supply and Use Comparison - Water Code Section 10635(a)						
		2030	2035	2040	2045	2050 (Opt)
		(AF)	(AF)	(AF)	(AF)	(AF)
First year	Supply totals	119,999	115,115	110,232	105,349	100,465
	Use totals	163,608	165,396	166,101	166,655	167,223
	Surplus/(shortfall)	(43,609)	(50,281)	(55,869)	(61,307)	(66,758)
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit	15,000	15,000	15,000	15,000	15,000
	WSCP - use reduction savings benefit	28,609	35,281	40,869	46,307	51,758
	Revised Surplus/(shortfall)	**0**	**0**	**0**	**0**	**0**
Second year	Supply totals	119,251	114,398	109,545	104,692	99,839
	Use totals	163,608	165,396	166,101	166,655	167,223
	Surplus/(shortfall)	(44,357)	(50,998)	(56,556)	(61,963)	(67,383)
	OPTIONAL WSCP Actions					
	WSCP - supply augmentation benefit	15,000	15,000	15,000	15,000	15,000
	WSCP - use reduction savings benefit	29,357	35,998	41,556	46,963	52,383
	Revised Surplus/(shortfall)	**0**	**0**	**0**	**0**	**0**
Third year	Supply totals	163,608	165,396	166,101	166,655	167,223
	Use totals	163,608	165,396	166,101	166,655	167,223
	Surplus/(shortfall)	**0**	**0**	**0**	**0**	**0**
Fourth year	Supply totals	163,608	165,396	164,435	157,150	149,865
	Use totals	163,608	165,396	166,101	166,655	167,223
	Surplus/(shortfall)	0	0	(1,667)	(9,505)	(17,358)
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit	0	0	1,667	9,505	15,000
	WSCP - use reduction savings benefit	0	0	0	0	2,358
	Revised Surplus/(shortfall)	**0**	**0**	**0**	**0**	**0**
Fifth year	Supply totals	163,608	165,396	166,101	166,655	159,207
	Use totals	163,608	165,396	166,101	166,655	167,223
	Surplus/(shortfall)	0	0	0	0	(8,016)
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit	0	0	0	0	8,016
	WSCP - use reduction savings benefit	0	0	0	0	0
	Revised Surplus/(shortfall)	**0**	**0**	**0**	**0**	**0**

NOTES: Multiple dry year supplies account for Watershed Runoff Supply, Carryover Storage Supply, and the minimum expected PG&E Supply (3,000 AF) as shown in Tables 7-1c through 7-1e. Multiple dry year recycled water supplies are not expected to differ from normal year supplies and are as reported in Table 6-9. Use totals represent normal year potable and non-potable uses. The WSCP plans for additional supply augmentation. The additional supply augmentation is up to 15,000 AF of additional water supply. For scenarios where the shortfall is larger than 15,000 AF, more water supply augmentation will be sought after, but cannot be guaranteed. This assessment assumes that WSCP use reduction savings benefit will need to be enacted to close the remaining shortfall. Based on this assessment, the District anticipates needing to declare Shortage Level 2 for the first two dry years in 2030. By 2050, the District anticipates needing to declare Shortage Level 3 for the first two dry years and Shortage Level 1 for the last two years of the consecutive dry-year period. For multiple dry year scenarios where the use totals are smaller than max watershed supply totals (as listed in Table 7-1e), supply totals are adjusted to equal use totals, as NID will not supply more than needed to meet total system demands.

7.2.3 Description of Management Tools and Options

NID has also been implementing the DMMs described in Chapter 9. Also, in response to the anticipated future dry year shortfalls, NID has a robust WSCP that systematically identifies ways NID can increase water supply and reduce water demands. The WSCP is summarized in Chapter 8.

7.3 Drought Risk Assessment

This subsection provides the approach for conducting NID's DRA. The near-term planning exercise is used to address the District's ability to meet customer demands based on the assumption that the next five years are considered drought conditions. Data used for conducting the DRA include projected supplies and demands 2026 through 2030. Projected supplies and demands are compared and used for identification of a supply shortage condition.

7.3.1 DRA Data, Methods, and Basis for Water Shortage Condition

As a first step in developing the DRA, NID has estimated unconstrained water demand for the next five years (2026–2030). Unconstrained water demand is the expected water use in the absence of drought water use restrictions. Due to a raw water infrastructure emergency that occurred in the years 2024 and 2025, the reported 2025 water demand is not considered unconstrained. Table 7-5 shows the difference in volume between the constrained 2025 values from Table 4-1 (DWR Submittal Table 4-1) and the unconstrained 2030 and 2035 values from Table 4-6 (DWR Submittal Table 4-2). Rather than calculating the characteristic five-year water demand by interpolating between the 2025 observed values and the projected 2030 values, this DRA interpolates down to 2026 using the projected 2030 and 2025 volumes. Table 7-6 summarizes those volumes.

Table 7-5. Water Demand – 2025 Observed and 2030 and 2035 Projected

	2025	2030	2035
Total Water Use (AF)	143,693	163,608	165,396

Table 7-6. Unconstrained Water Demand, 2026-2030

Total Water Demand					
Calendar Year Ending	2026	2027	2028	2029	2030
Total Water Demand (AF)	162,178	162,536	162,893	163,251	163,608
Notes: Demands include potable and non-potable water					

The available potable water supplies assumed in the DRA are based on the same methodology and assumptions used for the long-term WSRA (Sections 7.1 and 7.2).

7.3.2 DRA Individual Water Source Reliability

As described in Chapter 6, NID's primary source of supply is local surface water derived principally from the Yuba River, Bear River, and Deer Creek watersheds that is diverted and stored under the District's pre-1914 and post-1914 appropriative water rights. The District also purchases imported surface water from PG&E and produces recycled water to partially meet its raw water customer duty.

It should be noted that both the demand and supply projections include assumptions that may not actually materialize during the next five years or may not be as large as projected. For example, customer demands may not increase as projected. Additionally, there is tremendous uncertainty regarding whether NID's previous FERC requirements will continue or whether the new, potential FERC requirements will take effect. If the new FERC requirements do take effect, there is uncertainty about when that would happen. Lastly, supplies may actually be less available than projected from the sample drought. NID will monitor these conditions closely and update its supply and demand projections to plan for near-term conditions through the annual assessment process.

7.3.3 DRA Total Water Supply and Use Comparison

The maximum five-year (beginning in 2026) drought supplies were estimated and summarized in Table 7-1e. The unconstrained 2026-2030 water demands are included above in Table 7-6. NID is expected to experience shortfalls without WSCP action as described in Table 7-7 (DWR Submittal Table 7-5).

NID has developed a WSCP (Chapter 8) to address water shortage conditions resulting from any cause (e.g., droughts, impacted distribution system infrastructure, regulatory-imposed shortage restrictions, etc.). The WSCP identifies a variety of actions that NID will implement to reduce demands and further ensure supply reliability at various levels of water shortage. NID intends to implement its WSCP to reduce water use and address the supply shortfalls. Similar to the WSRA, the DRA exemplifies the need for shared responsibility from the District (augmentations) and customer (reductions) during future drought periods.

Table 7-7. Five-Year Drought Risk Assessment

Submittal Table 7-5 Retail: Five-Year Drought Risk Assessment - Water Code Section 10635(b)(3)		
2026		**Total**
Total Water Use	(AF)	162,150
Total Supplies	(AF)	119,999
Surplus/Shortfall w/o WSCP Action		(42,151)
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)		
WSCP - supply augmentation benefit	(AF)	15,000
WSCP - use reduction savings benefit	(AF)	27,151
Revised Surplus/(shortfall)		0
2027		**Total**
Total Water Use	(AF)	162,507
Total Supplies	(AF)	119,251
Surplus/Shortfall w/o WSCP Action		(43,256)
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)		
WSCP - supply augmentation benefit	(AF)	15,000
WSCP - use reduction savings benefit	(AF)	28,256
Revised Surplus/(shortfall)		0
2028		**Total**
Total Water Use	(AF)	162,865
Total Supplies	(AF)	162,865
Surplus/Shortfall w/o WSCP Action		0
2029		**Total**
Total Water Use	(AF)	163,223
Total Supplies	(AF)	163,223
Surplus/Shortfall w/o WSCP Action		0
2030		**Total**
Total Water Use	(AF)	163,580
Total Supplies	(AF)	163,580
Surplus/Shortfall w/o WSCP Action		0

NOTES: 1. Total water use for 2030 was taken from DWR Submittal Table 4-2. Total water use for years 2026-2029 were linearly downward extracted from the projected DWR Submittal Table 4-2 year 2030 and 2035 values. Year 2025 use from DWR Submittal Table 4-1 was not used because the raw water customer demand and raw water loss were significantly smaller than what is projected for the near future due to a PG&E infrastructure emergency that was resolved in 2025.

2. Multiple dry year supplies account for Watershed Runoff Supply, Carryover Storage Supply, and the minimum expected PG&E Supply (3,000 AF) as shown in Tables 7-1c through 7-1e as well as recycled water supplies reported in Table 6-9. There is no expected substantial change in recycled water supplies in a dry versus normal year. Use totals represent normal year potable and non-potable use.

3. The WSCP plans for additional supply augmentation. The additional supply augmentation is up to 15,000 AF of additional water supply. Based on this assessment, the District anticipates needing to declare Shortage Level 2 for the first two years of drought.

4. Supply totals are adjusted to meet use totals when available dry year supplies are larger than demand, as NID will not supply more than needed to meet total system demands.

8 WATER SHORTAGE CONTINGENCY PLAN

Lay Description

The District's Water Shortage Contingency Plan (WSCP) and pertinent information regarding the WSCP is included in this chapter. This WSCP presents NID's approach for identifying and mitigating various water shortage conditions, pursuant to CWC § 10632. The WSCP identifies drought action levels, appropriate agency responses, water demand reduction goals, and provides recommended DMMs to assist customers in water conservation. In the 2020 UWMP, the WSCP was called the Drought Plan.

8.1 Overview of the Water Shortage Contingency Plan

There is not a stand-alone WSCP. This WSCP is included as Chapter 8 of the 2025 UWMP and meets all required 2025 ESCP guidelines from DWR. This WSCP can be amended, as needed, without the requirement to amend the UWMP. It is noted that the Water Code does not exclude the District from taking actions not specifically contained in its WSCP in response to supply shortage conditions.

This WSCP applies to any shortage conditions identified or incurred by the District, including shortages identified by the annual assessment. Further, the WSCP shortage levels are also applicable to catastrophic interruption in supplies, including but not limited to, an earthquake, a regional power outage, and other emergency events.

8.1.1 Summary of Water Shortage Response Strategy and Required DWR Tables

Section 8.1 Overview of the Water Shortage Contingency Plan gives an overview of the WSCP fundamentals.

Section 8.2 Water Supply Reliability Analysis provides a summary of the water supply analysis and water reliability findings from the 2025 UWMP.

Section 3.3 Normal Year Supply provides a summary of water usage that the District may consider waste during all stages, including Normal Water Supply.

Section 8.4 Annual Water Supply and Demand Assessment Procedures provides a description of procedures to conduct and approve the Annual Assessment.

Section 8.5 Six Standard Water Shortage Levels explains the WSCP's six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, 50, and more than 50 percent shortages.

Section 8.6 Shortage Response Actions describes the WSCP's shortage response actions that align with the defined shortage levels.

Section 8.7 Communication Protocols addresses communication protocols and procedures to inform customers; the public; interested parties; and local, regional, and state governments, regarding any current or predicted shortages and any resulting shortage response actions.

Section 8.8 Compliance and Enforcement describes customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions.

Section 8.9 Legal Authorities is a description of the legal authorities that enable the District to implement and enforce its shortage response actions.

Section 8.10 Financial Consequences of the Water Shortage Contingency Plan provides a description of the financial consequences of and responses for drought conditions.

Section 8.11 Monitoring, Reporting, and Refinement describes monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements. Also addressed reevaluation and improvement procedures.

Section 8.12 Water Shortage Contingency Plan Adoption, Submittal, and Implementation provides a record of the process the Area followed to adopt and implement its WSCP.

8.2 Water Supply Reliability Analysis

NID conducts ongoing analysis of its supply reliability and reports on current understanding through its various planning efforts including the UWMP, PFW, Staff Reports to Board, Raw Water Master Plan, Watershed Sanitary Survey, and others.

The District's snowmelt-based water supplies are vulnerable to drought and are expected to be further impacted by climate change. The District holds senior water rights to most of its supply and can manage carry-over storage quantities based on domestic, municipal, and irrigation needs. However, the supply system relies on spring and summer snowmelt runoff, as well as capture and storage in reservoirs to release during the irrigation season. During droughts and periods of warmer winters when there is less snowpack, runoff is reduced, and the District must manage its storage and customer demands to meet requirements. The supply availability reduction is dependent on the severity and length of the drought. In addition to the hydrologic impacts on NID's supplies, there can be regulatory reduction, as during the last drought the state-mandated supply curtailments and NID was not able to access its available supply.

As part of NID's UWMP, reliability planning was conducted to evaluate the District's ability to meet demands. Two separate efforts were conducted to characterize both long- and near-term reliability scenarios. The Water Reliability Assessment is conducted for a normal, single dry year, and a drought lasting five consecutive years and is used to evaluate long-term supplies with demands over the next 25 years, in five-year increments. The DRA assumes the occurrence of a drought over the next five years and aims to assess the District's near-term reliability.

The reliability analysis indicates demand exceeds supplies during single dry year and multiple dry year scenarios, with the single dry year representing approximately 50 percent supply shortfall. This illustrates the highly variable reliability of a snowpack-based supply system during drought periods.

There are numerous management and operational efforts available to NID to address supply shortfall during drought periods, including: demand reductions, carryover storage strategies, system operational strategies, supplemental supplies, increased storage.

8.3 Normal Water Supply

Under Normal Water Supply conditions, the District's water supply and distribution system is expected to be able to meet all the water demands of its customers in the immediate future.

Regulations for Normal Water Supply are contained in the District's Water Service Rules and Regulations. The following is a list of water usage that the District may consider waste and therefore unreasonable use during all stages, including Normal Water Supply.

Treated Water

- Washing down paved surfaces unless for safety or sanitation, in which case a bucket, a hose with a shut-off nozzle, or a low-volume/high-pressure water broom must be used.
- Watering or irrigating landscapes or vegetation of any kind that creates excessive water flow or runoff onto pavement, gutters, or ditches.
- Washing of vehicle with a hose unless equipped with a water shut-off nozzle (does not apply to commercial car washes).
- Cleaning gutters by flooding with water.
- Landscape watering during the heat of the day (between 10 am and 6 pm).
- Use of fountains and water features that do not re-circulate water.
- Failure to repair leaks, breaks, or malfunctions in a timely manner once found or after receiving a notice from the District.
- Outdoor watering during periods of rain.
- Any infraction of mandatory measures in place during the implementation of the District's WSCP.

Raw Water

- Failure to repair leaks, breaks, or malfunctions in a timely manner once found, or after receiving notice from the District.
- Water that is not confined to the customer's property and is allowed to run off and cause damage to adjoining properties or the roadside ditch or gutter.
- Any infraction of mandatory measures in place during the implementation of this WSCP.

Further, the District's Water Service Rules and Regulations prohibit water use outside the District, except when it is deemed surplus to the needs of the District and the Board has declared the water surplus and approved the agreement for sale.

8.4 Annual Water Supply and Demand Assessment Procedures

NID conducts an annual analysis of supply and demand projections to help inform water resources management decisions for the coming year. The analysis incorporates various data sources used as evaluation criteria to project probable demands and supply availability for the coming year. Data sources to consider include:

- Projected weather conditions
  - Precipitation versus historical monthly
  - Snow survey results
- Projected Unconstrained Demand
  - Production versus historic monthly
  - New customer growth
  - Water use objective monthly tracking versus goal
- Projected Supply Availability (assuming no constraints)
  - Reservoir storage
  - Forecasted runoff

- PG&E contract water
- Recycled water

The general procedure is listed below. NID may modify this process based on available data, significant events, process restrictions, or other external factors that may impact the process.

1. **Dry Year Projection**
   Compile existing weather data to characterize the past 12 months' conditions. Considering recent conditions and available forecasts, select a projected dry year scenario from the historical precipitation record. Dry year scenario is 60%, or smaller, of normal precipitation at the Bowman Lake Reporting Station.

2. **Demand Projection**
   Project unconstrained monthly demand for the next 12 months factoring in existing demands, water use budgets, weather projections, and growth projections.

3. **Project Supply Availability**
   Utilize the existing conditions coupled with historic availability and other known conditions to project probable monthly availability. Summarize the current supply availability over the next 12 months assuming no supply restrictions. Project next year supply availability over the next 12 months assuming the next year is a dry year as selected in Step 1.

4. **Supply Infrastructure Restraints**
   Identify and describe any projected infrastructure restrictions to delivering supply in the next 12 months.

5. **Project Next Year Supply Deliverability**
   Using results from Steps 3 and 4, identify the current conditions normal year and dry year projected supply delivery for the next 12 months.

6. **Projected Dry Year Supply-to-Demand Comparison**
   Compare the projected next year's unconstrained demand to the next year's dry year projected supply deliverability. Identify any projected seasonal shortfall in supply to meet the unconstrained demand, cross-referencing the condition to one of the six water shortage levels identified below in this WSCP.

7. **Develop/Propose Water Resources Management Strategies**
   Develop and propose water resource management strategies to address the projected demand to supply comparison, including reference to one of the water shortage stages identified in this WSCP.

8. **Present Annual Water Supply Demand Assessment to Board**
   Present the annual water supply demand assessment to the Board of Directors for discussion and questions. Staff will modify/update the assessment by direction from the Board. The Board will approve the assessment and its findings and can also provide directions to implement specific management strategies at that time. The general proposed timeline is as follows:

   - Begin assessment by staff – February
   - Present assessment to Board – typically by March, no later than April
   - Submit to State per CWC § 10632.1 – by July 1

8.5 Six Standard Water Shortage Levels

NID maintains this WSCP to identify and respond to potential and actual water shortage conditions. Six water shortage levels are presented per CWC § 10632(a)(3) and shown in Table 8-1 (DWR Submittal Table 8-1). NID internally refers to these levels as stages. Proposed alternative response actions for each stage are identified with each respective projected impact on demand reduction or supply augmentation listed. NID will evaluate each specific shortage condition and select the appropriate response(s) for implementation.

The District maintains a water conservation program that is ongoing, even during periods of normal water supply. The District has found this program to be effective in reducing overall water consumption and managing demands during periods of normal water supply and water shortage conditions. The District will rely on its regular conservation program as well as additional measures to respond to the range of water supply shortages that may arise.

Table 8-1. Water Shortage Contingency Plan Levels

Submittal Table 8-1: Cross-reference for Standard vs Supplier Shortage Levels Water Code Section 10632(a)(3)(B)			
☑	Check the box if the Supplier uses the Standard six levels of water shortage. Proceed to the next table.		
Standard Shortage Levels	**Percent Shortage Range**	**Suppliers Shortage Levels**	**Percent Shortage Range**
1	Up to 10%	Shortage Stage 1	Up to 10%
2	Up to 20%	Shortage Stage 2	Up to 20%
3	Up to 30%	Shortage Stage 3	Up to 30%
4	Up to 40%	Shortage Stage 4	Up to 40%
5	Up to 50%	Shortage Stage 5	Up to 50%
6	>50%	Shortage Stage 6	>50%
NOTES: NID follows the Standard six levels of water shortage but refers to the levels as stages.			

8.6 Shortage Response Action

The following Figures 8-1 through 8-6 present the NID WSCP. Tables 8-2 (DWR Submittal Table 8-2) and 8-3 (DWR Submittal 8-3) present the individual estimated demand savings of each response action. Actual savings will likely vary greatly based on external influences, shortage stage level, and general customer understanding of drought severity. It is assumed that the savings estimates are not necessarily additive; however, when implemented together as a program with all the actions in each stage, they are intended and estimated to eliminate each stage's identified supply-to-demand shortage.

Stage 1 – 10% Supply Shortage
Forecast April 1 Available Supply: 234,999 to 211,500 AF Actions include normal rules and regulations plus those listed below.
Treated Water and Municipal Water Customers – Actions to Reduce Demand up to 10 Percent • Communicate conservation regulations as identified in Section 3.05 of District Rules and Regulations. • Encourage customers to limit outdoor irrigation to every other day. • Request fire department limit practices drills and hydrant flow testing.
Ag Water Customers – Actions to Reduce Demand up to 10 Percent • Allow Ag customers to voluntarily reduce purchase allotment for the year while reserving their right to return to their previous allotment in the following year if water supply is available.
District Actions • Declare no new or increased surplus water availability. • Leak repair receives higher priority. • Increase drought awareness through additional public outreach measures that notify public and customers for declared stage, requirements, and available conservation program support.
Enforcement Measures • Standard measures per District Rules and Regulations.

Figure 8-1. NID Water Shortage Contingency Plan – Stage 1

Stage 2 – 20% Supply Shortage
Forecast April 1 Available Supply: 211,499 to 188,000 AF Actions include Stage 1 plus those listed below.
Treated Water and Municipal Water Customers – Actions to Reduce Demand up to 20 Percent • Outdoor irrigation limited to every other day and maximum three days per week. • Odd address number can irrigate outdoors on Tuesday, Thursday, and Saturday. • Even address number can irrigate outdoors on Wednesday, Friday, and Sunday. • Customers shall adjust irrigation controllers to reduce usage for each zone by 20 percent. • Corresponding to fall daylight saving time, customers shall strive to limit outdoor irrigation to only once per week.
Ag Water Customers – Actions to Reduce Demand up to 20 Percent • Limit new water sales and increases to 1 miners inch. • Impose changes to delivery schedules to achieve 20 percent demand reductions.
District Actions • Declare no new or increased surplus water availability. • Declare no new or increase in Fall/Winter deliveries. • Communicate mandatory reduction targets to customers. • Inform Municipal customers of mandatory 20 percent reduction requirement. • Distribution system flushing only for public health & safety. • Appoint members to the Drought Hardship Committee. • Purchase available Contract water to achieve a target carryover of 115,000 AF.
Enforcement Measures • A written warning will be issued for a first violation. • A District imposed fine of $250 for a second violation, and any subsequent violation, and doubling with each subsequent violation up to a maximum of $1,000 for any single violation. • Upon a fourth violation, or upon an earlier violation the General Manager determines to create a significant threat to the goals of the stage, the General Manager may order the installation of a flow restrictor on service lines in question. • Similar penalties, fines, and charges may be implemented by the District as needed to enforce the restrictions on specific prohibited water uses.

Figure 8-2. NID Water Shortage Contingency Plan – Stage 2

Stage 3 – 30% Supply Shortage
Forecast April 1 Available Supply: 187,999 to 164,500 AF Actions include Stage 2 plus those listed below.
Treated Water and Municipal Water Customers – Actions to Reduce Demand up to 30 Percent • Outdoor irrigation limited to two days per week. • Odd address number can irrigate outdoors on Thursday and Sunday. • Even address number can irrigate outdoors on Wednesday and Saturday. • Customers shall adjust irrigation controllers to reduce usage for each zone by 30 percent. • Irrigation of ornamental turf in public street medians with treated water prohibited.
Ag Water Customers – Actions to Reduce Demand up to 30 Percent • Limit new water sale and increases to ½ miners inch. • Impose changes to delivery schedules to achieve 30 percent demand reductions.
District Actions • Declare no surplus water availability for exterior boundary customers. • Declare no Fall water availability. • Communicate mandatory reduction targets to customers. • Inform Municipal customers of mandatory 30 percent reduction requirement. • Purchase available Contract water to achieve a target carryover of 105,000 AF. • Convene the Drought Hardship Committee. • Dedicate additional staff for increased water waste patrols.
Enforcement Measures • A written warning will be issued for a first violation. • A District imposed fine of $250 for a second violation, and any subsequent violation, and doubling with each subsequent violation up to a maximum of $1,000 for any single violation. • Upon a fourth violation, or upon an earlier violation the General Manager determines to create a significant threat to the goals of the stage, the General Manager may order the installation of a flow restrictor on service lines in question. • Similar penalties, fines, and charges may be implemented by the District as needed to enforce the restrictions on specific prohibited water uses.

Figure 8-3. NID Water Shortage Contingency Plan – Stage 3

Stage 4 – 40% Supply Shortage
Forecast April 1 Available Supply: 163,499 to 141,000 AF Actions include Stage 3 plus those listed below.
Treated Water and Municipal Water Customers – Actions to Reduce Demand up to 40 Percent • Outdoor irrigation limited to one day per week. • Customers shall adjust irrigation controllers to reduce usage for each zone by 40 percent.
Ag Water Customers – Actions to Reduce Demand up to 40 Percent • Impose changes to delivery schedules to achieve 40 percent demand reductions.
District Actions • Declare no new or increased Ag sales. • Communicate mandatory reduction targets to customers. • Inform Municipal customers of mandatory 40 percent reduction requirement. • Purchase available Contract water to achieve a target carryover of 95,000 AF.
Enforcement Measures • A written warning will be issued for a first violation. • A District imposed fine of $250 for a second violation, and any subsequent violation, and doubling with each subsequent violation up to a maximum of $1,000 for any single violation. • Upon a fourth violation, or upon an earlier violation the General Manager determines to create a significant threat to the goals of the stage, the General Manager may order the installation of a flow restrictor on service lines in question. • Similar penalties, fines, and charges may be implemented by the District as needed to enforce the restrictions on specific prohibited water uses.

Figure 8-4. NID Water Shortage Contingency Plan – Stage 4

Stage 5 – 50% Supply Shortage
Forecast April 1 Available Supply: 140,999 to 117,500 AF Actions include Stage 4 plus those listed below.
Treated Water and Municipal Water Customers – Actions to Reduce Demand up to 50 Percent • Outdoor irrigation prohibited.
Ag Water Customers – Actions to Reduce Demand up to 50 Percent • Impose changes to delivery schedules to achieve 50 percent demand reductions.
District Actions • Communicate mandatory reduction targets to customers. • Inform Municipal customers of mandatory 50 percent reduction requirement. • Purchase available Contract water to achieve a target carryover of 85,000 AF.
Enforcement Measures • A written warning will be issued for a first violation. • A District imposed fine of $250 for a second violation, and any subsequent violation, and doubling with each subsequent violation up to a maximum of $1,000 for any single violation. • Upon a fourth violation, or upon an earlier violation the General Manager determines to create a significant threat to the goals of the stage, the General Manager may order the installation of a flow restrictor on service lines in question. • Similar penalties, fines, and charges may be implemented by the District as needed to enforce the restrictions on specific prohibited water uses.

Figure 8-5. NID Water Shortage Contingency Plan – Stage 5

Stage 6 – Over 50% Supply Shortage
Forecast April 1 Available Supply: less than 117,500 AF Actions include Stage 5 plus those listed below.
Treated Water and Municipal Water Customers – Actions to Reduce Demand greater than 50 Percent • Health and safety use of water only.
Ag Water Customers – Actions to Reduce Demand greater than 50 Percent • Impose changes to delivery schedules to achieve target demand reductions.
District Actions • Communicate mandatory reduction targets to customers. • Inform Municipal customers of mandatory health and safety use only. • Purchase available Contract water to achieve a target carryover of 80,000 AF. • Other actions as identified specific to the shortage condition.
Enforcement Measures • A written warning will be issued for a first violation. • A District imposed fine of $250 for a second violation, and any subsequent violation, and doubling with each subsequent violation up to a maximum of $1,000 for any single violation. • Upon a fourth violation, or upon an earlier violation the General Manager determines to create a significant threat to the goals of the stage, the General Manager may order the installation of a flow restrictor on service lines in question. • Similar penalties, fines, and charges may be implemented by the District as needed to enforce the restrictions on specific prohibited water uses.

Figure 8-6. NID Water Shortage Contingency Plan – Stage 6

Table 8-2. Supply Augmentation and Other Actions

Submittal Table 8-2 Retail: Supply Augmentation and Other Actions Water Code Section 10632(a)(4)(A),(C) and (E)				
Yes	Is the Supplier completing this table using the standard six levels? (yes/no)			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier **Drop down list** These are the only categories that will be accepted by the WUEdata online submittal tool	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)	
Shortage Level 1	Other Actions (describe)	Percentage	0-2%	Declare no new or increased surplus water availability.
Shortage Level 1	Other Actions (describe)	Percentage	0-2%	Leak repair receives higher priority.
Shortage Level 2	Other Actions (describe)	Percentage	2-5%	New raw water sales and increases limited to one (1) miner's inch.
Shortage Level 2	Other Actions (describe)	Percentage	0-2%	Declare no new or increase in Fall/Winter deliveries.
Shortage Level 2	Other Purchases	Percentage	5-20%	Purchase available Contract water to achieve a target carryover of 110,000 acre-feet.
Shortage Level 3	Other Actions (describe)	Percentage	3-6%	New raw water sales and increases limited to one-half (1/2) miner's inch.
Shortage Level 3	Other Actions (describe)	Percentage	1-2%	Declare no surplus water availability for exterior boundary customers.
Shortage Level 3	Other Actions (describe)	Percentage	5-10%	Declare no Fall water availability.
Shortage Level 3	Other Purchases	Percentage	5-20%	Purchase available Contract water to achieve a target carryover of 100,000 acre-feet.
Shortage Level 4	Other Actions (describe)	Percentage	1-5%	Declare no new or increased raw water sales.
Shortage Level 4	Other Purchases	Percentage	5-20%	Purchase available Contract water to achieve a target carryover of 90,000 acre-feet.
Shortagel Level 5	Other Purchases	Percentage	5-20%	Purchase available Contract water to achieve a target carryover of 80,000 acre-feet.
Shortage Level 6	Other Purchases	Percentage	5-20%	Purchase available Contract water to achieve a target carryover of 75,000 acre-feet.

Table 8-3. Demand Action Reductions

Submittal Table 8-3 Retail: Demand Reduction Actions Water Code Section 10632(a)(4)(B) and (E)					
Yes	Is the Supplier completing this table using the standard six levels? (yes/no)				
Shortage Level	Demand Reduction Actions **Drop down list** These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement? **For Retail Suppliers Only** Drop Down List
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)		
Shortage Level 1	Landscape - Limit landscape irrigation to specific days	Percentage	0-3%	Treated customers encouraged to limit outdoor irrigation to every other day.	No
Shortage Level 1	Other	Percentage	0-1%	Fire departments limit practive drills and hydrant flow testing.	No
Shortage Level 1	Other	Percentage	0-10%	Raw water customers asked to voluntarily reduce purchase allotment for the year while reserving their right to return to their previous allotment in the following year if water supply is available.	No
Shortage Level 1	Expand Public Information Campaign	Percentage	0-1%	Communicate conservation regulations.	No
Shortage Level 1	Expand Public Information Campaign	Percentage	0-3%	Increase drought awareness through additional public outreach measures that notify public and customers of declared stage, requirements, and available conservation program support.	No
Shortage Level 2	Landscape - Limit landscape irrigation to specific days	Percentage	1-3%	Treated customers outdoor irrigation limited to every other day and a maximum of three days per week	Yes
Shortage Level 2	Landscape - Limit landscape irrigation to specific days	Percentage	1-2%	Corresponding to Fall Daylight Savings Time, treated customers shall strive to limit outdoor irrigation to only once per week.	No
Shortage Level 2	Expand Public Information Campaign	Percentage	4-8%	Communicate mandatory reduction targets to customers.	No
Shortage Level 2	Other	Percentage	10-20%	Raw water customers required to change delivery developed by the District aimed at achieving a 20 percent demand reduction.	Yes
Shortage Level 2	Other	Percentage	1-2%	Inform Municipal customers of the mandatory 20 percent reduction requirement.	Yes
Shortage Level 2	Provide Rebates for Turf Replacement	Percentage	1-2%	Distribution system flushing only for public health and safety.	No
Shortage Level 2	Other	Percentage	1-3%	Enhanced enforcement measures.	No
Shortage Level 3	Landscape - Limit landscape irrigation to specific days	Percentage	2-3%	Treated customers outdoor irrigation limited to two days per week.	Yes
Shortage Level 3	Landscape - Other landscape restriction or prohibition	Percentage	2-3%	Treated customers to adjust irrigation controllers to reduce usage for each zone by 30 percent.	No
Shortage Level 3	Landscape - Prohibit certain types of landscape irrigation	Percentage	1-2%	Treated customers prohibted from irrigating ornamental trunf in public street medians.	Yes
Shortage Level 3	Other	Percentage	15-30%	Raw water customers required to change delivery developed by the District aimed at achieving a 30 percent demand reduction.	Yes
Shortage Level 3	Other	Percentage	2-3%	Inform Municipal customers of the mandatory 30 percent reduction requirement.	Yes
Shortage Level 3	Increase Water Waste Patrols	Percentage	0-3%	Dedicate additional staff for increased water waste patrols	No

Table 8-3. Demand Action Reductions, cont.

Submittal Table 8-3 Retail: Demand Reduction Actions					
Yes	Is the Supplier completing this table using the standard six levels? (yes/no)				
Shortage Level	Demand Reduction Actions **Drop down list** These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement? **For Retail Suppliers Only** Drop Down List
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)		
Shortage Level 4	Landscape - Limit landscape irrigation to specific days	Percentage	3-6%	Treated water customers' outdoor irrigtion limited to once per week.	Yes
Shortage Level 4	Landscape - Limit landscape irrigation to specific days	Percentage	3-6%	Treated customers to adjust irrigation controllers to reduce usage for each zone by 40 percent.	Yes
Shortage Level 4	Other	Percentage	25-40%	Raw water customers required to change delivery developed by the District aimed at achieving a 40 percent demand reduction.	Yes
Shortage Level 4	Other	Percentage	3-4%	Inform Municipal customers of the mandatory 40 percent reduction requirement.	Yes
Shortage Level 5	Landscape - Prohibit all landscape irrigation	Percentage	10-25%	Treated customers prohibited from irrigating outdoors.	Yes
Shortage Level 5	Other	Percentage	35-50%	Raw water customers required to change delivery developed by the District aimed at achieving a 50 percent demand reduction.	Yes
Shortage Level 5	Other	Percentage	4-6%	Inform Municipal customers of the mandatory 50 percent reduction requirement.	Yes
Shortage Level 6	Other	Percentage	6-10%	Treated customers limited to health and safety use of water only.	Yes
Shortage Level 6	Other	Percentage	varies	Raw water customers required to change delivery developed by the District aimed at achieving target demand reduction.	Yes
Shortage Level 6	Other	Percentage	6-9%	Inform Municipal customers of the mandatory health and safety use only.	Yes
Shortage Level 6	Other	Percentage	varies	Other actions as identified specific to the shortage condition	Yes
NOTES: Some of these actions are successive and included in further stages. Refer to 2025 UWMP and WSCP for specifics.					

8.6.1 Seismic Risk Assessment and Mitigation

Nevada and Placer counties have completed Local Hazard Mitigation Plans under the federal Disaster Mitigation Act of 2000 (Public Law 106-390). Per DWR requirements, a copy of the most recent adopted plan by each County will be submitted as part of the UWMP submittal to DWR.

8.7 Communication Protocols

NID maintains an established and effective communications program to inform its customers, neighbors, and other stakeholders of issues, updates, and policies. Implementation of the WSCP will use the existing communication program structure to inform customers and others of the declared shortage stage and respective actions and restrictions in place.

The Board meetings addressing the Annual Water Supply and Demand Assessment and/or a potential water shortage declaration will be notified according to normal Board meeting public notification procedures. The meeting will also be announced through regular press release protocols.

Once a shortage stage has been declared by the Board of Directors, NID will notify its customers and others through a range of efforts. The stage and restrictions will be identified in a press release, as well as customer billing statements. Additionally, the District has provided direct mailings to inform customers of a shortage and to encourage conservation. The District's website will be updated to feature the shortage declaration, restrictions, and resources available to customers from the District and other entities to help meet the

restrictions. Subsequent Board of Directors meetings will include a review of the shortage conditions and customer response results, along with discussion of and recommendations for potential modifications.

8.8 Compliance and Enforcement

NID was formed as an irrigation district under the Water Code and therefore it is granted the authority to enforce its rules and regulations, as well as levy and collect fines. NID will declare a water shortage emergency within its service area boundaries when it determines through its best judgment that normal demands and requirements of its customers cannot be met with the projected supplies.

Once a water shortage stage has been declared, NID will enforce compliance through a multitude of measures commensurate with each reduction goal. The District will either implement measures per this WSCP or will provide further discrete requirements through ordinances.

Measures will be enforced through the following procedures, in addition to any enforcement measures identified in ordinances. NID will modify and adjust the compliance strategy as necessary for each respective situation.

- A written warning will be issued for a first violation.
- A District imposed fine of $250 for a second violation, and any subsequent violation, and doubling with each subsequent violation up to a maximum of $1,000 for any single violation.
- Upon a fourth violation or an earlier violation the General Manager determines to create a significant threat to the goals of the ordinance, the General Manager may order the installation of a flow restrictor on service lines in question.
- Similar penalties, fines, and charges may be implemented by the District as needed to enforce the restrictions on specific prohibited water use.

Upon declaration of a Stage 2 shortage (or higher), NID will appoint members to the Drought Hardship Committee. Upon declaration of a Stage 3 shortage, NID will convene the Drought Hardship Committee. The Drought Hardship Committee is an advisory body and shall consist of one appointee from each director's division and the Board Workshop Committee. District Operation's staff will work closely with the committee.

The Drought Hardship Committee's purpose is to review the applications and determine whether additional water can be provided to the applicant. Before any appeal for a variance can be heard by the Drought Hardship Committee, raw water customers must submit a Drought Hardship Application and provide proof the water is being used for commercial agricultural purposes.

For the purposes of this WSCP, the definition of commercial agriculture is an agricultural producer engaged in a for-profit operation with a minimum gross annual sale of $3,000 and a minimum capital investment of $15,000. Commercial agricultural producers file a Schedule F with the Internal Revenue Service for their farming or ranching operation.

Variances may be approved for increases in raw water deliveries, seasonal variances, relief from regulations regarding treated water customers, or other protocols as determined by the Drought Hardship Committee. No such variance or appeal, however, shall be granted if the Board of Directors finds that the variance or appeal will adversely affect the public health or safety of others and is not in the public's best interest. Pursuant to CWC § 106.1, 106.3, 22252.3, and 375, and in critical water supply situations, NID's allocation in its previous WSCP was:

1. Human Consumption
2. Livestock and Animals

3. Perennial Crops
4. Annual Crops

8.9 Legal Authorities

NID is organized under the Irrigation District Law (CWC §§ 20500–29978) and is authorized to do any act necessary to furnish sufficient water in the District for any beneficial use (CWC § 22075) and is therefore granted the authority to enforce its rules and regulations. As a public entity, the District is authorized to "adopt and enforce a water conservation program to reduce the quantity of water used by those persons for the purpose of conserving the water supplies of the public entity" (CWC § 375). For the ordinance or resolution regarding the adoption of a conservation plan, the ordinance/resolution is made effective upon adoption (CWC § 376).

The powers derived from NID's organizing statutes are in addition to general powers granted to water distributors in CWC §§ 350–359. CWC § 350 authorizes the governing body of a distributor of a public water supply to declare a water shortage emergency whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent there would be insufficient water for human consumption, sanitation, and fire protection. Upon finding such an emergency condition, the distributor can adopt such regulations and restrictions on the delivery and consumption of water as will conserve the water supply for the greatest public benefit, with particular regard to domestic use, sanitation, and fire protection (CWC § 353). The regulations and restrictions remain in force and effect until the supply of water available for distribution within such area has been replenished or augmented, and restrictions may include the right to deny new service connections and discontinue service for willful violations (CWC §§ 355–356).

The District will vote to adopt its UWMP and WSCP as stated in Resolution 2026-23. The Resolution authorizes the implementation and enforcement of this WSCP, which is included in the 2025 UWMP.

NID will also coordinate with the City of Grass Valley, Nevada City, Auburn, as well as Placer, Nevada, and Yuba counties for the possible proclamation of a "local emergency" under California Government Code, California Emergency Services Act (Article 2, § 8558).

8.10 Financial Consequences of the Water Shortage Contingency Plan

Implementing any stage of the WSCP is expected to impact the District's financial status, including enforcement of excessive residential water use during a drought (compliance with Chapter 3.3, Division 1 of the Water Code). As experienced during previous droughts, it is expected that revenues will decrease with decreasing usage, and expenses will increase with additional monitoring and enforcement responsibilities, as well as additional costs for replacement supplies if needed.

The District maintains a rate structure that includes a fixed meter charge plus increasing volumetric block rates for residential customers and volumetric rates for irrigation customers. Volumetric revenue is approximately 53 percent of total revenue. In previous years, the District has implemented a drought rate structure. The drought rate structure is set to offset the revenue loss from mandatory demand reduction up to 40 percent. Demand reduction above 40 percent will reduce revenue accordingly. Actual impacts will vary depending on customer response. However, the District is restructuring the water rates, and the current proposal eliminates the drought rate structure.

Enforcement, enhanced outreach, and increase of customer data tracking can add to the District's costs around a water shortage condition. Oftentimes, these additional efforts are prioritized for current staff, and other normal work efforts are delayed or reassigned. If conditions warrant the following actions, the District will seek assistance through additional staffing or third-party service providers. These costs depend on the level of

support and will be evaluated on a case-by-case basis. An increase in costs can also be associated with additional equipment obtained to support the District's outreach, enforcement, tracking, and management efforts.

Depending on the situation, the District may also be able to obtain supplemental water supplies to mitigate the water shortage conditions. These supplies are expected to be more costly than regular supplies and will be evaluated for each specific opportunity.

It is reasonable to expect financial impacts or changes in cash flow during a prolonged water shortage condition. The District will enact a range of management and financial resources depending on the specific situation that includes:

- Drought rate surcharge (drought rate structure may not continue in future rate development)
- Using financial reserves
- Capital project deferment
- Operational and maintenance expense deferment
- Increased revenue from penalties
- And others as identified

8.11 Monitoring, Reporting, and Refinement

The WSCP aims to ensure demands are reduced and/or supply is augmented to balance supply and demand. The District will enact various actions commensurate with each respective stage. The District will then monitor results to maintain the supply/demand balance. Similar to the supply and demand projections used to establish a shortage condition in the annual assessment procedure, the District will monitor the same data to determine effectiveness and efficacy. District staff will report to the Board of Directors at least monthly on status and results. Data reporting will include:

- Actual demands to projected demands per customer class and on total
- Actual supply availability and utilized to projected availability per each supply source
- Projected supply availability for next 12 months per supply source
- Any specific requirements identified by the State in the future

Data will also be submitted to the State per any future reporting requirements.

Progress and efficacy will be summarized from the results data. The District will evaluate the need for any changes or modifications to the declared water shortage stage or actions based on the results. The District may determine to enact additional measures, develop ordinances, or update the WSCP as a whole. Any WSCP update or modification will be conducted through the Board of Directors meeting process unless specific conditions require otherwise.

8.12 Water Shortage Contingency Plan Adoption, Submittal, and Availability

The WSCP (including subsequent updates) shall be adopted in accordance with standard District procedures, including requirements for public participation (public hearing), and approval by the NID Board of Directors. Upon adoption, the WSCP will be provided to the City of Grass Valley, the City of Nevada City, Placer, Nevada, and Yuba counties, and submitted to DWR within 30 days. The adopted WSCP will be available on the District's website, as well as at the District office.

9 DEMAND MANAGEMENT MEASURES

Lay Description

This section characterizes the District's water conservation efforts. NID is dedicated to responsible stewardship of water supplies and conducts an active and ongoing water conservation program aimed thereto. Water conservation is achieved through managing the water supply and water demand for all customer sectors. Through reduction in loss and waste within the District's production and delivery systems, supply management is used to improve the overall system efficiency. NID relies on demand management and conservation programs to educate and encourage water conservation. DMMs are intended to facilitate NID's management and reduction of customer demands, and aid in maintaining supply reliability. The District has utilized these DMMs to meet customer use targets, including SBX7-7 and drought conservation targets. NID anticipates that DMMs will serve as tools to rely on when meeting compliance with future water use targets, including Water Use Objectives. All of the DMMs presented below have been implemented over the previous five years.

9.1 Demand Management Measures for Retail Suppliers

This section details the efforts made by NID to implement DMMs to increase conservation and reduce water demand within the NID service area.

9.1.1 Implementation over the Past Five Years

The following section documents implementation of the water conservation programs, included in detail in Section 9.1.3, over the past five years.

Water Waste Prevention Ordinances

Progress toward these DMMs has been ongoing over the past five years and are detailed in Section 9.1.3.

Metering

This DMM is fully implemented, and the District will continue to install and read meters on all new services. Additionally, the District has begun the replacement of its meters to cellular read. NID is actively replacing automatic meter reading (AMR) meters with automatic metering infrastructure (AMI) meters. The District has replaced a total of 15,699 meters, nearly an additional 6,000 meters over the past five years. The District's AMR/AMI program allows the District to automatically identify customers with high usage rates for potential leak issues. The District has replaced more than 60% of meters sized 2 inches and larger and will continue to implement large meter replacement (upgrading to AMI) during 2026.

Conservation Pricing

The District plans to discontinue its inclining block rate. Moving forward, rates will only include one tier. The change is expected to take effect by January 2027.

Public Education and Outreach

All efforts to date are described in Section 9.1.3. Importantly, the District has a dedicated Communications Specialist who regularly develops and distributes messaging and conservation tips to social media pages and all local media outlets. This role and the activities related have been greatly expanded over the last five years. The District participates in the U.S. Environmental Protection Agency's annual Fix a Leak Week campaign, sharing daily social media posts that encourage the public to check different areas of their homes for leaks. Additionally, starting in 2020 in response to COVID-related limits on public outreach, the District launched a very small pilot program offering toilet rebates. NID has been steadily increasing messaging to grow the program.

Programs to Assess and Manage Distribution System Real Loss

Progress toward these DMMs has been ongoing over the past five years and are detailed in Section 9.1.3.

Water Conservation Program Coordination and Staffing Support

Progress toward these DMMs has been ongoing over the past five years and are detailed in Section 9.1.3.

9.1.2 Planned Implementation to Achieve Water Use Targets

Demand Measurement Measures for SB X7-7 Targets

NID has achieved its 2020 water use per capita target. Additional information about the District's compliance with SB X7-7 is included in Chapter 5 of the UWMP.

Demand Measurement Measures for Urban Water Use Objectives

The State DWR and SWRCB have developed and regulated water agencies to Water Use Objectives, or water budget. An Urban Water Supplier's UWUO is based on efficient water use of the following:

- Aggregate estimated efficient indoor residential water use
- Aggregate estimated efficient outdoor residential water use
- Aggregate estimated efficient outdoor irrigation landscape areas with dedicated irrigation meters or equivalent technology in connection with Commercial, Industrial, and Institutional (CII) water use
- Aggregate estimated efficient water losses
- Aggregate estimated water use for variances approved by SWRCB

The District relies on existing conservation programs, described in detail in Section 9.1.3, that will help the District meet and calculate the UWUO. Additionally, NID focuses on system maintenance and monitoring. In particular, NID takes action to monitor water production versus billed consumption, detecting and repairing links, and maintaining the distribution infrastructure.

9.1.3 Required Demand Management Measures

This section details the efforts made by NID to implement DMMs to increase conservation and reduce water demand within the service area.

Water Waste Prevention Ordinances

Water waste prohibition is an ongoing component of the District's water conservation program. The District has adopted regulations which state that "a water user who wastes water, either willfully, carelessly, or due to defective or inadequate private facilities, may be subject to fines, reduction, or termination of service" (Water Service Regulations, § 3.05 Water Conservation).

NID has an established an active water waste reporting program. Customers can report water waste through the District's website or by telephone. The primary tool to address reported customer waste is outreach and education. Contact is made with the customer as a follow up to the water waste report. They are informed of the report and advised of ways to correct as necessary. Per the District's Water Service Rules and Regulations, continued violations may lead to a fine, reduction in service, or termination of service. The District's Water Conservation Coordinator/Water Efficiency Technician monitors leak alerts and contacts customers alerting them to unusually high use. In addition, the District is currently conducting a pilot program for customers equipped with a Badger meter. The pilot program includes water use software that monitors flows and sends alerts to customers with unusual increases in usage patterns. This notification has historically been sufficient to prompt immediate corrective actions for most NID customers.

NID anticipates continually implementing this DMM, as it provides a proactive approach for addressing water waste by District customers.

Metering

The District is fully metered, and all treated water connections are billed based on the volume of water used. The metered connections allow the District to better monitor customer use during drought conditions when tracking is required. NID is actively replacing AMR meters with AMI meters. Existing AMR meters are replaced when components fail, and currently 15,699 meters have been replaced. The AMI meters will allow real time water use comparisons and leak reporting. District customers now have access to their usage using the EyeonWater website and app. The District has replaced more than 60% of meters sized 2 inches and larger and will continue to implement large meter replacement (upgrading to AMI) during 2026. Despite facing delays brought on by the COVID-19 pandemic, NID projects that the meter replacement program will be completed in the next five years.

Conservation Pricing

The District began implementing an inclining block rate structure for all urban water customer sectors in 1996. All customer sectors and meter sizes received a monthly Tier 1 allocation of five hundred cubic feet. Usage above the Tier 1 allocation was billed at a higher block rate.

The District plans to discontinue its inclining block rate. Moving forward, rates will only include one tier. The change is expected to take effect by January 2027.

Public Education and Outreach

Public information and community engagement are essential ongoing components of the District's water conservation program. The Water Efficiency Technician leads the effort to promote water conservation and awareness through a variety of methods. NID prepares and distributes public information through bill inserts, newsletters, brochures, community presentations, targeted advertising, its website, and community events held throughout each year. These efforts are designed to reach a wide, diverse audience and reinforce the importance of responsible water use across all customer groups.

The District has a dedicated Communications Specialist who regularly develops and distributes messaging and conservation tips to social media pages and all the local media outlets. This role and the activities related have been greatly expanded over the last five years. The District also publishes and distributes newsletters four times a year containing articles and information on water conservation. Previously, the District published a booklet entitled "Water Conservation Gardening" to assist its customers in implementing applicable conservation measures. The "Lawn Watering Guide" was published by the District in 1989 and is updated or reprinted as needed. The District also partners with the University of California Cooperative Extension Master Gardeners, who annually produce "Water Wise Landscaping" periodicals. The District offers this information to customers and makes it publicly available on the District's water efficiency webpage.

Detailed information on the District's public outreach programs is presented below. In addition to event flyers, District presentations, and media releases, Appendix D contains samples of public information distributed by the District. Implementation of the District's public outreach and education program is active and ongoing, reflecting a continued commitment to fostering a culture of water conservation within the community. The District plans to work toward expanding and refining its efforts by developing new informational materials, outreach strategies, and educational activities to communicate the importance of water efficiency within its community. While water savings associated with these outreach and education efforts are not directly quantified, they are recognized by providing meaningful, passive benefits over time. Through increased awareness and gradual changes in customer behavior, these programs contribute to sustained reductions in water demand and support the District's broader conservation goals well into the future.

Mulch Magic Giveaway: The District's Mulch Magic Program focuses on educating the community about the benefits of incorporating mulch into their landscapes, with a strong emphasis on water conservation. Mulch plays a critical role in improving landscape efficiency by reducing soil evaporation, moderating soil temperature, suppressing weed growth, and improving overall soil health. Historically, the District supported these efforts through a mulch giveaway program, distributing more than 1,200 cubic yards of shredded cedar mulch to residents in Nevada and Placer counties. Building on the success of this initiative, NID has recently transitioned from a direct giveaway model to a mulch rebate program. This shift is intended to expand accessibility and better serve a broader range of customers, allowing participants to select mulch products that best fit their specific landscape needs, while still promoting the same water-saving practices.

Through this enhanced approach, the District continues to encourage sustainable landscaping practices and empower customers to make long-term, water efficient improvements in their landscaping.

NID Landscaping Project: NID's Water Wise Irrigation Project consisted of removing a portion of turf at the District's headquarters office and replacing with planting and irrigation systems to demonstrate how to provide water-efficient landscaping. Since the project was completed, NID has performed regular maintenance to the garden. The garden is equipped with plant and irrigation information to facilitate self-guided tours.

Water Conservation School Class Presentation: Previously, NID partnered with the South Yuba River Citizens League to deliver a series of water conservation school assemblies known as "The Great Water Mystery." This program reached students through engaging, large-scale presentations.

Today, NID continues its commitment to students by offering classroom presentations upon request. These more personalized sessions allow for more one-on-one interactions, creating a richer learning experience. As recently as early 2026, NID has visited individual classes to share its knowledge and passion for water stewardship.

During these presentations, students gain insight into the history of the District, learn the importance of watersheds, and follow the journey of water from its natural source to the students' homes. NID also emphasizes practical, everyday strategies for conserving water, empowering students to make water conservation a way of life.

Nevada County Building Fair: NID's Water Efficiency Technician and Business Services Technician attend the Nevada County Building Fair. There, they coordinate a booth with information and giveaways for attendees aimed at increasing water efficiency awareness.

Farm Days: Farm Days is the cornerstone of the District's community outreach efforts, providing a valuable opportunity to engage with more than 500 local students each year. Designed specifically for second and third grade students throughout Nevada County, this event introduces young learners to the fundamental role agriculture plays in their daily lives, while highlighting the critical importance of responsible water use practices.

The NID booth provides an engaging, hands-on learning environment filled with interactive activities that help encourage students to explore how water supports agriculture. Students learn water moves through natural and managed systems, and why conservation is essential for sustaining local farms.

Because Farm Days is centered on public education and meaningful community outreach, the District is proud to be an active participant and anticipates continuing its involvement in this annual event for the foreseeable future.

Table Tents: NID distributes "Water Served Upon Request" table tents to restaurants within the District's service area. This program is aimed at promoting public awareness of water conservation and offers individuals a way to actively contribute toward the overall goal of conservation.

Toilet Rebate: Beginning in 2020, the District launched its toilet replacement program as part of its commitment to promoting water conservation and improving water efficiency within the community. This initiative encourages single-family residential customers to upgrade older, inefficient toilets to high-efficiency models that use 1.28 gallons per flush or less. To support and incentivize participation, NID offers a rebate of up to $100.00 per parcel to help offset the cost of upgrading the fixture. This program not only benefits individual customers through potential savings on their water bills but also contributes to long-term water conservation. Since its inception, the program has seen steady participation, with the District issuing over 130 rebates to date.

Raw Water Storage Tank Rebate: To further support water efficiency, the District offers a water storage tank rebate program for Raw Water customers. Customers who purchase a minimum of ¼ Miners Inch of irrigation water per year and install a storage tank with a capacity of 500 gallons or more are eligible for a rebate of up to $500.00. This program is designed to promote the use of water storage systems that help customers better manage supply and ensure that water resources are used thoughtfully and sustainably. Since the program's implementation, the District has issued 10 water storage tank rebates. While participation is still growing, each installation represents a meaningful investment in long-term water efficiency and reflects NID's ongoing commitment to supporting water conservation.

Turf Removal Rebate: To encourage sustainable landscaping practices and reduce outdoor water demand, the District offers a turf replacement rebate for single-family residents who choose to transition to more water-efficient landscapes. Customers who convert a minimum of 250 square feet of traditional turf to drought-tolerant plants and efficient irrigation systems are eligible to receive a rebate of up to $1,000.00. This program supports the shift towards attractive, low-water-use landscapes that are better suited to the local climate, while still enhancing the beauty and functionality of outdoor spaces. By replacing high-water-use turf with water-wise alternatives, customers can significantly decrease their irrigation needs, lower water bills, and contribute to long-term water conservation. To date, more than 8,500 square feet of turf have been replaced through this program.

Programs to Assess and Manage Distribution System Real Loss

Ongoing leak detection and repair within the system, focused on the high probability leak areas, is used to assess and manage the system's real losses. This includes a continuing meter calibration and replacement program for all production and distribution meters. The District conducts annual water audits and leak detection and repair on an ongoing basis. The District conducted a water loss audit during 2020 through 2025 as described in Chapter 4. Because the District maintains records on all leaks repaired on its treated water system, the information is annually reviewed and used to determine which pipelines should be considered as part of the annual budgeted project list. The ongoing budget for repair and replacement of leaking treated water distribution pipes amounts to approximately $1 million annually.

The program for leak detection and repair began in 1985. The District will continue to audit their water distribution systems, per American Water Works Association guidelines, by comparing water produced and water delivered. Each system is audited at least annually. The District will continue its leak detection program and will schedule surveys on high water loss systems as determined by the annual water audits and leak history records. The District will continue rehabilitating its water distribution system by replacing water mains with extensive leak histories.

Water Efficiency staff continue to work with various departments to improve and refine data collection aimed at improving the District's validity score where appropriate.

The effectiveness of NID's programs to assess and manage the distribution system's real loss is evaluated by tracking leak detection and leak repair and comparison of prior water use to future water use.

The District maintains records of numbers and locations of leaks that are detected and repaired each year. The District implemented an asset management program beginning in 2015 to be able to better track repairs.

Water Conservation Program Coordination and Staffing Support

Since 2011, the District has staffed a full-time Water Conservation Coordinator/Water Efficiency Technician. The Water Efficiency Technician performs a variety of highly responsible technical duties in support of the District's water conservation program, including water distribution and production activities. The coordinator plans, organizes, tracks, implements, and reports on various water efficiency, distribution, and production programs, conducts public outreach/education activities regarding the District's water efficiency, and investigates reports of water waste. The coordinator identifies, recommends, and implements programs and activities to improve water use efficiency among NID customers, develops programs to efficiently communicate to the NID customer base, and has established a toilet rebate program, a retrofit program at the local fairgrounds, and mulch giveaway events. Additionally, this role ensures compliance with water efficiency legislation through state-required monthly reporting and annual water audits.

The implementation of the District's water conservation program is ongoing. Recent budget allotments have averaged $271,000 per year, which includes programming and staff costs. Water savings from this DMM cannot

be directly quantified. Effectiveness of this DMM is evaluated by the overall success of the District's water conservation program

Other Demand Measurement Measures

In addition to the DMMs presented above, NID also undertakes various programs and provides rebates aimed at increasing water use efficiency and reducing waste. Information on these additional DMMs employed by the District is presented below.

Leak Detection: With the implementation of new cellular-read Badger meters in 2017, the District significantly enhanced its ability to identify and respond to potential water loss through leak detection. These meters are actively and continuously monitored, allowing the District to receive alerts when uncharacteristic water usage at a property persists for more than 24 hours.

The Water Efficiency Technician plays a key role in this process by reviewing usage data, identifying irregular patterns, and contacting customers to notify them of potential leaks. This proactive approach allows customers to address problems early, helping prevent unnecessary water loss, reduce utility costs, and avoid potential property damage.

In 2025, the District mailed over 1,800 notification letters to customers about unusual or high water use, staff responded to about 520 high-consumption calls, and technicians assisted with over 200 customer-side leaks. These efforts demonstrate the District's ongoing commitment to improving water efficiency and minimizing water waste throughout the system.

High Efficiency Toilet Rebate Program: NID's Toilet Rebate Program was developed to provide a financial incentive to encourage customers to replace older, inefficient toilets with High Efficiency Toilets rated at 1.28 gallons per flush or less. By encouraging the adoption of these modern, water-saving appliances, the program supports both household-level efficiency and broader, long-term water conservation goals across the District.

The implementation of this program is estimated to conserve up to 3.4 million gallons of water annually, reflecting the significant cumulative impact that small, everyday water use improvements can achieve when adopted community-wide. In addition to reducing overall demand, these upgrades can also help customers lower their water bills while maintaining reliable performance.

To date, NID has distributed 168 rebate applications and approved 136 toilet rebates, demonstrating steady participation and strong community interest. Notably, since the program's inception, no rebate application has been denied. Each approved rebate represents a continued step toward improving water efficiency and reinforcing a culture of conservation throughout the service area.

Large Landscape Conservation Program Incentives: NID actively promotes informed and efficient landscape water management as a key component of its conservation efforts. A central feature of this initiative is the Demonstration Garden located at the District's Grass Valley office, which serves as a hands-on, visual resource for customers interested in sustainable landscaping practices. The garden showcases water-wise plant selections, efficient irrigation techniques, and design strategies that balance aesthetic appeal with reduced water use.

At the Demonstration Garden, NID has developed and makes readily available a variety of educational materials focused on irrigation efficiency and landscape best practices These resources are designed to help customers better understand how to optimize outdoor water use, reduce waste, and maintain healthy, resilient landscapes.

In addition, the District reinforces these efforts through its quarterly newsletter, which regularly highlights the Demonstration Garden as a valuable community resource.

CII Accounts Surveys: All of the District's 838 CII accounts are metered. NID has identified customers with the largest meters and highest use for targeted outreach and will work collaboratively with them to improve efficiency and reduce water use as needed.

Agricultural Water Conservation: In 2015, 2020, and 2025 the District prepared an AWMP in compliance with the Agricultural Water Management Planning Act. The Agricultural Water Management Planning Act calls for agricultural water suppliers to report on which efficient water management practices they have implemented and plan to implement and to describe the associated water use efficiency improvements. The District continues to implement water measurement and volume-based pricing with an incentive pricing structure for all agricultural customers. Gaging stations to help monitor flows at intermediate locations along the canals, as well as automated reading stations, will continue to be installed annually. The District actively inspects and maintains raw water supply pumps, conducts pump efficiency tests, and replaces pumps as necessary and as funding allows. The District continues to work with PG&E to increase the flexibility in the timing and location of the PG&E supply, enabling more efficient management of the District's water resources. The District's agricultural efficient water management practices are described in detail in the recently adopted 2025 AWMP.

9.2 Demand Management Measures for Wholesale Suppliers

This section is not applicable to NID.

10 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

Pursuant to DWR requirements, this 2025 UWMP was submitted to the California State Library, cities of Grass Valley, Lincoln, and Nevada City, and the counties of Nevada, Placer, and Yuba. This 2025 UWMP and applicable submittal tables were electronically submitted to DWR. This 2025 UWMP is available to the public electronically on the District's website or at the District office.

10.1 Notice of Public Hearing

A public hearing was conducted by the District on May 13, 2026, to discuss and receive comments/input regarding NID's 2025 UWMP and WSCP prior to their adoption. The public hearing was noticed in the Union Newspaper, Auburn Journal, and Lincoln News Messenger, 14 days and 7 days prior to the hearing (per DWR requirements). See Appendix B for a copy of the newspaper notice.

10.2 Notice to Cities and Counties

In December 2025 and January 2026, notices of preparation and intent to update the UWMP were emailed to the applicable cities, county, and other agencies more than 60 days before the public hearing, as required. A copy of the Notice of Intent to Update the 2025 UWMP is included in Appendix B.

In April-May 2026, notices of the public hearing were emailed to the applicable cities, county, and other agencies as required more than 14 days prior to the hearing. The notices included the location where the 2025 UWMP could be viewed, the UWMP revision schedule, and NID's contact information. A copy of the Notice of Public Hearing is included in Appendix B.

Table 10-1 lists the specific entities that were notified for both the above instances.

Table 10-1. Notification to Cities and Counties

Submittal Table 10-1 Retail: Notification to Cities and Counties Water Code Section 10621(b) and 10642		
City Name	60 Day Notice **Drop Down (yes/no)**	Notice of Public Hearing **Drop Down (yes/no)**
Add additional rows as needed		
City of Nevada City	Yes	
City of Grass Valley	Yes	
City of Lincoln	Yes	
County Name **Drop Down List**	60 Day Notice **Drop Down (yes/no)**	Notice of Public Hearing **Drop Down (yes/no)**
Add additional rows as needed		
Nevada County	Yes	
Placer County	Yes	
Yuba County	Yes	
NOTES: Cities and Counties were notified in December 2025.		

10.2.1 Notice to the Public

A public hearing notice was placed in the Union Newspaper, Auburn Journal, and Lincoln News Messenger for two successive weeks, April 29 and May 6, 2026, announcing that NID would be reviewing and considering amendments to the UWMP and WSCP. Notification occurred in accordance with Government Code Section 6066 and included the time and place of hearing as well as the location where the UWMP was available for public inspection.[3] This information was also posted on NID's website on April 22, 2026.

10.2.2 Public Hearing

The public hearing, conducted by the District on May 13, 2026, allowed for community input on the 2025 UWMP and WSCP.

10.2.3 Adoption

This 2025 UWMP was adopted on May 13, 2026, thereby superseding the plan prepared in 2020. A copy of the resolution adopting the 2025 UWMP is provided in Appendix C.

[3] California State Legislature. (1949). Government Code Section 6066. http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=6066

10.3 Plan Submittal

Within 30 days of adoption, NID submitted a copy of the 2025 UWMP and WSCP to DWR, the California State Library Government Publications Section (Sacramento), and to any city or county to which NID provides water in accordance with CWC § 10635(c), 10644(a)(1) and (2), and 10645(a) and (b).

10.3.1 Submitting the UWMP and WSCP to DWR

To satisfy DWR requirements, all UWMPs and WSCPs must be submitted to DWR within 30 days of adoption and prior to July 1, 2026. NID submitted the documents within 30 days of the adoption date of May 13, 2026.

10.3.2 Electronic Data Submittal

NID submitted its 2025 UWMP and WSCP to DWR electronically.

10.3.3 Submitting the UWMP to the California State Library

The District submitted a CD or hard copy of its adopted 2025 UWMP to the California State Library within 30 days of adoption.

10.3.4 Submitting the UWMP to Cities and Counties

NID submitted a copy of its adopted 2025 UWMP to the cities of Grass Valley, Nevada City, and Lincoln, and to the Nevada, Placer, and Yuba County.

10.4 Public Availability

Within 30 days after filing the 2025 UWMP and WSCP with DWR, the documents were made available for public review during normal business hours at XXX, the public libraries (XXX Branches), and on NID's website at <insert website here>.

10.5 Notification to Public Utilities Commission

Per CWC § 10621(c), Suppliers that are regulated by the California Public Utilities Commission (CPUC) must submit their UWMP and WSCP to the CPUC as part of its general rate case filings. Since this is not applicable to NID, the plans were not submitted to the CPUC.

10.6 Amending an Adopted UWMP or WSCP

Should any changes be made to the 2025 UWMP and/or the WSCP, per CWC § 10621(d) and 10644(a)(1), within 30 days after adoption, NID will submit copies of the amendments or changes to DWR, the California State Library, and the above-mentioned cities and counties.

10.6.1 Amending the UWMP

If NID amends the adopted 2025 UWMP, each of the steps for notification, public hearing, adoption, and submittal of the original 2025 UWMP will be followed.

10.6.2 Amending the WSCP

Specific to CWC § 10644(b), if NID revises its WSCP after DWR has approved the 2025 UWMP, NID will submit to DWR an electronic copy of the revised WSCP within 30 days of adoption.