

Program Overview

2020 Integrated Source Water and 319(h) Watershed Protection Plan for Public Water Systems and the Truckee River in the Truckee Meadows

Introduction

The *2020 Integrated Source Water and 319(h) Watershed Protection Plan for Public Water Systems and the Truckee River in the Truckee Meadows* is a tool developed by the community to help preserve and improve the quality of groundwater, lakes, rivers, springs, and streams that supply drinking water to the general public. This voluntary multi-jurisdictional planning effort is organized on a watershed basis for the Truckee River through the Truckee Meadows because the river and local aquifers comprise the drinking water sources for most of the population of Washoe County. Watershed management for non-point source pollution goes hand in hand in with protecting source water quality.

Key Outcomes of this Planning Effort

The plan is intended to be a guide and resource for organizations working within a watershed and an educational tool for those interested in learning more about the protecting source water quality where they live. Key outcomes of the planning effort include map based on-line access to the Plan, increased funding opportunities, and integration with existing regional water planning guidance.

Web Map Tool

This voluntary multi-agency effort has produced a [Web Map Tool](#) available to agencies, organizations and the general public. The *Source Water and Watershed Protection Web Map* is a visualization tool to aid water quality protection and enhancement in the greater Reno-Sparks area of Washoe County.

Increased Grant Funding Opportunities

Stakeholders can use this tool to support individual or cooperative funding requests for a multitude of water quality improvement projects. The Plan was built to satisfy the criteria for endorsement by the Nevada Division of Environmental Protection as a [Community Source Water Protection Plan](#) through the Source Water Protection Program and approval of the U.S. EPA Region 9 as a [319\(h\) Watershed Management Plan](#).

Completion of the Plan increases the grant funding opportunities for local government, utilities, and Non-Profit Organizations to help protect water quality. Specifically, grant funding is available from two state programs: The [Integrated Source Water Protection Program](#) and the [319 \(h\) Non-Point Source program](#) in the Bureau of Safe Drinking Water and the Bureau of Water Quality Planning under the Nevada Division of Protection (NDEP).

Integration with Existing Regional Water Planning Entities

The Plan recognizes and supports the regional entities that have responsibility for components of source water and watershed protection within their jurisdiction.

- [Washoe County Health District](#) – Responsible for compliance of all public water systems in Washoe County with State of Nevada and Federal safe drinking water regulations
- [Truckee Meadows Water Authority](#) – Regional water purveyor in the Truckee Meadows
- [Truckee Meadows Stormwater Permit Coordinating Committee](#) – Overseeing compliance with municipal stormwater regulations and watershed management for tributaries to the Truckee River in the Truckee Meadows
- [Western Regional Water Commission](#) – Providing comprehensive water planning for water supply and water quality throughout Washoe County
- [Truckee Meadows Regional Planning Agency](#) – Overseeing the consistency of land use planning in the Truckee Meadow Region

This Plan and the *2020 Watershed Management and Protection Plan for Tributaries to the Truckee River* (NCE, 2020) are mutually complementary plans and work together to address the broad scope of potential strategies for groundwater and surface water quality in Washoe County.

Plan Organization

For easy access to the county-wide plan information, a map based on-line format has been developed and is being hosted at the [Truckee Meadows Regional Planning Agency website](#), organized as follows:

- Maps of the plan area to help characterize the land use, jurisdiction, and water sources in each watershed.
- Descriptions by watershed of activities potentially contributing to point or non-point source pollution and management strategies to protect surface water and groundwater quality.
- Outlines of source water protection areas which represent precautionary indicators to safeguard drinking water sources, including more critical areas closer to perennial streams and public water system wells.
- Links to descriptions of voluntary projects to implement for watershed and source water protection.

Plan Development

Plan Initiation

In 2017, the Northern Nevada Water Planning Commission, the Western Regional Water Commission, the Truckee Meadows Water Authority, the Truckee Meadows Regional Planning Agency, and Washoe County Health District requested to participate in a regional planning effort to protect water quality and sources of drinking water ([TMWA, 2020-2040 Resource Plan](#)). This included the Integrated Source Water Protection Program and concurrent update and development of a Truckee River Watershed Management Plan that would meet the [EPA requirements](#).

The Plan Development Team

Several teams were assembled for developing the plan elements. The teams were composed of representatives from local and state government agency planners, scientists, and educators. The primary planning team members represented the following entities:

- [Central Truckee Meadows Remediation District](#)
- [City of Reno Community Development, Environmental Control](#)
- [City of Sparks Planning & Zoning, Environmental Control](#)
- [NDEP Bureau of Water Quality Planning, Bureau of Safe Drinking Water](#), with [Resource Concepts, Inc.](#), contractor
- [Northern Nevada Water Planning Commission](#) and [Western Regional Water Commission](#)
- [Truckee Meadows Regional Planning Agency](#)
- [Truckee Meadows Stormwater Permit Coordinating Committee](#)
- [Truckee Meadows Water Authority](#)
- [Washoe County Community Services Dept. Planning & Development](#)
- [Washoe County Health District](#)

Purpose and Goals

The purpose of the planning effort was to create a tool to help agency staff and decision makers to protect the water quality of drinking water source and to help manage the Truckee River watershed to maintain and/or improve water quality.

The team developed the following goals to guide the plan development:

1. Identify water quality problems and solutions
2. List prioritized and implementable projects to improve or protect water quality
3. Provide a process for implementation, with roles and responsibilities
4. Be coordinated, consistent with and complementary to other plans
5. Be useful to funding and regulatory agencies
6. Provide a process to show benefits and accomplishments
7. Receive regional support and approval

Plan Area Selection

Source Water

The planning area includes the watersheds and groundwater basins containing existing and potential future sources of public drinking water throughout Washoe County. These drinking water sources are operated by 75 different public water systems, including TMWA, as well as numerous mobile home parks, gas stations, restaurants, and schools outside of [TMWA's service area](#).

Drinking water sources include:

- Groundwater tapped by over 170 public water system wells
- Surface water from the Truckee River watershed upstream of TMWA's treatment plants
- Surface water other tributaries and springs where used for existing or potential future drinking water supply.

Source Water Protection Areas

Sources of drinking water including the recharge areas were defined using multiple modeling techniques and mapped as Source Water Protection Areas (SWPAs). SWPAs are the land surrounding both surface water and groundwater supply sources where activities can have the highest impact to water quality. Management and monitoring of these areas can protect surface and ground water from becoming contaminated. The SWPAs are for voluntary planning purposes and do not represent regulatory boundaries.

Watersheds by USGS Hydrologic Code

Watersheds in the project area are described at the hydrologic unit code 12 or “HUC-12” level. This system is used to describe watershed extent to fulfill several goals. The watershed approach satisfies the EPA requirements for a watershed plan. Watersheds are important regarding recharge to groundwater sources of drinking water. HUC 12 watersheds are also used by project stakeholders such as the US Forest Service, the Natural Resource Conservation Service, and the NV Division of Forestry and thus is a common language to share information. These HUC-12 watersheds include multiple streams or tributaries to the Truckee River.

Implementation Measures and Project Profiles

Water quality protection and improvement strategies are listed in the watershed profiles and detailed in the Project Profiles. These project profiles describe the information needed to satisfy the EPA 9 Critical Elements of a watershed-based plan.

References

- City of Reno, Environmental Control, Website, Available at: [Environmental Control](#)
- City of Reno, Truckee Meadows Storm Water Permit Coordinating Committee, Website, Available at: [Truckee Meadows Stormwater Quality Management Program](#)
- City of Sparks, Environmental Control, Website, Available at: [City of Sparks](#)
- Environmental Protection Agency. 2012 Recreational Water Quality Criteria. Accessed online 08/24/2020. Available at: [EPA 2012 Recreational Water Quality Criteria](#)
- Environmental Protection Agency. Polluted Runoff: Nonpoint Source (NPS) Pollution. Accessed online 08/24/2020. Available at: [319 Grant Program for States and Territories](#)
- NDEP BWQP, Nevada Division of Environmental Protection, 2016-2018. [Nevada 2016-2018 Water Quality Integrated Report](#)
- NDEP, Bureau of Safe Drinking Water, Nevada Division of Environmental Protection, Website, Available at: [NDEP](#)
- NDEP, Integrated Source Water Protection Program, Website, Available at: [Integrated Source Water Protection](#)
- Northern Nevada Water Planning Commission, Website, Available at: [NNWPC](#)
- Resource Concepts, Inc. (RCI), 2020 Integrated Source Water and 319(h) Watershed Protection Plan for Public Water Systems and the Truckee Meadows in the Truckee Meadows, 2020. http://www.rci-nv.com/source_water_protection/
- Truckee Meadows Regional Planning Agency, Website, Available at: [TMRPA](#)
- Truckee Meadows Water Authority, Website, Available at: [TMWA](#)
- Truckee Meadows Water Authority, DRAFT 2020-2040 Water Resources Plan, Chapter 6 protecting the Watershed and the Environment, Recommendation 2.6, 2020. Available at: [WRP](#)
- Truckee Meadows Water Authority, Service Areas, Online Image, Available at: [TMWA Service Areas](#)
- Truckee River Info Gateway. Truckee Meadows Regional Storm Water Permit Coordinating Committee. Accessed online 08/24/2020. Available at: [Truckee River Info](#)
- Washoe County, Central Truckee Meadows Remediation District, Website, Available at: [CTMRD](#)
- Washoe County, Community Services, Website, Available at: [Community Services](#)
- Washoe County, Health District, Website, Available at: [Health District](#)
- Western Regional Water Commission, Website, Available at: [WRWC](#)

Program Overview of the 2020 Integrated Source Water and 319(h) Watershed Protection Plan for Public Water Systems and the Truckee River in the Truckee Meadows