



SOURCE WATER PROTECTION PROGRAM – 2023 HIGHLIGHTS

TMWA has a robust Source Water Protection Program to improve and maintain regional drinking-water quality. The sections below describe elements from the key components of TMWA’s program for 2023.

INTEGRATED SOURCE WATER PROTECTION PLAN

A component of TMWA’s Source Water Protection Program is the *2020 Integrated Source Water and 319(h) Watershed Protection Plan for Public Water Systems and the Truckee River in the Truckee Meadows (2020 Plan)*. The 2020 Plan revolves around an [online tool](#) developed by the community to identify and map source water protection areas. This mapping facilitates [project](#) identification and implementation to preserve and improve the quality of the groundwater, lakes, rivers, springs, and streams that supply drinking water to the public. The website is regularly updated, at least on an annual basis, to include new source water protection areas and new projects.

WHAT IS SOURCE WATER PROTECTION?

Efforts to protect water quality at the source to reduce risks to public health, instill customer confidence, and control water treatment costs.

TRUCKEE RIVER FUND

The [Truckee River Fund](#) was established by TMWA in 2004 and was one of the first components of TMWA’s source water protection efforts. This fund is used to support projects that protect and enhance the water quality or resources of the Truckee River and its watershed. Since 2004, the Truckee River Fund has funded 212 projects and distributed \$16.1 million to qualifying projects through grant awards. Partner organizations have provided \$26.1 million in cash and in-kind services. In 2023, Truckee River Fund provided grant funding to the projects listed in the table below.

ORGANIZATION	PROJECT NAME
Great Basin Outdoor School	Youth Watershed & Protection Projects
Sierra Nevada Journeys	Watershed Education Initiative
Truckee River Watershed Council	Coldstream Canyon & Cold Creek Streambank Stabilization
Indigenous Peoples Council on Biocolonialism for Healing Waters Institute	River Justice
Friends of Nevada Wilderness	Mount Rose Noxious Weed Monitoring, Treatment, and Re-Seeding
US Fish and Wildlife Service	Truckee River Water Temperature Monitoring
City of Reno	Lake Park Floating Wetlands and Pollinator Revegetation Project
Keep Truckee Meadows Beautiful	2024 Great Community Clean-Up, Truckee River Clean-Up, Adopt-A-River Program, and Community Education Program
One Truckee River	Watershed Coalition Building

MIDDLE TRUCKEE RIVER WATERSHED FOREST PARTNERSHIP

In October 2022, TMWA signed a memorandum of understanding with the Tahoe National Forest, The Nature Conservancy, Truckee River Watershed Council, and National Forest Foundation (NFF) to form the Middle Truckee River Watershed Forest Partnership (MTRWFP). A catastrophic fire in this area of the watershed could have direct and prolonged water quality impacts to TMWA's sources of supply.

Since 2023, the partners have been working on planning and implementation and developed a 10-year vegetation plan. The goal is to treat 62,000 acres of forested lands by 2033 with ecologically-based forest thinning and restoration methods. For more information on specific projects, an interactive map is available on the MTRWFP [website](#). The Partnership has raised \$10.1 million from various grants since 2022 to fund planning and implementation for additional projects.

The Ladybug Project, partially funded through TMWA at \$500,000, is underway. NFF is implementing the project. In 2023, NFF accomplished 465 acres of hazardous fuel reduction work within the Ladybug project area. This included 203 acres of large-diameter mastication (grinding) where trees up to 16" in diameter at breast height were masticated to meet spacing targets.



A masticator at the Ladybug Project in 2023 used to grind trees up to 16" in diameter

ONE TRUCKEE RIVER PARTNERSHIP COUNCIL



Ribbon cutting for the John Champion Portland Loo in April 2023

TMWA is an active partner in the [One Truckee River Partnership Council](#) and a key implementation partner in the Truckee River Restroom Project. In 2020, the first Portland Loo was installed at Brodhead Park. In April 2023, the second Portland Loo was opened to the public at John Champion Park. These restrooms have been highly successful in reducing waste upstream of TMWA's Glendale Water Treatment Plant intake and providing sanitation facilities for all river users.

NDEP SPILL REPORTS

TMWA is notified by the Nevada Division of Environmental Protection (NDEP) when spills occur that could impact groundwater or surface water sources. TMWA closely monitors ongoing and active spill release sites overseen by NDEP and other local partners to prevent impacts to TMWA's water supplies. TMWA reviewed **38 spill reports** in 2023.

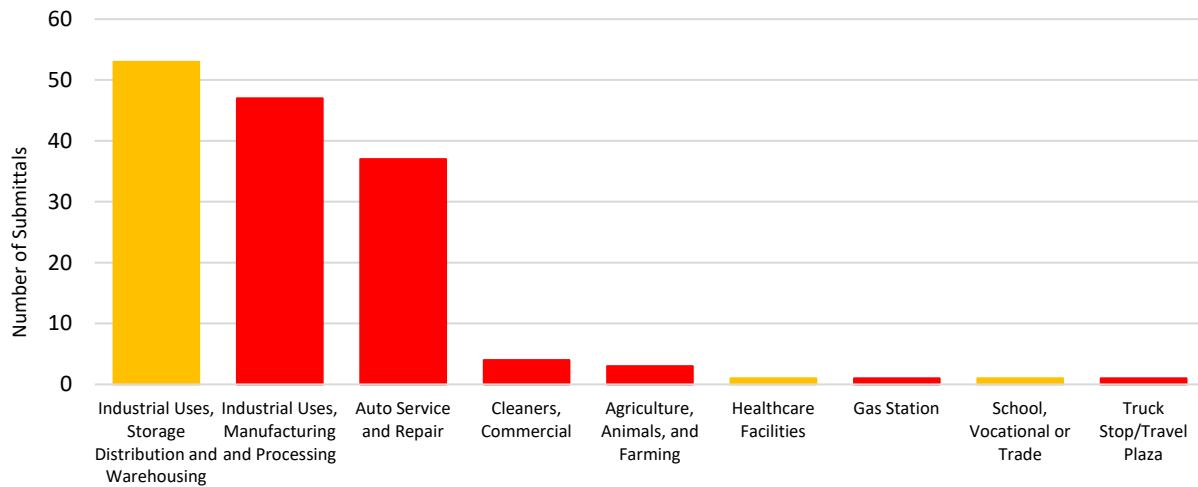
DEVELOPMENT PROJECT APPLICATION REVIEWS

TMWA is notified of projects that are being reviewed by Washoe County’s Planning and Building Division, City of Reno’s Planning Commission, and Sparks Planning & Community Services Department. In addition to other internal TMWA reviews, these projects are evaluated for source water protection concerns. If concerns are noted, comments are provided to the applicants via the agencies. TMWA assessed **50 development review memos** for source water protection concerns in 2023.

In 2020, the City of Reno amended their Title 18 Land Development Code to add a process for new businesses to notify TMWA if they fall within designated SWPAs. TMWA is [notified](#) when new activities are planned within critical distances of sensitive water infrastructure. This provides the opportunity for TMWA staff to educate those businesses about the location of drinking water sources and the SWPP. This cooperative process provides businesses with the information needed to take the measures required to help prevent future groundwater and surface water contamination.

TMWA **received notifications from 150 businesses in 2023**, and TMWA contacted approximately 25% of those businesses (38 businesses). Businesses were contacted if they were located within a critical source water protection area and/or the business type was of particular concern for water quality. On the graph below, red indicates business types of the highest concern and yellow are of moderate concern. The attached maps show locations for projects submitted and contacted in 2023.

2023 SOURCE WATER PROTECTION SUBMITTALS BY BUSINESS TYPE



DONNER INTERAGENCY PARTNERSHIP FOR STEWARDSHIP

During 2020 and 2021, visitation to the Donner Lake area drastically increased. With growing numbers of visitors came additional issues such as higher boat traffic, increased erosion, and more litter. To address these issues, multiple stakeholders, including TMWA, came together to form the Donner Interagency Partnership for Stewardship (DIPS). In June 2023, the collaborative published the [2022 State of Donner Lake](#) to create a baseline dataset about the ecological and water quality conditions of Donner Lake. DIPS has also created the [2022 Stewardship Plan](#) to identify action items to protect the long-term health of Donner Lake.

FOREST AMBASSADOR PROGRAM

TMWA partnered with the Humboldt-Toiyabe National Forest and the National Forest Foundation in 2022 to establish a Forest Ambassador Program in the watersheds upstream of the Mt. Rose Water Treatment Plant. The Forest Ambassador spends time on the local trails educating recreators about responsible recreation and the importance of protecting the region's water supply. In 2023, the Forest Ambassador interacted with nearly 4,000 people from June through November.

2024 PROGRAM GOALS

Key goals for TMWA's Source Water Protection Program in 2024 include the following:

- Continue engaging with Washoe County to get source water protection notifications integrated into their business license process in early 2024.
- Start working with Sparks to get source water protection notifications integrated into their business license submittal processes in late 2024.
- Notify existing industrial businesses within the 5-year capture zones of TMWA's production wells.
- Continue collaborating with upstream entities to increase the pace and scale of forest health management projects to decrease the likelihood of and impacts from large-scale wildfires in the headwaters.
- Install a Portland Loo at Reno City Plaza as part of the Truckee River Restroom Project, in collaboration with One Truckee River.
- Update Source Water Protection Areas with any changes (annually).
- Continue working with Truckee Meadows Regional Planning Agency to refine source water protection policy language to be included in the Natural Resources Plan.
- Translate TMWA's source water protection outreach materials into Spanish.
- Continue working with the NDEP, Reno and Sparks Environmental Control, and Northern Nevada Public Health to update and improve communication and response to spills or releases to critical source water protection areas.



Forest Ambassador providing educational materials to trail users at the Thomas Creek trailhead

SOURCE WATER PROTECTION SUCCESS STORY



TMWA receives notifications of special use permit applications for industrial, commercial, redevelopment, and other land uses from the local municipalities. An application for industrial redevelopment on a parcel located next to the Truckee River and upstream of the intakes at Chalk Bluff Water Treatment Plant was reviewed by TMWA, and staff provided comments and conditions for approval. During 2023, TMWA staff worked closely with the industrial applicant to review the regional Source Water Protection Plan, provide information on best management practices, coordinate with NDEP, and upgrade portions of the facility and the property to avoid contamination of the Truckee River. The collaboration between the industrial applicant and TMWA helped protect the Truckee River and the community's drinking water supply.

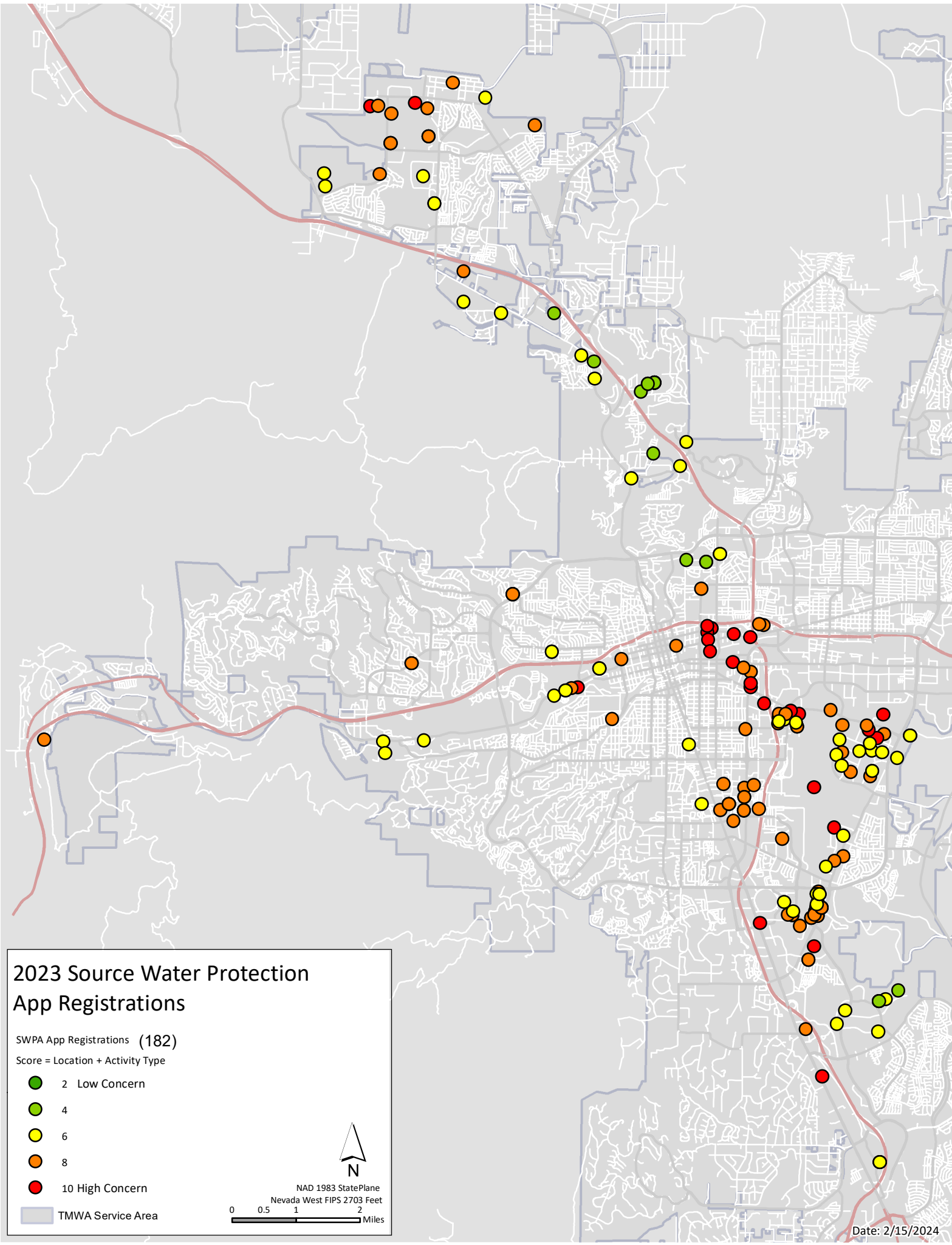
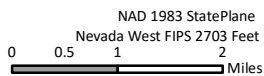
2023 Source Water Protection App Registrations

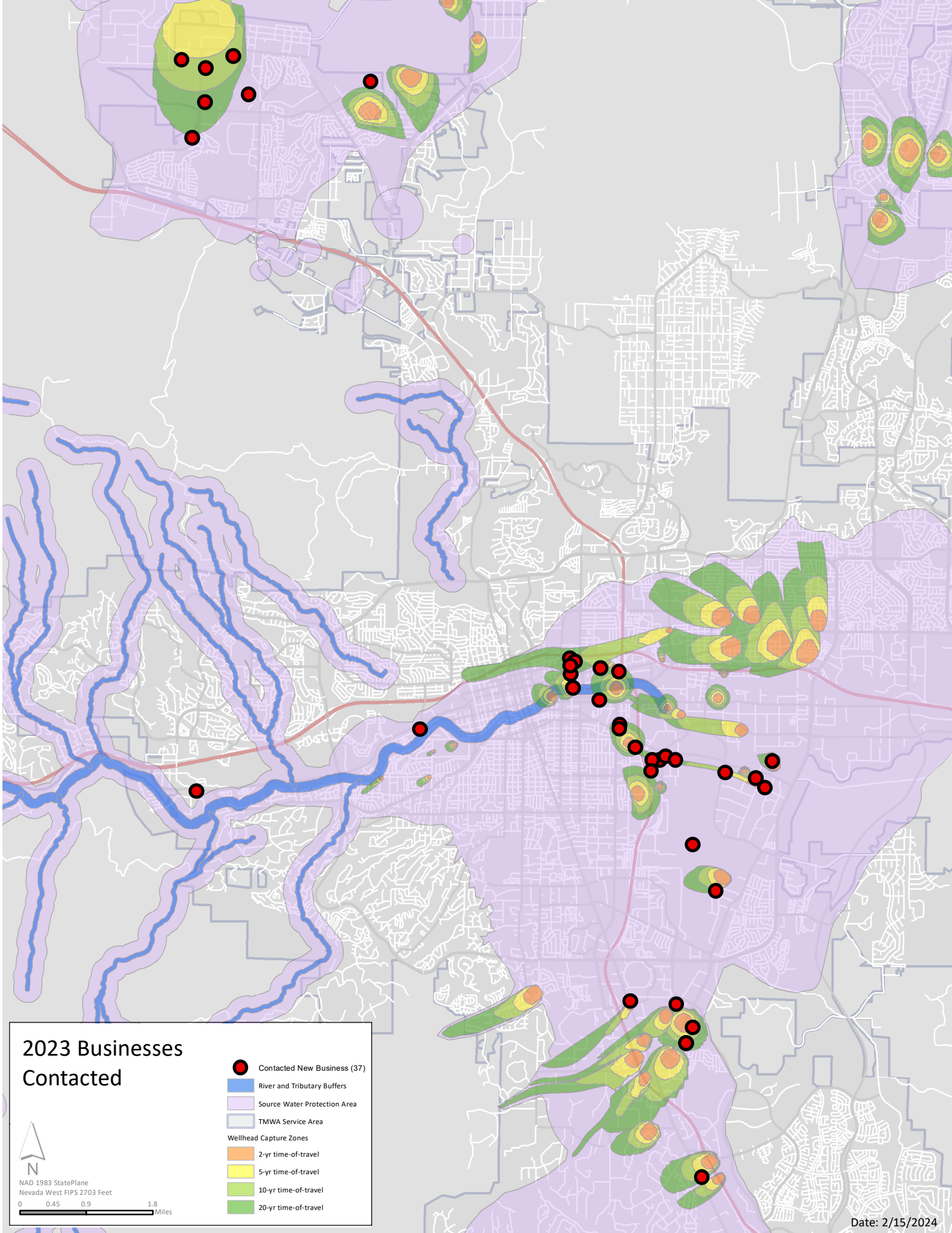
SWPA App Registrations (182)

Score = Location + Activity Type

- 2 Low Concern
- 4
- 6
- 8
- 10 High Concern


TMWA Service Area





2023 Businesses Contacted

- Contacted New Business (37)
- River and Tributary Buffers
- Source Water Protection Area
- TMWA Service Area
- Wellhead Capture Zones**
- 2-yr time-of-travel
- 5-yr time-of-travel
- 10-yr time-of-travel
- 20-yr time-of-travel


 NAD 1983 StatePlane
 Nevada West FIPS 2703 Feet
