

Town of Telluride Source Water Protection Plan

San Miguel County, Colorado
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For the Community Water Provider:
Town of Telluride, PWSID# CO-0157800

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Cover photo description and acknowledgments. The cover photo of a portion of Blue Lake in the Bridal Veil Basin of San Miguel County was taken by Karen Guglielmone on July 23, 2012.

This Source Water Protection Plan is a planning document and there is no legal requirement to implement the recommendations herein. Actions on public lands will be subject to federal, state, and county policies and procedures. Action on private land may require compliance with county land use codes, building codes, local covenants, and permission from the landowner. This SWPP for the Town of Telluride was developed using version 16.01.04 of the Colorado Rural Water Association’s Source Water Protection Plan Template.

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COMMON ACRONYMS

BMP	Best Management Practice
CDPHE	Colorado Department of Public Health and Environment
CRWA	Colorado Rural Water Association
GIS	Geographic Information System
MGD	Million Gallons per Day
NRCS	Natural Resources Conservation Service
PSOC	Potential Source of Contamination
SWAA	Source Water Assessment Area
SWAP	Source Water Assessment and Protection
SWPA	Source Water Protection Area
SWPP	Source Water Protection Plan
TOT	Time of Travel
USFS	United States Forest Service

EXECUTIVE SUMMARY

There is a growing effort in Colorado to protect community drinking water sources from potential contamination. Many communities are taking a proactive approach to preventing the pollution of their drinking water sources by developing a source water protection plan. A source water protection plan identifies a source water protection area, lists potential contaminant sources and outlines best management practices to reduce risks to the water source. Implementation of a source water protection plan provides an additional layer of protection at the local level beyond drinking water regulations.

The Town of Telluride values a clean, high quality drinking water supply and decided to work collaboratively with area stakeholders to develop a Source Water Protection Plan. The source water protection planning effort consisted of a series of individual meetings and one public planning workshop with stakeholders including local citizens and landowners, private businesses, water operators, local and state governments, and agency representatives on February 23, 2016, at the Community Room of the Telluride Marshals Department in Telluride, Colorado. Colorado Rural Water Association was instrumental in this effort by providing technical assistance in the development of this Source Water Protection Plan.

The Town of Telluride obtains its drinking water from groundwater that surfaces at the Stillwell Tunnel, four potential surface water intakes in the Bridal Veil Basin (at Mud Lake, Lewis Lake, Blue Lake, and the Falls Crest Diversion on Bridal Veil Creek), and one surface water intake in the Mill Creek watershed. The Source Water Protection Areas for these water sources include the watershed boundaries for each of the water intakes. These Source Water Protection Areas are the areas where the Town of Telluride has chosen to focus its source water protection measures to reduce source water susceptibility to contamination. The Steering Committee conducted an inventory of potential contaminant sources and identified other issues of concern within the Source Water Protection Area.

The Steering Committee developed several best management practices to reduce the risks from the potential contaminant sources and other issues of concern. The best management practices are centered on the themes of building partnerships with community members, businesses, and local decision makers; raising awareness of the value of protecting community drinking water supplies; and empowering local communities to become stewards of their drinking water supplies by taking actions to protect their water sources.

The following list highlights the highest priority potential contaminant sources and/or issues of concern and their associated best management practices.

- Security
 1. Install or replace signage at strategic points within Town of Telluride's SWPA about source water protection
 - a. Request Source Water Protection Road Signs from CDPHE
 - b. Develop signage with local contact information to display below CDPHE's signs
 - c. Install Source Water Protection Road Signs
 2. Install, repair, and maintain fencing, security gates, and/or security camera at/near intakes
- Maintenance & Construction Activities

1. Share electronic and hard copies of the Town of Telluride' SWPP and GIS shapefiles/maps of the SWPAs with the Idarado Mining Company; USFS, CDRMS, Telluride Fire Protection District, and emergency responders and request to be notified of spill events within SWPAs in a timely manner. Encourage them to use Best Management Practices to prevent road materials from entering the source waters.
 - a. Gather contact information & create mailing list for distribution;
 - b. Utilize CRWA's "SWPP Distribution Letter" template to develop a cover letter for SWPP distribution;
 - c. Print hard/CD copies of SWPP; print CDs with SWPA GIS shapefiles;
 - d. Distribute SWPP Distribution Cover Letter along with copy of Town of Telluride' SWPP and SWPA GIS shapefiles.
 2. Reference Bridal Veil Water System Operations Protocol for emergencies within SWPA
- Recreation
 1. Work with USFS and San Miguel County to install signage or post information about source water protection at entry points or trailhead in SWPA.
 - a. Identify major recreational sites in SWPA;
 - b. Request SWPA signage from CDPHE or develop other signage/outreach material;
 - c. Install signage at recreational sites identified.
 2. Keep updated on permit requirements on USFS lands in SWPA and work with USFS to disseminate information about source water protection to commercial users within SWPA
 3. Request the locations of SWPAs be included in the revised USFS GMUG Forest Service Plan.
 4. Share information about the Town of Telluride's SWPP maps of the SWPAs with commercial users
 - a. Gather contact information & create mailing list for distribution;
 - b. Utilize CRWA's "SWPP Distribution Letter" template to develop a cover letter to explain the SWPP;
 - c. Print hard copies of the SWPAs;
 - d. Distribute SWPP Distribution Cover Letter along with maps of the SWPAs

The Steering Committee recognizes that the usefulness of this Source Water Protection Plan lies in its implementation and will begin to execute these best management practices upon completion of this Plan.

This Plan is a living document that is meant to be updated to address any changes that will inevitably come. The Steering Committee will review this Plan at a frequency of once every 5-10 years or if circumstances change resulting in the development of new water sources and source water protection areas, or if new risks are identified.

INTRODUCTION

Source water protection is a proactive approach to preventing the pollution of lakes, rivers, streams, and groundwater that serve as sources of drinking water. For generations water quality was taken for granted, and still today many people assume that their water is naturally protected. However, as water moves through and over the ground, contaminants may be picked up and carried to a drinking water supply.

While a single catastrophic event may wipe out a drinking water source, the cumulative impact of minor contaminant releases over time can also result in the degradation of a drinking water source. Contamination can occur via discrete (point source) and dispersed (nonpoint source) sources. A discrete source contaminant originates from a single point, while a dispersed source contaminant originates from diffuse sources over a broader area. According to the US Environmental Protection Agency, nonpoint source pollution is the leading cause of water quality degradation (GWPC, 2008).

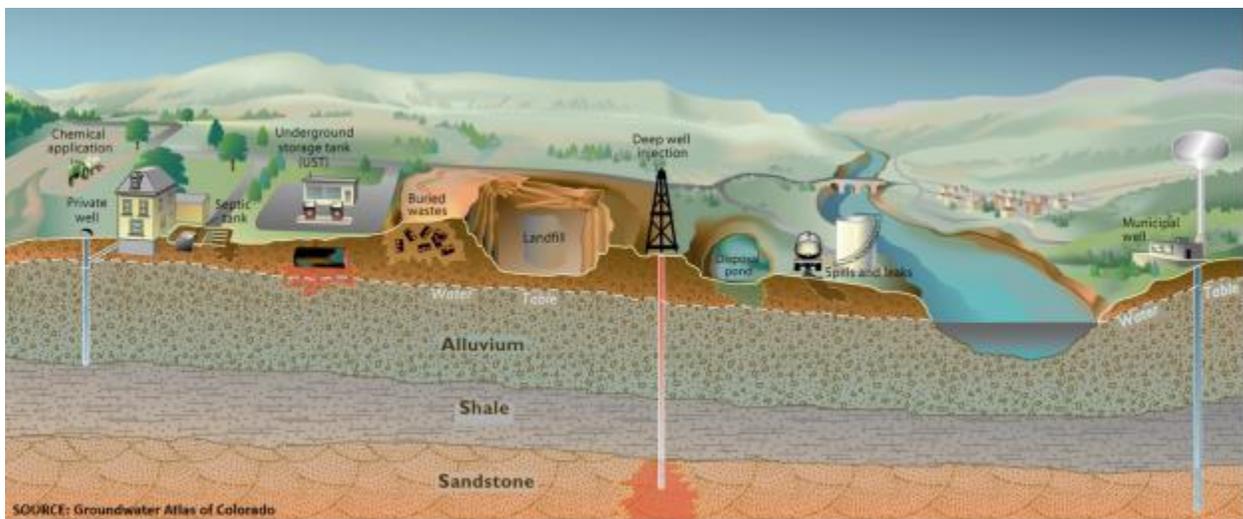


Figure 1: Schematic drawing of the potential source of contamination to surface and groundwater

The Town of Telluride recognizes the potential for contamination of their drinking water sources, and realizes that the development of this Source Water Protection Plan is the first step in protecting this valuable resource. Proactive planning is essential to protect the long-term integrity of the drinking water supply and to limit costs and liabilities. This SWPP demonstrates the Town of Telluride's commitment to reducing risks to their drinking water supply.

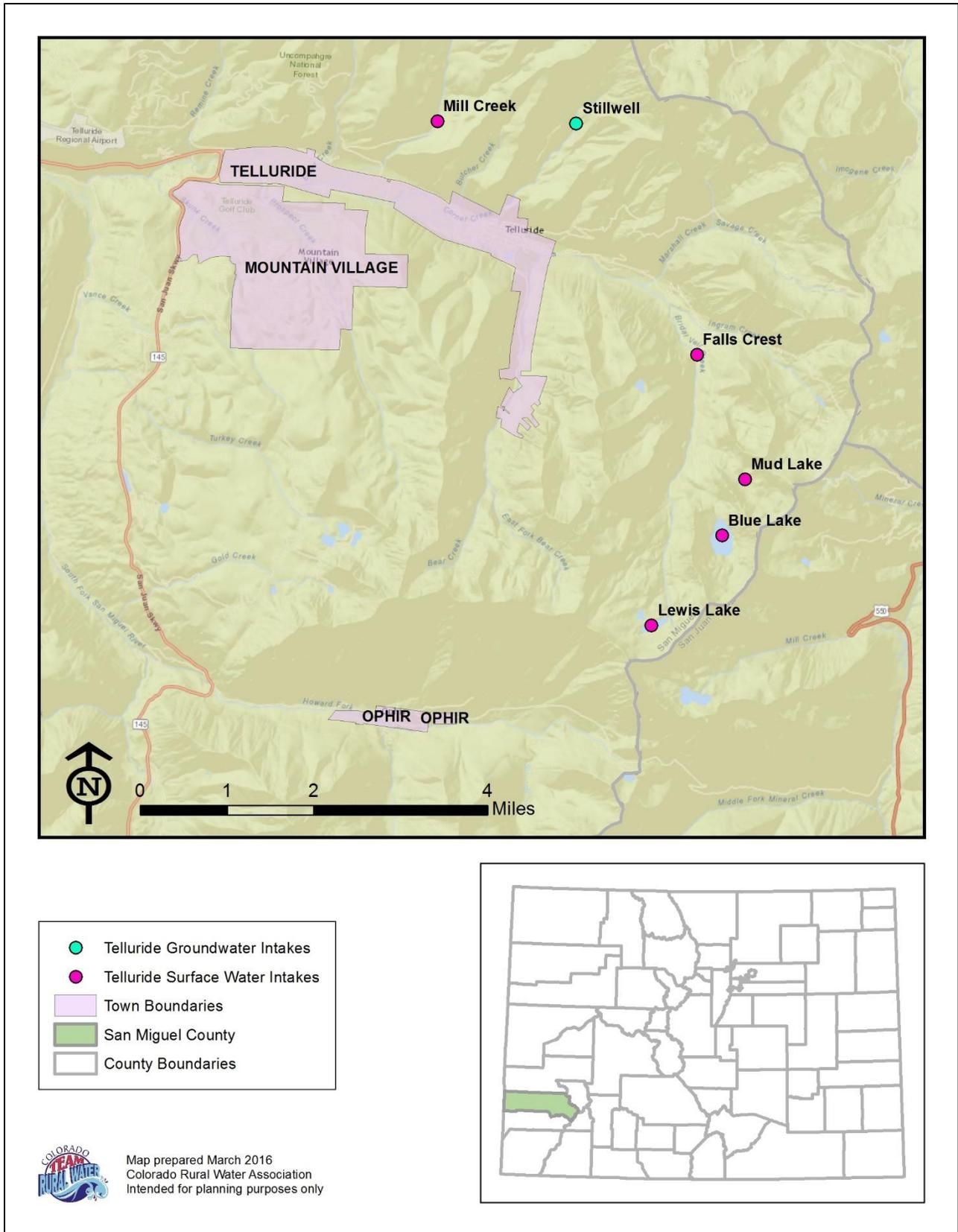


Figure 2: Location of the Town of Telluride and Its Intakes within San Miguel County, Colorado

Purpose of the Source Water Protection Plan

The Source Water Protection Plan (SWPP) is a tool for the Town of Telluride to ensure clean and high quality drinking water sources for current and future generations. This Source Water Protection Plan is designed to:

- Create an awareness of the community's drinking water sources and the potential risks to surface water and/or groundwater quality within the watersheds where SWPAs exist;
- Encourage education and voluntary solutions to alleviate pollution risks;
- Promote management practices to protect and enhance the drinking water supply;
- Provide for a comprehensive action plan in case of an emergency that threatens or disrupts the community water supply.

Developing and implementing source water protection measures at the local level (i.e. county and municipal) will complement existing regulatory protection measures implemented at the state and federal governmental levels by filling protection gaps that can only be addressed at the local level.

Background of Colorado's SWAP Program

Source water assessment and protection came into existence in 1996 as a result of Congressional reauthorization and amendment of the Safe Drinking Water Act. These amendments required each state to develop a source water assessment and protection (SWAP) program. The Water Quality Control Division, an agency of the Colorado Department of Public Health and Environment (CDPHE), assumed the responsibility of developing Colorado's SWAP program and integrated it with the Colorado Wellhead Protection Program.

Colorado's SWAP program is an iterative, two-phased process designed to assist public water systems in preventing potential contamination of their untreated drinking water supplies. The two phases include the Assessment Phase and the Protection Phase as depicted in the upper and lower portions of Figure 3, respectively.



Source: CDPHE - WQCD

Figure 3: Source Water Assessment and Protection Phases

Source Water Assessment Phase

The Assessment Phase for all public water systems was completed in 2004 and consisted of four primary elements:

1. Delineating the source water assessment area for each of the drinking water sources;
2. Conducting a contaminant source inventory to identify potential sources of contamination within each of the source water assessment areas;
3. Conducting a susceptibility analysis to determine the potential susceptibility of each public drinking water source to the different sources of contamination;
4. Reporting the results of the source water assessment to the public water systems and the general public.

A Source Water Assessment Report (Appendices A-B) was provided to each public water system in Colorado in 2004 that outlines the results of this Assessment Phase.

Source Water Protection Phase

The Protection Phase is a non-regulatory, ongoing process in which all public water systems have been encouraged to voluntarily employ preventative measures to protect their water supply from the potential sources of contamination to which it may be most susceptible. The Protection Phase can be used to take action to avoid unnecessary treatment or replacement costs associated with potential contamination of the untreated water supply. Source water protection begins when local decision

makers use the source water assessment results and other pertinent information as a starting point to develop a protection plan. As depicted in the lower portion of Figure 3, the source water protection phase for all public water systems consists of four primary elements:

1. Involving local stakeholders in the planning process;
2. Developing a comprehensive protection plan for all of their drinking water sources;
3. Implementing the protection plan on a continuous basis to reduce the risk of potential contamination of the drinking water sources; and
4. Monitoring the effectiveness of the protection plan and updating it accordingly as future assessment results indicate.

The water system and the community recognize that the Safe Drinking Water Act grants no statutory authority to the Colorado Department of Public Health and Environment or to any other state or federal agency to force the adoption or implementation of source water protection measures. This authority rests solely with local communities and local governments.

The source water protection phase is an ongoing process as indicated in Figure 3. The evolution of the SWAP program is to incorporate any new assessment information provided by the public water supply systems and update the protection plan accordingly.

SOURCE WATER SETTING

Location and Description

The Town of Telluride is located in the eastern portion of San Miguel County and sits in a box canyon surrounded by steep forested mountains and cliffs in the western San Juan Mountains. Telluride's source waters are the headwaters for the San Miguel River and originate on the mountainsides that surround the Town and lie mostly within public lands in the GMUG National Forest, which is managed by the Norwood Ranger District. There are a few parcels of private land within the source water areas, as well, that consist of recreational and industrial use.

The San Miguel Watershed Rapid Assessment, which was completed by the United States Department of Agriculture's Natural Resource Conservation Service (NRCS), characterizes the area as having steep, high mountain ranges and associated mountain valleys with elevations ranging from 6,500 to 14,400 feet above sea level. Vegetation consists of sagebrush-grass at low elevations, and with increasing elevation, ranges from coniferous forest to alpine tundra. Precipitation occurs mostly in the form of snowpack during winter months and ranges from 29 to 53 inches annually (USDA Natural Resources Conservation Service, March 2010).

Hydrologic Setting

The Town of Telluride, Colorado, operates a municipal water system that supplies drinking water to over 1750 taps within the Town of Telluride and also parts of unincorporated San Miguel County. The Town obtains drinking water from several locations: the Still Well Tunnel; Mill Creek, and four potential surface water intakes in the Bridal Veil Basin (i.e., Mud Lake, Lewis Lake, Blue Lake, and at the Falls Crest Diversion on Bridal Veil Creek). Mill Creek and the Bridal Veil Basin are part of the Headwaters of the San Miguel River sub-watershed, which eventually makes its way to the San Miguel River. Still Well was an old mining tunnel and is a ground water source. The EPA Watershed Quality Assessment Report for the San Miguel Watershed Basin does not list any stream segments that feed into Telluride's intakes as impaired (United States Environmental Protection Agency, 2012). In addition, the San Miguel Watershed Coalition monitors water quality at 34 monitoring sites throughout the larger San Miguel Watershed to provide independent data and supplement analysis to state and federal monitoring programs (San Miguel Watershed Coalition, 2014).

The Town of Telluride has not petitioned the Water Quality Control Commission to establish a classified ground water area and associated site-specific ground water quality standards for its ground water intakes under Regulation No. 42.

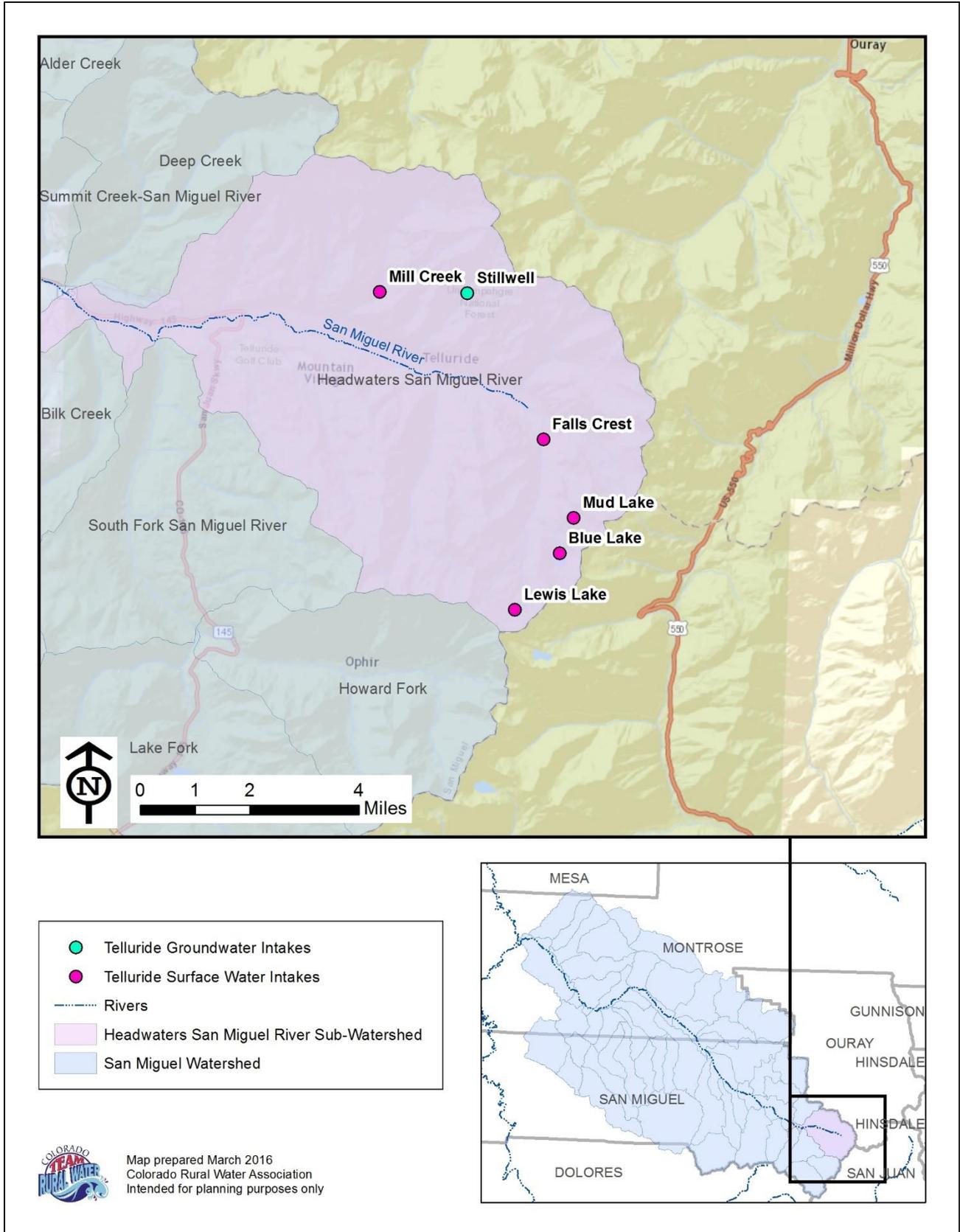


Figure 4: Headwaters San Miguel River Sub-watershed within the San Miguel Basin

DRINKING WATER SUPPLY OPERATIONS

Water Supply and Infrastructure

The Town of Telluride, Colorado, operates a municipal water system that supplies drinking water to over 1750 taps within the Town of Telluride and also parts of unincorporated San Miguel County. The Town obtains drinking water from several locations: the Still Well Tunnel; Mill Creek, and four potential surface water intakes in the Bridal Veil Basin (i.e., Mud Lake, Lewis Lake, Blue Lake, and at the Falls Crest Diversion on Bridal Veil Creek).

Table 1: Groundwater Supply Information

Water System Facility Name	Water System Facility Number	Total Depth of Well (ft.)	Depth of Plain Casing (ft.)	Depth of Perforation (ft.)	Yield (gpm)	Year Drilled
Well #1	Permit #31773-F	90.5	0-53.55	53.55 – 89.5	250	1977
Well #2	Permit #31772-F	116	0 - 80	80 - 111	1500	1977

Table 2: Surface Water Supply Information

Water System Facility Name	Water System Facility Number	Surface Water Source	Constructed Date
Pandora Water Treatment System	CO0157800 Facility ID 011 PANDORA	Bridal Veil Basin	2015
Stillwell Water Treatment Facility*	CO0157800 Facility ID 005 STILLWELL	Ground water tributary to Cornet Creek	1974
Mill Creek Water Treatment Facility*	CO0157800 Facility ID 001 MILL CREEK	Mill Creek	1987

*Source: Water Master Plan Update, 1993, Resource Engineering, Inc.

Staff believes that the Stillwell Water Treatment Facility was constructed to treat Mill Creek water in 1964. In 1964, the Mill Creek water line was installed from the Mill Creek head gate down Mill Creek road to the highway, and then along the highway to Oak Street and up Tomboy Road, then up to the Stillwell plant, where it currently exists today. The Stillwell tunnel was not a drinking water source until 1974 when the pipeline was constructed from the tunnel to the Stillwell plant where we would then treat both sources. There was no pipe leaving the Stillwell tunnel prior to 1974.

Water Supply Demand Analysis

The Town of Telluride served 1782 water service connections (in 2015). An accurate accounting of total system users can be difficult to estimate, however, because Telluride is a resort destination. While the 2010 census lists approximately 2500 immediate, full time residents, there are many second homeowners and visitors. On a theoretical basis, the current water system has the capacity to produce approximately 2.5 million gallons of water per day. This, of course, depends on the actual availability of water from each source, whether a specific water plant is able to function fully without technical difficulties, and other legal agreements that are in place. It would be more conservative to say that the current water system has the capacity to produce approximately 1 million gallons of water per day. Average water system production over the last 5 years (2011 – 2015) has been approximately 460,000 gallons per day, which meets the average daily demand over the last 5 years. The average peak daily

demand over the last 5 years (2011 – 2015) is approximately 506,000 gallons per day. Using these estimates, the water system has a surplus of 540,000 gallons per day to meet the average daily demand and a surplus of approximately 494,000 gallons per day to meet the average peak daily demand.

Now that the Pandora WTP is operating, the Town of Telluride is confident that if one of its currently operating water sources become disabled for an extended period of time due to contamination, the Town would likely be able to meet the average daily demand of its customers by increasing production at using one or both of the other water sources available to it, depending on the quantity of water available at each of those alternate sources at the time of contamination. And in the event that one of its currently operating water sources become disabled for an extended period of time, however, the Town may not be able to meet the average peak daily demand of its customers, especially if a structure fire were to occur.

The ability of Town of Telluride to meet either of these demands for an extended period of time is also affected by the amount of treated water the water system has in storage at the time a water source(s) becomes disabled.

The potential financial and water supply risks related to the long-term disablement of one or more of the community's water sources are a concern to the Steering Committee. As a result, the Steering Committee believes the development and implementation of a source water protection plan for the Town of Telluride can help to reduce the risks posed by potential contamination of its water source(s). Additionally, the Town of Telluride has developed an emergency response plan or contingency plan (Appendix C: Contingency Plan) to coordinate rapid and effective response to any emergency incident that threatens or disrupts the community water supply.

SOURCE WATER PROTECTION PLAN DEVELOPMENT

The Colorado Rural Water Association’s (CRWA) Source Water Protection Specialist, Kimberly Mihelich, helped facilitate the source water protection planning process. The goal of the CRWA’s Source Water Protection Program is to assist public water systems in minimizing or eliminating potential risks to drinking water supplies through the development and implementation of Source Water Protection Plans.

The source water protection planning effort consisted of a series of individual meetings and one public planning workshop. Information discussed at the meetings helped the Town of Telluride develop an understanding of the issues affecting source water protection for the community. The Steering Committee then made recommendations for best management practices to be incorporated into the Source Water Protection Plan. In addition to the planning meetings, data and other information pertaining to Source Water Protection Area was gathered via public documents, internet research, phone calls, emails, and field trips to the protection area. A summary of the meetings is represented below.

Table 3: Planning Meetings

Date	Purpose of Meeting
October 28, 2015	<u>Initial Planning Meeting with CRWA & Town of Telluride</u> –Review of the State’s Source Water Assessment for Town of Telluride. Develop and review list of stakeholders. Field tour of Telluride’s drinking water sources.
January 28, 2016	<u>Logistic Planning Meeting with CRWA & Town of Telluride</u> – Review list of stakeholders. Set date for SWPP Planning Workshop and develop draft agenda.
February 23, 2016	<u>SWPP Planning Workshop</u> - Presentation on the process of developing a Source Water Protection Plan. Review of the State’s Source Water Assessment Report for the Town of Telluride. Presentation on Telluride’s drinking water sources. Identify & discuss potential sources of contamination and assess risk level. Discussion on BMPs in place or needed for each potential source of contamination. Prioritize potential sources of contamination.

Stakeholder Participation in the Planning Process

Local stakeholder participation is vitally important to the overall success of Colorado’s Source Water Assessment and Protection (SWAP) program. Source water protection was founded on the concept that informed citizens, equipped with fundamental knowledge about their drinking water source and the threats to it, will be the most effective advocates for protecting this valuable resource. Local support and acceptance of the Source Water Protection Plan is more likely when local stakeholders have actively participated in its development.

The Town of Telluride’s source water protection planning process attracted interest and participation from 15 stakeholders including local citizens and landowners, private businesses, water operators, local and state governments, and agency representatives. A planning workshop was held on February 23, 2016 at the Telluride Marshal’s Offices in Telluride, Colorado to encourage local stakeholder

participation in the planning process. Stakeholders were notified of meetings via letters, emails, and phone calls.

A Steering Committee to help develop the source water protection plan was formed from the stakeholder group. The Steering Committee’s role in the source water protection planning process was to advise the Town of Telluride in the identification and prioritization of potential contaminant sources as well as management approaches that can be voluntarily implemented to reduce the risks of potential contamination of the untreated source water. All Steering Committee members attended the planning workshop and contributed to planning efforts from their areas of experience and expertise. Their representation provided diversity and led to a thorough Source Water Protection Plan. The Town of Telluride and the Colorado Rural Water Association are very appreciative of the participation and expert input from the following participants.

Table 4: Stakeholders and Steering Committee Members

Stakeholder	Title	Affiliation	Steering Committee Member
Bill Goldsworthy	Plants Superintendent	Town of Telluride	X
Karen Guglielmone	Environmental & Engineering Division Manager	Town of Telluride	X
Eric Schoenbaum	Red Mountain Site Manager	Idarado Mining Company	X
Mark Parker	Pandora Site Manager	Idarado Mining Company	X
Peter Hayes	Lab Technician/Operator	Town of Telluride	X
Linda Luther Broderick	Open Space and Parks Coordinator	San Miguel County	X
Hallie Bevan Simpson	Environmental Engineer	Amec Foster Wheeler	X
John Bennett	District Chief	Telluride Fire Protection District	X
Camille Price	Project Manager	Colorado Division of Reclamation and Mining Safety	X
Al Jansen	Resident	Telluride Community	X
Dee Closson	Lands Staff Officer	US Forest Service	X
Kevin Geiger	Town Attorney	Town of Telluride	X
Todd Brown	Councilperson/Treasurer	Town of Telluride/San Miguel Watershed Coalition	X
Drew Lloyd	Town Engineer	Town of Telluride	X
Jenny Patterson	Councilperson	Town of Telluride	X

Development and Implementation Grant

The Town of Telluride has been awarded a \$5,000 Development and Implementation Grant from the Colorado Department of Public Health and Environment (CDPHE). This funding is available to public

water systems and representative stakeholders committed to developing and implementing a source water protection plan. A one to one financial match (cash or in-kind) is required. The Town of Telluride was approved for this grant in September 2015, and it expires on September 2, 2017. The Town of Telluride intends on using the funds to implement management approaches that are identified in this Plan.

Source Water Assessment Report Review

The Town of Telluride has reviewed the Source Water Assessment Report along with the Steering Committee. These Assessment results were used as a starting point to guide the development of appropriate management approaches to protect the source waters of Town of Telluride from potential contamination. A copy of the Source Water Assessment Report for Town of Telluride can be obtained by contacting the Town of Telluride or by downloading a copy from the CDPHE's SWAP program website located at: <http://www.colorado.gov/cs/Satellite/CDPHE-WQ/CBON/1251596793639>.

Defining the Source Water Protection Area

A source water protection area is the surface and subsurface areas within which contaminants are reasonably likely to reach a water source. The purpose of delineating a source water protection area is to determine the recharge area that supplies water to a public water source. Delineation is the process used to identify and map the area around a pumping well that supplies water to the well or spring, or to identify and map the drainage basin that supplies water to a surface water intake. The size and shape of the area depends on the characteristics of the aquifer and the well, or the watershed. The source water assessment area that was delineated as part of the Town of Telluride's Source Water Assessment Report provides the basis for understanding where the community's source water and potential contaminant threats originate, and where the community has chosen to implement its source water protection measures in an attempt to manage the susceptibility of their source water to potential contamination.

After carefully reviewing their Source Water Assessment Report and the CDPHE's delineation of the Source Water Assessment Areas for each of the Town of Telluride's sources, the Steering Committee chose to accept the Source Water Assessment Areas for the Mill Creek and Still Well intakes as the Source Water Protection Areas for those intakes, and to modify the Blue Lake Source Water Assessment Area it before accepting it as their Source Water Protection Area for this Source Water Protection Plan. The Steering Committee agreed that the outer delineations of the Blue Lake SWPA was accurate, however, they decided to include sub-SWPAs for each intake within the Blue Lake Basin SWPA (Mud Lake, Blue Lake, and Lewis Lake intakes) to show that these intakes work independently and can be shut off or used separately from the other intakes. They also decided in to include a Zone 1 around the drainage at the lower lake into Bridal Veil Creek.

The Town of Telluride's Source Water Protection Areas are defined as:

Still Well Source Water Protection Area:

1. **Zone 1** is defined as a 500-foot radius around the wellhead.
2. **Zone 2** is defined by calculating the distance from the wellhead through which a parcel of water travels over a two-year time period or 2-year time of travel (TOT).

- Zone 3** is defined by calculating the distance from the wellhead through which a parcel of water travels over a five-year time period or 5-year time of travel (TOT).

Mill Creek & Blue Lake Basin Source Water Protection Areas:

- Zone 1** is defined as a 1,000-foot-wide band on either side of the stream.
- Zone 2** extends 1/4 mile beyond each side of the boundary of zone 1 (2,320 feet from the stream).
- Zone 3** is made up by the remainder of the SWAA area up to the watershed boundary or the State boundary.

In addition to the Zones within the Blue Lake Basin Source Water Protection Area, sub-SWPAs are delineated around each intake (Mud Lake, Blue Lake, and Lewis Lake intakes) to show that these intakes work independently and can be shut off or used separately from the other intakes.

The Source Water Protection Area is illustrated in the following maps.

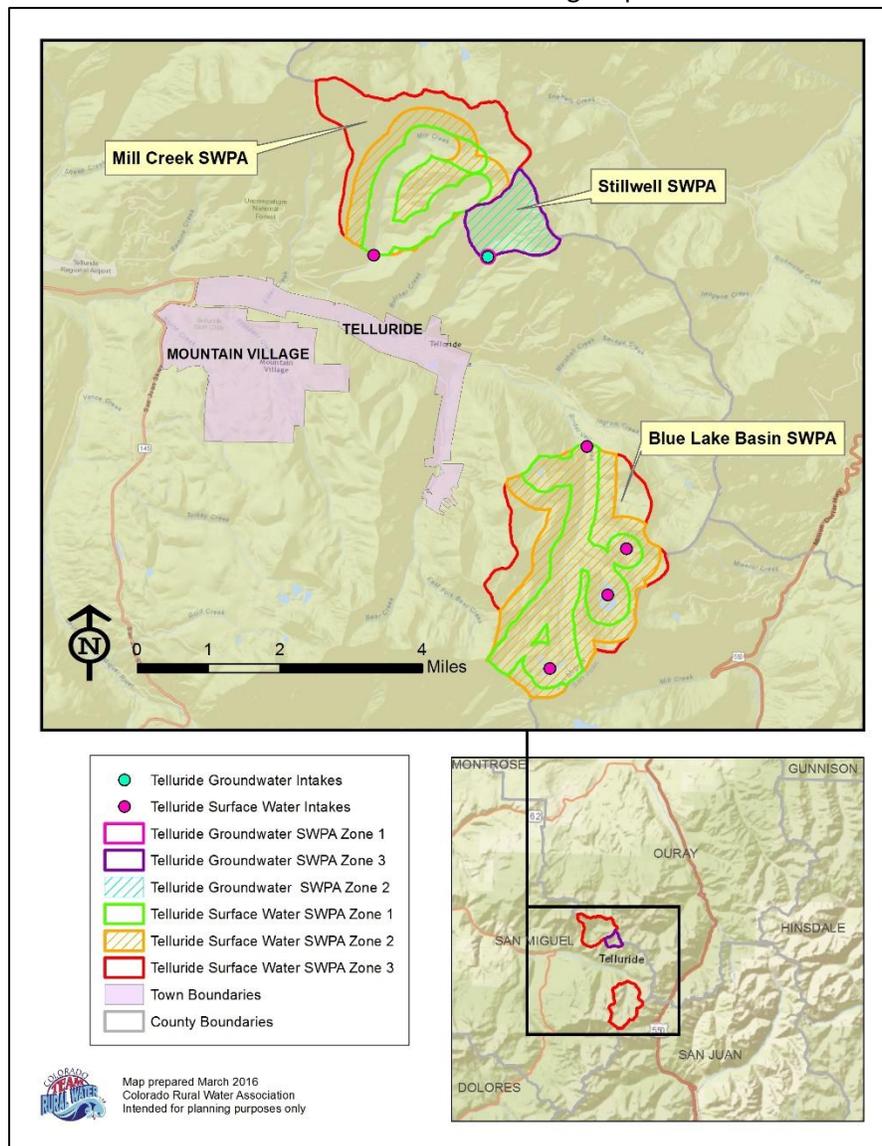


Figure 5: Source Water Protection Areas for the Town of Telluride, Colorado

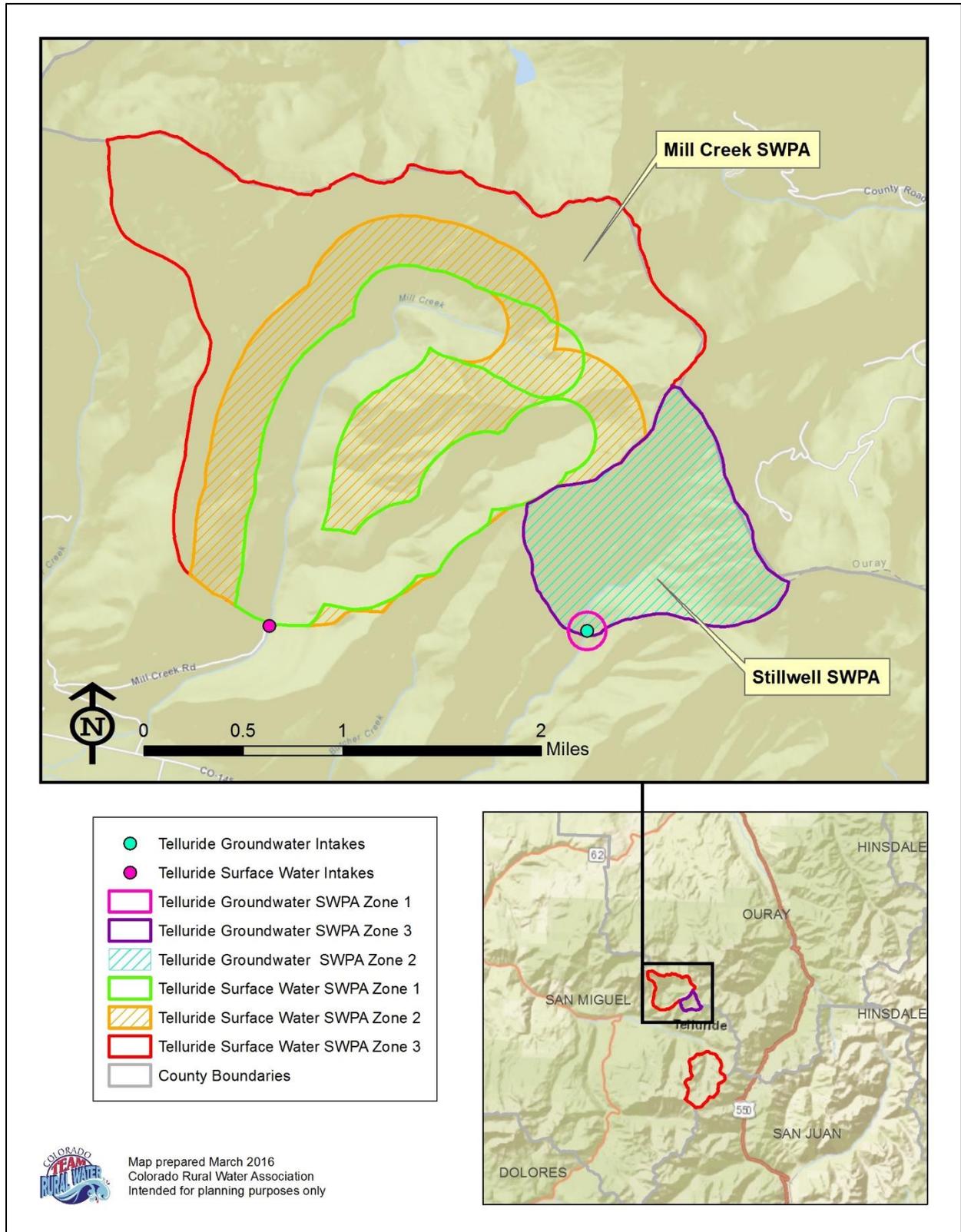


Figure 6: Mill Creek & Stillwell Source Water Protection Areas for the Town of Telluride, Colorado

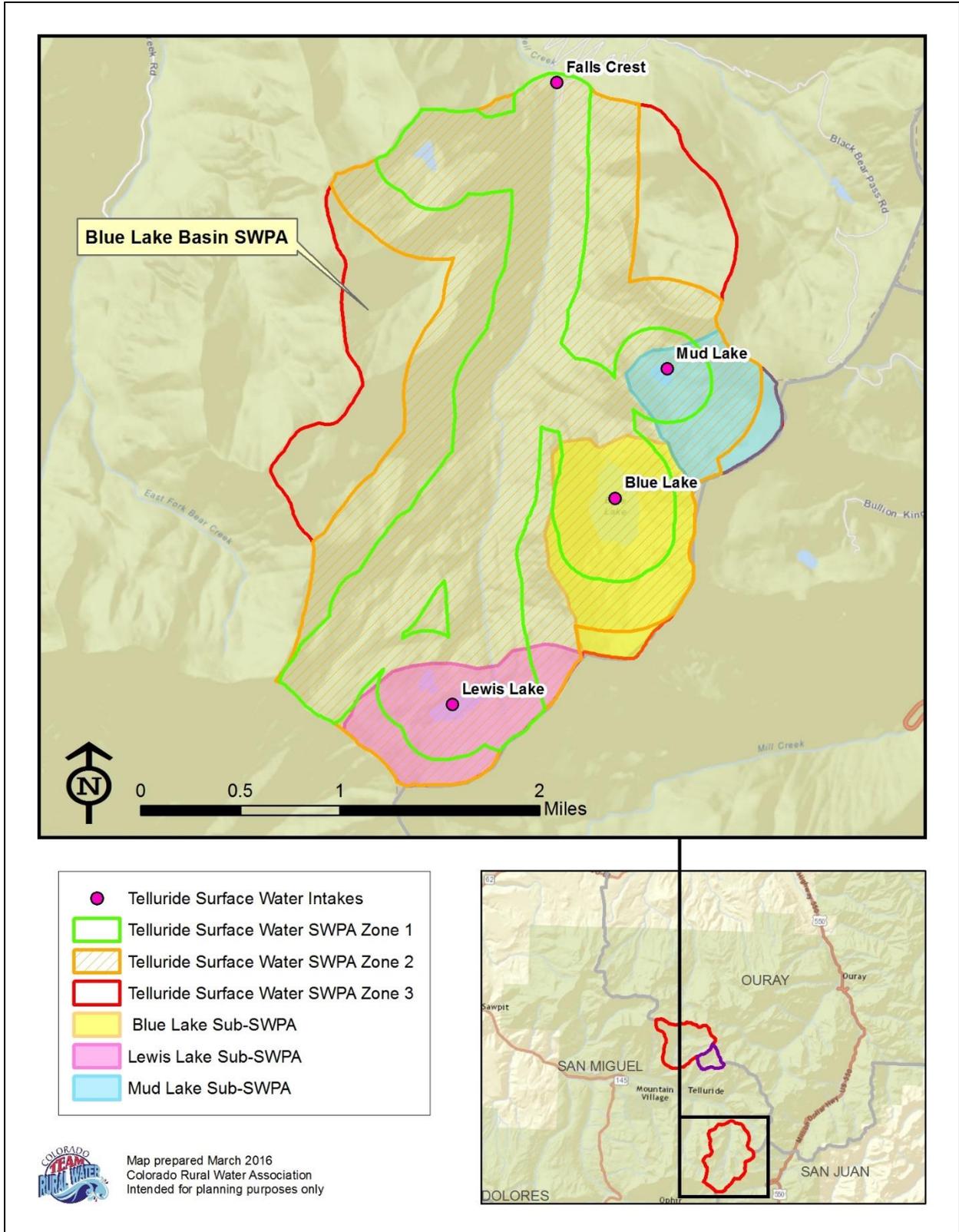


Figure 7: Blue Lake Basin Source Water Protection Area & sub-SWPAs for the Town of Telluride, Colorado

Inventory of Potential Contaminant Sources and Other Issues of Concern

In 2001 – 2002, as part of the Source Water Assessment Report, a contaminant source inventory was conducted by the Colorado Department of Public Health and Environment to identify selected potential sources of contamination that might be present within the source water assessment areas. Discrete and dispersed contaminant sources were inventoried using selected state and federal regulatory databases, land use / land cover and transportation maps of Colorado. The contaminant inventory was completed by mapping the potential contaminant sources with the aid of a Geographic Information System (GIS).

The Town of Telluride was asked, by CDPHE, to review the inventory information, field-verify selected information about existing and new contaminant sources, and provide feedback on the accuracy of the inventory. Through this Source Water Protection Plan, the Town of Telluride is reporting its findings to the CDPHE.

After much consideration, discussion, and input from local stakeholders, the Town of Telluride and the Steering Committee have developed a more accurate and current inventory of contaminant sources located within the Source Water Protection Area and other issues of concern that may impact the Town of Telluride’s drinking water sources.¹ In addition to the discrete and dispersed contaminant sources identified in the contaminant source inventory, the Steering Committee has also identified other issues of concern that may impact the Town of Telluride’s drinking water sources (see Table 5: Potential Sources of Contamination and Issues of Concern Prioritization Table, page 25). Upon completion of this contaminant source inventory, the Town of Telluride has decided to adopt it in place of the original contaminant source inventory provided by the CDPHE.

Priority Strategy of Potential Contaminant Sources and Other Issues of Concern

After developing a contaminant source inventory and list of issues of concern that is more accurate, complete, and current, the Town of Telluride prioritized each item to guide the implementation of the best management practices outlined in this Source Water Protection Plan (see Table 6: Source Water Protection Best Management Practices, page 34). The prioritization ranking of each potential contaminant source or other issue of concern factored in the following criteria (as described below): the level of risk, the water system control, and the best management practices associated with each item.

1. **Risk** – The level of risk for each contaminant source is a measure of the water source’s potential exposure to contamination. When prioritizing, a water system may assign a higher priority ranking to a potential contaminant source that has a higher risk level than one of lower risk level. The Town of Telluride utilized CRWA’s *SWAP Risk Assessment Matrix* (Appendix D), which calculates the level of risk by estimating the following:
 - **Impact to the Public Water System** – The risk to the source waters increases as the impact to the water system increases. The impact is determined by evaluating the human health concerns and potential volume of the contaminant source. CDPHE developed information tables to assist with this evaluation (Appendices E-H). The

¹ The information contained in this Plan is limited to that available from public records and the Town of Telluride at the time that the Plan was written. Other potential contaminant sites or threats to the water supply may exist in the Source Water Protection Area that are not identified in this Plan. Furthermore, identification of a site as a “potential contaminant site” should not be interpreted as one that will necessarily cause contamination of the water supply.

following descriptions provide a framework to estimate the impact to the public water system.

- **Catastrophic** - irreversible damage to the water source(s). This could include the need for new treatment technologies and/or the replacement of existing water source(s).
 - **Major** - substantial damage to the water source(s). This could include a loss of use for an extended period of time and/or the need for new treatment technologies.
 - **Significant** - moderate damage to the water source(s). This could include a loss of use for an extended period of time and/or the need for increased monitoring and/or maintenance activities.
 - **Minor** - minor damage resulting in minimal, recoverable, or localized efforts. This could include temporarily shutting off an intake or well and/or the issuance of a boil order.
 - **Insignificant** - damage that may be too small or unimportant to be worth consideration, but may need to be observed for worsening conditions. This could include the development of administrative procedures to maintain awareness of changing conditions.
- **Probability of Impact** – The risk to the source waters increases as the relative probability of damage or loss increases. The probability of impact is determined by evaluating the number of contaminant sources, the migration potential or proximity to the water source, and the historical data. The following descriptions provide a framework to estimate the relative probability that damage or loss would occur within one to ten years.
 - **Certain**: >95% probability of impact
 - **Likely**: >70% to <95% probability of impact
 - **Possible**: >30% to <70% probability of impact
 - **Unlikely**: >5% to <30% probability of impact
 - **Rare**: <5% probability of impact

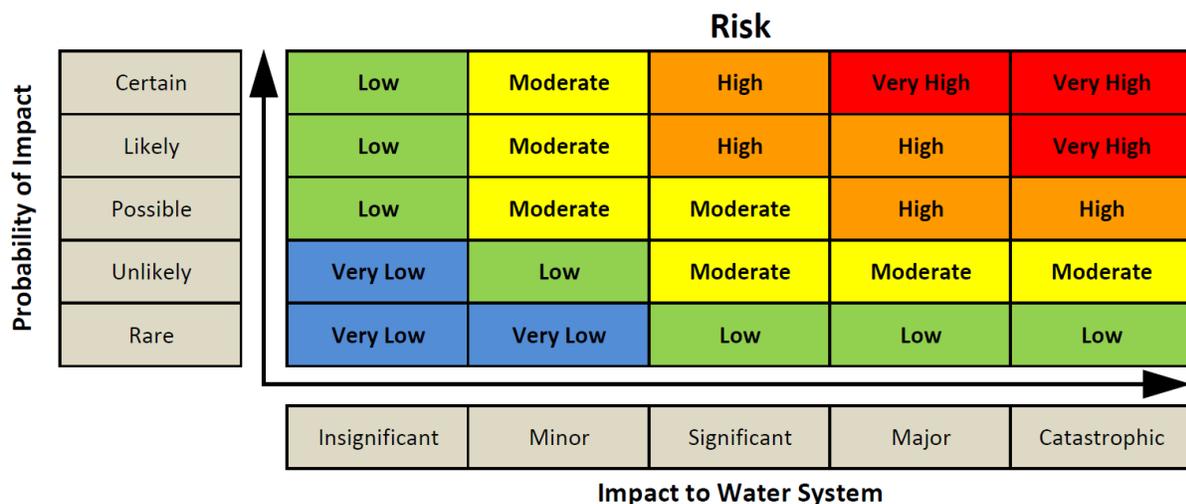


Figure 8: CRWA's SWAP Risk Assessment Matrix

2. **Control** – The level of water system control describes the ability of the water system to take measures to prevent contamination or minimize impact. A potential contaminant source that falls within a water system’s jurisdiction (i.e. direct control), may be of higher priority since they can take direct measures to prevent contamination or minimize the impact.
 - **Direct Control** – The water system can take direct measures to prevent.
 - **Indirect Control** – The water system cannot directly control the issue, but can work with another person or entity to take measures to prevent.
 - **No Control** – The PSOC or issue of concern is outside the control of the public water system and other entities.

3. **Best Management Practices** – BMPs are the actions that can be taken within the Source Water Protection Area to help reduce the potential risks of contamination to the community’s source waters. The prioritization of the potential contaminant sources or issues of concern may be affected by the feasibility of implementing the BMPs that the Town of Telluride developed (Table 6: Source Water Protection Best Management Practices, page 34).

The Town of Telluride and Steering Committee ranked the potential contaminant source inventory and issues of concern in the following way:

Table 5: Potential Contaminant Sources and Issues of Concern Prioritization Table

Potential Contaminant Source or Issue of Concern	SWPA Affected	Impact to Water System (Insignificant, Minor, Significant, Major, Catastrophic)	Probability of Impact (Rare, Unlikely, Possible, Likely, Certain)	Risk (Very Low, Low, Intermediate, High, Very High)	Control (Direct, Indirect, No)	BMPs ²	Priority Ranking
Security	Mill Creek, Still Well, Blue Lake	Major	Rare	Low	Direct/Indirect		High
Maintenance & Construction Activities	Blue Lake	Insignificant	Rare	Very Low	Direct/Indirect		High
Recreation	Mill Creek, Still Well, Blue Lake	Insignificant	Rare	Very Low	Indirect		High
Wildfire	Mill Creek, Still Well, Blue Lake	Significant	Possible	Moderate	Indirect		Moderate
Abandoned Mines / Mine Tailings	Blue Lake	Minor	Rare	Very Low	Indirect		Moderate
Flooding	Mill Creek	Minor	Possible	Moderate	No		Low
Wildlife	Mill Creek, Still Well, Blue Lake	Insignificant	Rare	Very low	No		Low
Vehicle/Helicopter	Mill Creek & Still Well (Helicopter only), Blue Lake (Vehicles & Helicopters)	Minor	Rare	Very Low	No (helicopter)/Indirect (vehicle)		Low
Natural disasters	Mill Creek, Still Well, Blue Lake	Major	Rare	Low	No		Low

² The prioritization of the potential contaminant sources or issues of concern may be affected by the feasibility of implementing the BMPs that were developed. See Table 6: Source Water Protection Best Management Practices for details.

DISCUSSION OF POTENTIAL CONTAMINANT SOURCES AND ISSUES OF CONCERN

The following section provides a brief description of potential contaminant sources and issues of concern that have been identified in this plan, describes the way in which they threaten the water source(s) and outlines best management practices.

Security

SWPAs Affected: Mill Creek, Stillwell, Blue Lake

Priority Ranking: High

Although there have been no major acts of vandalism to the Town of Telluride's water supplies, this is still a concern for the Steering Committee. While the probability for these acts to occur is rare, this remains a concern, as the impacts could be major. Water infrastructure could be targeted directly, or water can be contaminated through the introduction of poisonous chemicals or disease-causing biological agents (Gleick, 2006). Signs and fencing are installed at strategic points around Telluride's drinking water supply, but the Steering Committee recommends replacing or installing new signage and repairing fencing and security gates to the area as well as placing security cameras near intakes.

Security Best Management Practices Recommendations

1. Install or replace signage at strategic points within Town of Telluride's SWPA about source water protection
 - a. Request Source Water Protection Road Signs from CDPHE
 - b. Develop signage with local contact info to display below CDPHE's signs
 - c. Install Source Water Protection Road Signs
2. Install, repair, and maintain fencing, security gates, and/or security camera at/near intakes

Maintenance & Construction Activities

SWPAs Affected: Blue Lake

Priority Ranking: High

The Idarado Mining Company owns a few parcels within the Blue Lake Basin SWPA and has several facilities and structures that they maintain. The Mining Company has a Special Use Permit from the USFS in order to access their facilities via vehicles. Vehicle spills/accidents and maintenance activities can impact the Town of Telluride's source waters if chemicals such as fuels, waste or other hazardous chemicals are allowed to drain into waterbodies. The Idarado Mining Company has Standard Operating Procedures (SOPs) in place for accidents and containment of spills and has a good working relationship with the Town of Telluride in the event of such an accident. In addition the Town of Telluride and the Idarado Mining Company have developed protocol for emergencies and can be found in their Bridal Veil Water System Operations Protocol.

Maintenance & Construction Activities Best Management Practices Recommendations

1. Share electronic and hard copies of the Town of Telluride' SWPP and GIS shapefiles/maps of the SWPAs with the Idarado Mining Company; USFS, CDRMS, Telluride Fire Protection District, and emergency responders and request to be notified of spill events within SWPAs

in a timely manner. Encourage them to use Best Management Practices to prevent road materials from entering the source waters.

- a. Gather contact information & create mailing list for distribution;
 - b. Utilize CRWA's "SWPP Distribution Letter" template to develop a cover letter for SWPP distribution;
 - c. Print hard/CD copies of SWPP; print CDs with SWPA GIS shapefiles;
 - d. Distribute SWPP Distribution Cover Letter along with copy of Town of Telluride' SWPP and SWPA GIS shapefiles.
2. Reference Bridal Veil Water System Operations Protocol for emergencies within SWPA

Recreation on US Forest system lands

SWPAs Affected: Mill Creek, Still Well, Blue Lake

Priority Ranking: High

There are many types of recreation that occurs on US Forest System lands within the Town of Telluride's Source Water Protection Areas including bicycling, camping, hiking, horseback riding, and heli-skiing. Motorized vehicles are not allowed on US Forest System lands within the Town of Telluride's SWPAs.

Some undesirable impacts of recreation can include eroded soils, user-created unplanned roads, disrupted wetland ecosystems, as well as general habitat destruction and degraded water quality throughout forested lands. However, there has been no evidence of degradation to Telluride's drinking water sources and the Steering Committee considers impacts from recreation to be a very low risk.

Recreation Best Management Practices Recommendations

1. Work with USFS and San Miguel County to install signage or post information about source water protection at entry points or trailhead in SWPA.
 - a. Identify major recreational sites in SWPA;
 - b. Request SWPA signage from CDPHE or develop other signage/outreach material;
 - c. Install signage at recreational sites identified.
2. Keep updated on permit requirements on USFS lands in SWPA and work with USFS to disseminate information about source water protection to commercial users within SWPA
3. Request the locations of SWPAs be included in the revised USFS GMUG Forest Service Plan.
4. Share information about the Town of Telluride' SWPP maps of the SWPAs with commercial users
 - a. Gather contact information & create mailing list for distribution;
 - b. Utilize CRWA's "SWPP Distribution Letter" template to develop a cover letter to explain the SWPP;
 - c. Print hard of the SWPAs;
 - d. Distribute SWPP Distribution Cover Letter along with maps of the SWPAs

Wildfire

SWPAs Affected: Mill Creek, Still Well, Blue Lake

Priority Ranking: Moderate

If a large, hot fire occurred within the Town of Telluride's Source Water Protection Areas and surrounding lands, it could have an impact on the Town of Telluride's source waters by removing vegetation and decreasing infiltration during rain events. This can result in soil erosion and sediment and ash pollution in drinking water. Large rain events can produce mudslides and debris flow capable of destroying water infrastructure and altering clarity and pH of the source waters. A wildfire is most likely to occur in the Mill Creek and Still Well SWPAs, with the most significant wildfire occurring in the Mill Creek SWPA, due to the amount of vegetation in the SWPAs. The Blue Lake Basin SWPA is less likely to be impacted from wildfire because the source water basin is located primarily above the tree line with very little wildfire fuel burden.

Mitigating the wildfire danger in the SWPAs using fuel reduction techniques like tree thinning would only have a limited short-term benefit but is unlikely as the financial costs to do so are not feasible. In addition, access to the area with heavy equipment necessary for tree thinning or other fuel reduction techniques is very limited and not likely. In the event of a wildfire or other storm event in one SWPA, the Town of Telluride has the ability to shut off water intakes and use their remaining two sources.

Wildfire/Storms/Aftermath Best Management Practices Recommendations

1. Refer to San Miguel County's Community Wildfire Protection Plan & USFS Fuels Management Plan as a guide to assess and understand wildfire risk.
2. Share electronic and hard copies of the SWPP and GIS shapefiles of the SWPA with the USFS, San Miguel County, and Telluride Fire Protection District, and Idarado Mining Company
 - a. Gather contact information & create mailing list for distribution;
 - b. Utilize CRWA's "SWPP Distribution Letter" template to develop a cover letter for SWPP distribution;
 - c. Print hard/CD copies of SWPP; print CDs with SWPA GIS shapefiles;
 - d. Distribute & SWPP Distribution Cover Letter along with copy of Town of Telluride' SWPP and SWPA GIS shapefiles.
3. Share Emergency Notification Cards with the USFS, San Miguel County, and Telluride Fire Protection District
 - a. Gather contact information & create mailing list for distribution;
 - b. Develop Emergency Notification Cards that includes maps of the SWPAs and water system contact information;
 - c. Print copies of Emergency Notification Cards;
 - d. Mail/Distribute Emergency Notification Cards.

Abandoned Mines

SWPAs Affected: Blue Lake

Priority Ranking: Moderate

Mining practices during the early days allowed mine owners to simply abandon mines without consideration of the impact on streams, water quality, slope stability and safety. Many old mining properties contain abandoned mine workings, mine waste and/or mill tailings. Active and inactive

mining operations have a potential to contaminate drinking water supplies from either point source discharges (i.e. mine drainage tunnels or flowing adits) or nonpoint source discharges from run-off over waste rock or tailing piles. Acidic, metal-laden water emanating from inactive mines and waste rock piles has a potential to impair aquatic life and to a lesser degree threaten human drinking water. The Town of Telluride is not currently aware of any impairment to their drinking water sources but continues to work with other agencies to observe and monitor for any potential contamination.

The Colorado Division of Reclamation, Mining, and Safety (DRMS) regulates mining and prospecting operations in the state of Colorado under the auspices of the Colorado Mined Land Reclamation Act and the Hard Rock/Metal Mining Rules and Regulations of the Mined Land Reclamation Board. The Division is responsible for mineral and energy development, policy, and regulation and planning. One of their primary objectives is to review mining permit applications and to inspect mining operations to make sure that regulations are being followed. The USFS works closely with the Colorado Division of Reclamation and Mining Safety to monitor high-risk mine sites.

During the years 1991 through 1999, the Colorado Geological Survey completed an inventory of abandoned mine lands on National Forest System lands within Colorado (Colorado Geological Survey, n.d.). Within the Blue Lake Basin SWPA, there are several mine inventory areas (see Figure 8 below). The Lewis Mine is a well-known inventory area, containing a few mine openings. The USFS reported that the mine is a shaft rather than an adit and there is no water draining, and these mines are considered to be very low risk.

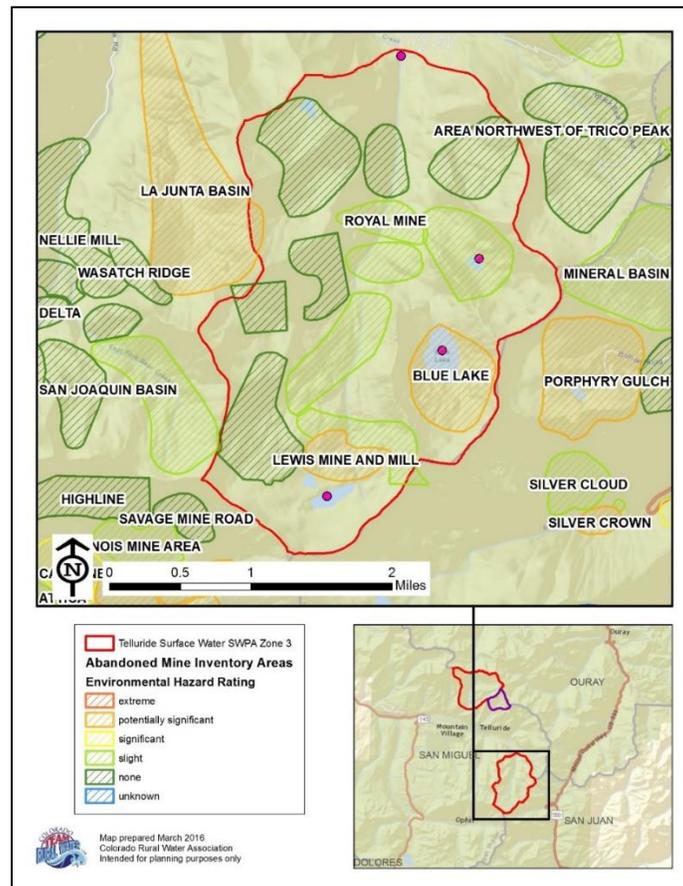


Figure 9: Historical mine inventory areas within the Town of Telluride's Blue Lake Basin SWPA

Abandoned Mines Best Management Practices Recommendations

1. Share electronic and hard copies of the Town of Telluride' SWPP and GIS shapefiles/maps of the SWPAs with CDPHE, CDRMS, CDNR, USFS, EPA, and Private Landowners (Idarado) and request to be notified of mine blowouts and spill events within SWPAs in a timely manner.
 - a. Gather contact information & create mailing list for distribution;
 - b. Utilize CRWA's "SWPP Distribution Letter" template to develop a cover letter for SWPP distribution;
 - c. Print hard/CD copies of SWPP; print CDs with SWPA GIS shapefiles;
 - d. Distribute SWPP Distribution Cover Letter along with copy of Town of Telluride' SWPP and SWPA GIS shapefiles.
2. Share Emergency Notification Cards with CDPHE, CDRMS, CDNR, USFS, EPA, and Private Landowners (Idarado).
 - a. Gather contact information & create mailing list for distribution;
 - b. Develop Emergency Notification Cards that includes maps of the SWPAs and water system contact information;
 - c. Print copies of Emergency Notification Cards;
 - d. Mail/Distribute Emergency Notification Cards.
3. Update Town of Telluride Emergency Response Plan to include appropriate agencies as it pertains to abandoned mines
 - a. Develop notification procedures with organizations that might first notice the problems (e.g. San Miguel County, Telluride Fire Department, USFS, and/or Private Landowners (Idarado)).
 - b. Develop and maintain an effective contact list to report and collaborate on any issues that may arise.
 - c. Report any issues or threats that arise to the appropriate agencies.

Flooding

SWPAs Affected: Mill Creek

Priority Ranking: Low

Flooding is one of the most common hazards in the United States, causing more damage than any other severe weather-related event. In San Miguel County, the flood season generally extends from late spring to fall. Snowmelt floods typically occur with rapid rises in temperature in May or June. Impacts to drinking water and wastewater utilities can include loss of power, damage to assets, and dangerous conditions for personnel. Often located in low lying areas, water and wastewater utilities are particularly vulnerable to flooding. Water and debris can inundate the facility, thereby damaging equipment and structures, and causing power outages. Such impacts can lead to various consequences including costly repairs, disruptions of services, and/or hazardous situations for personnel and public health advisories. (US Environmental Protection Agency, 2014).

Flooding depends on various factors including rainfall, topography, river-flow, drainage, and tidal-surge. The threat of flooding is based on the likelihood that such a flooding event will occur. The Federal Emergency Management Agency (FEMA) produces maps of a "100-year flood" (a flood event that has a one percent chance of occurring in a given year) and a more catastrophic "500-year flood" (a flood event that has a two tenths of a percent chance of occurring in a given year). (Federal Emergency Management Agency, 2015).

San Miguel County is extremely susceptible to riverine flooding given the steep mountainous terrain and the multitude of creeks and streams that eventually flow into the San Miguel River. Riverine flooding is defined as when a watercourse exceeds its “bank-full” capacity and is usually the most common type of flood event. Riverine or flash flooding generally occurs as a result of prolonged rainfall, or rainfall that is combined with soils already saturated from previous rain events. The amount of precipitation, precipitation intensity and density, soil type and moisture and vegetation all influence the likelihood and severity of a riverine flooding event. Riverine flooding can be worsened if debris blocks the flow of water, causing it to back up and then eventually surge (San Miguel County , 2011).

Flooding Best Management Practices Recommendations

1. Enroll in Code Red using treatment facility and water intake addresses.
2. Monitor weather forecasts and other hazardous weather outlooks from NOAA. Enact the Town of Telluride’s Emergency Response Plan when flooding threatens water infrastructure.
3. Share electronic and hard copies of the SWPP and GIS shapefiles of the SWPA with the San Miguel County Office of Emergency Management; USFS; Idarado Mining Company; Telluride Fire Protection District.
 - e. Gather contact information & create mailing list for distribution;
 - f. Utilize CRWA’s “SWPP Distribution Letter” template to develop a cover letter for SWPP distribution;
 - g. Print hard/CD copies of SWPP; print CDs with SWPA GIS shapefiles;
 - h. Distribute SWPP Distribution Cover Letter along with copy of Town of Telluride’ SWPP and SWPA GIS shapefiles.
4. Share Emergency Notification Cards with the San Miguel County Office of Emergency Management.
 - a. Gather contact information & create mailing list for distribution;
 - b. Develop Emergency Notification Cards that includes maps of the SWPAs and water system contact information;
 - c. Print copies of Emergency Notification Cards;
 - d. Mail/Distribute Emergency Notification Cards.

Wildlife

SWPAs Affected: Mill Creek, Blue Lake, Still Well

Priority Ranking: Low

The Town of Telluride’s SWPAs are home to many types of wildlife including deer, elk and bears, who feed upon the land. While impacts from wildlife is considered a very low risk to the Steering Committee, this activity can impact riparian health, stream-channel conditions and water quality. The most common water quality impacts include pathogen contamination, sedimentation, and increased water temperatures from loss of vegetative stream coverage. Grazing activities with the highest potential for direct and indirect impacts to water resources include long-term concentrated grazing in riparian areas, and trampling/trailing near water sources. Direct bank damage may add large amounts of sediment directly into streams, especially in wet meadow streams or erosive topography that is prone to gully formation.

Wildlife Best Management Practices Recommendations

1. Continue to monitor for contaminants, such as fecal coliforms, at treatment facility.

Vehicle & Helicopter Accidents

SWPAs Affected: Blue Lake (Vehicles & Helicopter Accidents), Mill Creek & Still Well (Helicopter Accidents only)

Priority Ranking: Low

While there are no vehicles allowed in Telluride's Source Water Protection Areas, the Idarado Mining Company has a Special Use Permit with the US Forest Service that allows them vehicle access to their property within the Blue Lake Basin SWPA. In addition, there is some heli-skiing that takes place within all of Telluride's SWPAs. While unlikely, vehicle and helicopter accidents are a concern to the Steering Committee. Fuels, waste, and other hazardous chemicals such as crankcase oil, transmission, hydraulic, and brake fluid, and antifreeze may be released from vehicle or helicopter accidents and into source waters. Chemicals from accidents or spills are often diluted with water, potentially washing the chemicals into the soil and infiltrating into the groundwater or draining directly to surface water sources.

Local response for spills and accidents is from the Telluride Fire Protection District, the San Miguel County Sheriff's Department, and the San Miguel County Office of Emergency Management. Current best management practices in place for cleaning up spills include laying down absorbent material and damming off leaks/spills in an effort to not reach ditches and streambanks.

Vehicle & Helicopter Accidents Best Management Practices Recommendations

1. Request to be included in San Miguel County Office of Emergency's notification procedures for emergencies & disasters.
2. Ensure entry gates within the SWPAs are maintained as a locked gate.

Natural Disasters

SWPAs Affected: Mill Creek, Stillwell, Blue Lake

Priority Ranking: Low

Natural disasters, other than wildfire and flooding which were discussed in previous sections, may occur in or near the Town of Telluride's SWPAs. The San Miguel County All Hazard Mitigation Plan has identified the following natural and manmade hazards that may occur in San Miguel County (San Miguel County, 2011):

Natural Hazards

- Avalanche
- Dam Failure
- Debris Flows
- Drought
- Earthquake
- Flooding
- Extreme Winter Weather

- Wildfire
- Natural Health Hazards
- Severe Weather

Manmade Hazards

- Power Outages
- Critical Infrastructure Failure
- Technological Hazards
- Terrorism

- Transportation Accidents
- Hazardous Materials

In particular, the Steering Committee is most concerned with avalanches and earthquakes occurring in or near the Town of Telluride's SWPAs. Both types of natural disasters can threaten Telluride's infrastructure either above or below drinking water intakes which can impact the quality of their drinking water as well as their supply. For more information about natural hazards in San Miguel County, refer to the San Miguel County All Hazard Mitigation Plan (Appendix I).

Natural Disasters Best Management Practices Recommendations

1. Request to be included in San Miguel County Office of Emergency's notification procedures for emergencies & disasters.
2. Refer to Telluride's ERP and San Miguel County All Hazard Mitigation Plan for disaster response.

Public Education

While public education is not a potential source of contamination, the Steering Committee believes that education community members about source water protection efforts is essential to the prevention of surface and groundwater contamination. Public education can help community members understand the potential threats to their drinking water sources and motivate them to participate as responsible citizens to protect their valued resources.

Public Education Best Management Practices Recommendations

1. Develop outreach material that alerts the community about source water protection efforts. Opportunities for public education include: brochures, flyers, newspaper articles, poster displays at local utility offices, library or other public buildings, water bill inserts, and community events.
2. Post a copy of the SWPP or information about the SWPP on the Town's website

SOURCE WATER BEST MANAGEMENT PRACTICES

The Steering Committee reviewed and discussed several possible best management practices that could be implemented within the Source Water Protection Area to help reduce the potential risks of contamination to the community's source water. The Steering Committee established a "common sense" approach in identifying and selecting the most feasible source water management activities to implement locally. The best management practices were obtained from multiple sources including: Environmental Protection Agency, Colorado Department of Public Health and Environment, Natural Resources Conservation Service, and other source water protection plans.

The Steering Committee recommends the best management practices listed in the following table be considered for implementation.

Table 6: Source Water Protection Best Management Practices

Issues	Priority Ranking	Best Management Practices	Partners
Security	High	<ol style="list-style-type: none"> 1. Install or replace signage at strategic points within Town of Telluride’s SWPA about source water protection <ol style="list-style-type: none"> a. Request Source Water Protection Road Signs from CDPHE b. Develop signage with local contact info to display below CDPHE’s signs c. Install Source Water Protection Road Signs 2. Install, repair, and maintain fencing, security gates, and/or security camera at/near intakes 	Town of Telluride ; CDPHE; San Miguel County; Idarado; UFSS
Maintenance & Construction Activities	High	<ol style="list-style-type: none"> 1. Share electronic and hard copies of the Town of Telluride’ SWPP and GIS shapefiles/maps of the SWPAs with the Idarado Mining Company; USFS, CDRMS, Telluride Fire Protection District, and emergency responders and request to be notified of spill events within SWPAs in a timely manner. Encourage them to use Best Management Practices to prevent road materials from entering the source waters. <ol style="list-style-type: none"> a. Gather contact information & create mailing list for distribution; b. Utilize CRWA’s “SWPP Distribution Letter” template to develop a cover letter for SWPP distribution; c. Print hard/CD copies of SWPP; print CDs with SWPA GIS shapefiles; d. Distribute SWPP Distribution Cover Letter along with copy of Town of Telluride’ SWPP and SWPA GIS shapefiles. 2. Reference Bridal Veil Water System Operations Protocol for emergencies within SWPA 	Town of Telluride; Idarado Mining Company; USFS, CDRMS, Telluride Fire Protection District emergency responders
Recreation	High	<ol style="list-style-type: none"> 1. Work with USFS and San Miguel County to install signage or post information about source water protection at entry points or trailhead in SWPA. <ol style="list-style-type: none"> a. Identify major recreational sites in SWPA; b. Request SWPA signage from CDPHE or develop other signage/outreach material; c. Install signage at recreational sites identified. 	Town of Telluride ; USFS; San Miguel County; commercial users

		<ol style="list-style-type: none"> 2. Keep updated on permit requirements on USFS lands in SWPA and work with USFS to disseminate information about source water protection to commercial users within SWPA 3. Request the locations of SWPAs be included in the revised USFS GMUG Forest Service Plan. 4. Share information about the Town of Telluride' SWPP maps of the SWPAs with commercial users <ol style="list-style-type: none"> a. Gather contact information & create mailing list for distribution; b. Utilize CRWA's "SWPP Distribution Letter" template to develop a cover letter to explain the SWPP; c. Print hard of the SWPAs; d. Distribute SWPP Distribution Cover Letter along with maps of the SWPAs 	
<p>Wildfire</p>	<p>Moderate</p>	<ol style="list-style-type: none"> 1. Refer to San Miguel County's Community Wildfire Protection Plan & USFS Fuels Management Plan as a guide to assess and understand wildfire risk. 2. Share electronic and hard copies of the SWPP and GIS shapefiles of the SWPA with the USFS, San Miguel County, and Telluride Fire Protection District, and Idarado Mining Company <ol style="list-style-type: none"> a. Gather contact information & create mailing list for distribution; b. Utilize CRWA's "SWPP Distribution Letter" template to develop a cover letter for SWPP distribution; c. Print hard/CD copies of SWPP; print CDs with SWPA GIS shapefiles; d. Distribute & SWPP Distribution Cover Letter along with copy of Town of Telluride' SWPP and SWPA GIS shapefiles. 3. Share Emergency Notification Cards with the USFS, San Miguel County, and Telluride Fire Protection District <ol style="list-style-type: none"> a. Gather contact information & create mailing list for distribution; b. Develop Emergency Notification Cards that includes maps of the SWPAs and water system contact information; c. Print copies of Emergency Notification Cards; d. Mail/Distribute Emergency Notification Cards. 	<p>Town of Telluride ; USFS; San Miguel County; Telluride Fire Protection District; Idarado Mining Company</p>

<p>Abandoned Mines / Mine Tailings</p>	<p>Moderate</p>	<ol style="list-style-type: none"> 1. Share electronic and hard copies of the Town of Telluride’ SWPP and GIS shapefiles/maps of the SWPAs with CDPHE, CDRMS, CDNR, USFS, EPA, and Private Landowners (Idarado) and request to be notified of mine blowouts and spill events within SWPAs in a timely manner. <ol style="list-style-type: none"> a. Gather contact information & create mailing list for distribution; b. Utilize CRWA’s “SWPP Distribution Letter” template to develop a cover letter for SWPP distribution; c. Print hard/CD copies of SWPP; print CDs with SWPA GIS shapefiles; d. Distribute SWPP Distribution Cover Letter along with copy of Town of Telluride’ SWPP and SWPA GIS shapefiles. 2. Share Emergency Notification Cards with CDPHE, CDRMS, CDNR, USFS, EPA, and Private Landowners (Idarado). <ol style="list-style-type: none"> e. Gather contact information & create mailing list for distribution; f. Develop Emergency Notification Cards that includes maps of the SWPAs and water system contact information; g. Print copies of Emergency Notification Cards; h. Mail/Distribute Emergency Notification Cards. 3. Update Town of Telluride Emergency Response Plan to include appropriate agencies as it pertains to abandoned mines <ol style="list-style-type: none"> a. Develop notification procedures with organizations that might first notice the problems (e.g. San Miguel County, Telluride Fire Department, USFS, and/or Private Landowners (Idarado)). b. Develop and maintain an effective contact list to report and collaborate on any issues that may arise. c. Report any issues or threats that arise to the appropriate agencies. 	<p>Town of Telluride ; CDPHE; CDRMS; CDNR; USFS; EPA; Private Landowners (Idarado); San Miguel County; Telluride Fire Department</p>
<p>Flooding</p>	<p>Low</p>	<ol style="list-style-type: none"> 1. Enroll in Code Red using treatment facility and water intake addresses. 2. Monitor weather forecasts and other hazardous weather outlooks from NOAA. Enact the Town of Telluride’s Emergency Response Plan when flooding threatens water infrastructure. 3. Share electronic and hard copies of the SWPP and GIS shapefiles of the SWPA with the San Miguel County Office of Emergency Management; USFS; Idarado Mining Company; Telluride Fire Protection District. <ol style="list-style-type: none"> e. Gather contact information & create mailing list for distribution; 	<p>Town of Telluride; San Miguel County Office of Emergency Management; USFS; Idarado Mining Company; Telluride Fire Protection District</p>

		<ul style="list-style-type: none"> f. Utilize CRWA's "SWPP Distribution Letter" template to develop a cover letter for SWPP distribution; g. Print hard/CD copies of SWPP; print CDs with SWPA GIS shapefiles; h. Distribute SWPP Distribution Cover Letter along with copy of Town of Telluride' SWPP and SWPA GIS shapefiles. <p>4. Share Emergency Notification Cards with the San Miguel County Office of Emergency Management.</p> <ul style="list-style-type: none"> e. Gather contact information & create mailing list for distribution; f. Develop Emergency Notification Cards that includes maps of the SWPAs and water system contact information; g. Print copies of Emergency Notification Cards; h. Mail/Distribute Emergency Notification Cards. 	
Wildlife	Low	<ol style="list-style-type: none"> 1. Continue to monitor for contaminants, such as fecal coliforms, at treatment facility. 	Town of Telluride
Vehicle/Helicopter	Low	<ol style="list-style-type: none"> 1. Request to be included in San Miguel County Office of Emergency's notification procedures for emergencies & disasters. 2. Ensure entry gates within the SWPAs are maintained as a locked gate. 	Town of Telluride; San Miguel County Office of Emergency Management
Natural disasters	Low	<ol style="list-style-type: none"> 1. Request to be included in San Miguel County Office of Emergency's notification procedures for emergencies & disasters. 2. Refer to Telluride's ERP and San Miguel All Hazard Mitigation Plan for disaster response. 	Town of Telluride; San Miguel County
Public education	N/A	<ol style="list-style-type: none"> 1. Develop outreach material that alerts the community about source water protection efforts. Opportunities for public education include: brochures, flyers, newspaper articles, poster displays at local utility offices, library or other public buildings, water bill inserts, and community events. 2. Post a copy of the SWPP or information about the SWPP on the Town's website 	Town of Telluride

EVALUATING EFFECTIVENESS OF SOURCE WATER PROTECTION PLAN

The Town of Telluride is committed to evaluating the effectiveness of the various source water best management practices that have been implemented. The purpose of evaluating the effectiveness is to determine if the various source water best management practices are being achieved, and if not, what adjustments to the Source Water Protection Plan will be taken in order to achieve the intended outcomes. It is further recommended that this Plan be reviewed at a frequency of once every 5-10 years or if circumstances change resulting in the development of new water sources and source water protection areas, or if new risks are identified.

The Town of Telluride is committed to a mutually beneficial partnership with the Colorado Department of Public Health and Environment in making future refinements to their source water assessment and to revise the Source Water Protection Plan accordingly based on any major refinements.

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APPENDICES³

- A. Source Water Assessment Report
- B. Source Water Assessment Report Appendices
- C. Contingency Plan
- D. CRWA's SWAP Risk Assessment Matrix
- E. Table A-1 Discrete Contaminant Types
- F. Table A-2 Discrete Contaminant Types (SIC Related)
- G. Table B-1 Dispersed Contaminant Types
- H. Table C-1 Contaminants Associated with Common PSOC's
- I. San Miguel County All Hazards Mitigation Plan

³ All appendices are located on the CD version of this SWPP.