

SOUTH TAHOE PUBLIC UTILITY DISTRICT LOCAL HAZARD MITIGATION PLAN

2019 Update

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I. INTRODUCTION

A. DISTRICT PROFILE

The South Tahoe Public Utility District (STPUD), a public agency chartered in 1950, operates on the south shore of Lake Tahoe in El Dorado County. The District supplies drinking water and provides wastewater collection and treatment for the community of South Lake Tahoe. The District recycles 100% of its wastewater and transports it to Alpine County, where its application benefits agricultural land. Lake Tahoe's seasonal tourism and the large number of part-time residents cause wide fluctuations in both daily water production and wastewater flows.

The District serves water to more than 14,000 homes and businesses, with annual water production at nearly 2.6 billion gallons. The water system includes 16 active wells, 22 water tanks, 15 booster stations, and 370 miles of water mainline.

The District's unique water distribution system is an amalgam of small private water systems dating back to the late 1940s. The District began acquiring these private water companies in the 1970s after the passage of the Clean Water Act, when many of these companies sought to sell their systems instead of complying with the new, costly regulations. In addition to regulatory challenges, most of the waterlines in the systems did not meet the District's present standards with regards to size. Smaller waterline size impacts potable water pressure and delivery of fire-fighting water.

The District has worked diligently on replacing waterlines to improve water quality, quantity, and fire suppression capabilities. While not a legal mandate, waterline projects include fire hydrant installation at 500-foot intervals. The District considers the upsizing of waterlines and the installation of fire hydrants to be a public service for community safety.

The sewage collection system consists of more than 330 miles of collection lines and 42 lift stations, providing service to more than 17,000 homes and businesses. The wastewater treatment plant capacity is 7.7 million gallons per day. The design and operation of the wastewater treatment plant makes it possible to achieve water quality that allows water and biosolids recycling. Each year the plant treats and exports more than 1.4 billion gallons of recycled water that meets high reuse standards. Under provisions of the 1968 Porter-Cologne Water Quality Control Act, the District transports the recycled water nearly 26 miles out of the Tahoe Basin to the District-owned and operated Harvey Place Dam and Reservoir. The recycled water facilities, known as Diamond Valley Ranch (DVR,) are located near Woodfords, California in neighboring Alpine County.

The District's state-certified laboratory performs more than 30,000 tests annually to monitor a variety of chemicals and microorganisms in the drinking water, wastewater treatment, and recycled water export systems. These tests on groundwater, surface water, and soils safeguard District customers and the environment.

As part of providing a high-level of customer service, the District diligently alerts and educates customers on matters affecting their water supply and water quality. The District also provides all customers with an annual Consumer Confidence Report (CCR) that easily explains critical drinking water information. The CCR is available on the District's web site at www.stpud.us.

B. BACKGROUND

Natural hazards, such as floods, landslides, and hurricanes are a part of the world around us. Their occurrence is natural and inevitable, and there is little we can do to control their force and intensity. However, through *hazard mitigation planning*, we can control what comes afterward. By minimizing the impact of natural hazards upon our built environment, we can prevent such events from resulting in disasters.

"Hazard mitigation" is simply a technical term for reducing risks to people and property from natural hazards. It includes both structural measures, such as protecting buildings and infrastructure from the forces of wind and water, and non-structural measures, such as natural resource protection and wise floodplain management. These activities can target existing development or seek to protect future development by avoiding any new hazardous construction.

The easiest way a community can get serious about hazard mitigation is through the development and adoption of a local **hazard mitigation plan**. A mitigation plan will ensure that measures to reduce the present and future vulnerability of a community are thoroughly considered before, during, and after the next disaster strikes.

Mitigation planning has the potential to produce long-term and recurring benefits by breaking the repetitive cycle of disaster loss. A core assumption of mitigation is that current dollars invested in mitigation practices will significantly reduce the demand for future dollars by lessening the amount needed for emergency recovery, repair, and reconstruction.

Both the State of California and the U.S. Congress made the development of a hazard mitigation plan a specific eligibility requirement for any local government applying for mitigation grant funding. Communities with an adopted plan will therefore become "prepositioned" and more apt to receive any available mitigation funds. "Local government" has been defined by the Federal Emergency Management Administration (FEMA) to include counties, cities, school districts, special districts, Indian tribes, and other small and large governmental entities.

The South Tahoe Public Utility District is located in a region of California that is particularly vulnerable to the effects of a range of natural hazards. These hazards threaten the life and safety of District employees and local residents, and have the potential to damage or destroy both public and private property. The District has, in fact, suffered disaster losses in years past that resulted in significant property damage.

The South Tahoe Public Utility District Local Hazard Mitigation Plan satisfies the federal legislation, The Disaster Mitigation Act of 2000, and the requirement for local governments to formulate and enact a pre-disaster mitigation program in order "to identify the natural hazards that impact them, to identify actions and activities to reduce any losses from those hazard, and to establish a coordinated process to take advantage of the plan, taking advantage of a wide range of resources." (44 CFR, sec. 201.1)

The District has the option to file a stand alone plan or an addendum to El Dorado County's Plan. The South Tahoe Public Utility District staff has chosen to prepare the LHMP as an addendum to the El Dorado County Plan.

C. PURPOSE

The purpose of this Local Hazard Mitigation Plan is:

- To protect life, safety and property by reducing the potential for future damages and economic losses that result from natural hazards;
- To qualify for additional grant funding, in both the pre-disaster and post-disaster environment;
- To speed recovery and redevelopment following future disaster events;
- To demonstrate a firm commitment to hazard mitigation principles; and
- To comply with both state and federal legislative requirements for local hazard mitigation plans.

D. PARTICIPANTS IN THE PLANNING PROCESS

Local Contact:

Lynn Nolan Grant Coordinator STPUD 1275 Meadow Crest Dr. South Lake Tahoe, CA 96150 lnolan@stpud.dst.ca.us

The participants in the development of the 2008 Local Hazard Mitigation Plan included the persons listed in the following table.

Name	Job Title
Richard H. Solbrig	General Manager
Paul Sciuto	Assistant General Manager
Randy Curtis	Manager of Field Operations
Mary Alsbury	Computer Systems Tech II
Ivo Bergsohn	Hydro-Geologist
Hal Bird	Land Application Manager
Linda Brown	Purchasing Agent
Dennis Cocking	District Information Officer
Bill Frye	Information Systems Administrator

South Tahoe Public Utility District Local Hazard Mitigation Plan

Jim Hoggatt	Construction Manager/Engineer	
Nancy Hussmann	Director of Human Resources	
Ross Johnson	Manager of Plant Operations	
Jeff Lee	Operations Supervisor	
Larry Norton	Electrical/Instrumentation Tech	
Jeff Penner	Pump Station Operator II	
Glenn Roderick	Pump Station Operator II	
Rhonda McFarlane	Chief Financial Officer	
Kathy Sharp	Executive Services Manager	
Carol Swain	Information Systems Manager	
John Thiel	Senior Engineer	
Christina Dingman	Engineer	П

The participants in the development of the Local Hazard Mitigation Plan 2017 Update included the persons listed in the following table.

Name	Job Title
Richard H. Solbrig	General Manager
Shannon Cotulla	Assistant General Manager
Chris Stanley	Manager of Field Operations
Jim Hilton	Water Reuse Manager
John Thiel	Engineering Manager
Nancy Hussmann	Director of Human Resources
Jeff Lee	Interim Manager of Plant Operations
Paul Hughes	Chief Financial Officer
Chris Skelly	Information Technology Manager
Terry Powers	Lab Manager
Debbie Henderson	Accounting Manager

Other Jurisdictions participating in plan development

Agency	Name	Job Title
El Dorado County	Todd Crawford	Sheriff's Deputy

E. DESCRIPTION OF THE PLANNING PROCESS

The planning process began in 1999 with natural hazard mitigation plan meetings with Department Managers. The purpose of the meetings was to identify plan participants and stakeholders, and to develop an approach for researching, writing, and implementing an effective natural hazard mitigation strategy for the South Tahoe Public Utility District. Natural hazards that could potentially affect District facilities, staff, and infrastructure were identified and analyzed. Data Tables assessing the hazards and providing a vulnerability analysis were created and over the next 3 years were circulated amongst plan participants. These tables allowed for input by the concerned parties while surveying the plan participants about their specific natural hazard concerns. In addition, site visitations were scheduled with each plan participant to inventory assets and estimate potential losses.

Concurrently, District staff was also involved in the development of the Alpine County Local Hazard Mitigation Plan, completed and adopted in 2004. This plan includes objectives and mitigation action items specific to the wastewater distribution system located in Alpine County. As a part of this process, community meetings and public meetings via the Alpine County Board of Supervisors were held for input regarding the development of mitigation objectives. A full description of this process is included in the Alpine County LHMP. The District sent staff to Alpine County to attend these public meetings, where they assisted in the development of the plan and gained valuable insight into hazard mitigation planning and the creation of mitigation objectives.

The next stage of the planning process for STPUD was the development of mitigation projects for the identified hazards for each department. Mitigation goals were formulated and objectives and actions were identified for each natural hazard. In 2005, development of the actual Hazard Mitigation Plan Document began. Bi-monthly meetings were held with the Maintenance, Operations, and Engineering departments where the plan was discussed, developed, and updated.

In July of 2008, the information and input gathered over the prior years was assembled into the South Tahoe Public Utility District's Local Hazard Mitigation Plan. At that time, a draft of the plan with all current revisions was made available for public input. The STPUD Board of Supervisors also held a public hearing for comments on the draft LHMP. Although there were no written or verbal comments received from the public, the Board offered several suggestions and comments that were incorporated into the final plan.

In 2016 the LHMP was distributed to District staff for review. The LHMP was updated and the Local Hazard Mitigation Plan 2017 Update was published on the District's website for public review and comment. On January 19, 2017, the South Tahoe Public Utility District Board of Directors conducted a public hearing and adopted the updated plan by resolution No. 3049-17.

II. HAZARD IDENTIFICATION AND ANALYSIS

The South Tahoe Public Utility District has identified several hazards that are examined and addressed within this Hazard Mitigation Plan. These include: wildland fires, thunderstorms, flooding, drought, landslide, avalanche, high winds, severe winter storms, and earthquakes. In addition, several human and technological hazards have been identified which may impact District operations. The following is the hazard identification and risk assessment for these hazards.

A. NATURAL HAZARDS

<u>Wildland fires</u>: Wildland fire is one of the most dangerous natural disaster threats in the Lake Tahoe Basin. Regardless of the seasonal environmental variables that act as indicators of wildland fire potential, most wildland fire events are caused by human actions. Whether the ignition source is a discarded cigarette, an unattended campfire, or

and act of arson, it is people who have the greatest impact on and control over the number of wildland fires in a fire season. Mother Nature can also be responsible for igniting wildland fires. Lightning is an especially dangerous element during the dry summer season.

Hazard Assessment: Wildland fire danger is a seasonal hazard and provides some measures of awareness and predictability to the hazard. The threat of wildland fire increases as winter snowpack melts, summer temperatures rise, and forest fuels become dry and susceptible to fire. These fires can have devastating effects that are essentially measured in terms of how much area is burned in the fire.

The District's facilities and infrastructure are at risk due to the fire load and terrain setting. A wildfire storm could potentially destroy power facilities, interfere with water delivery & storage, create water contamination, cause environmental damage, and cause potential injury and/or death to staff and the public. In summer of 2007, the Angora fire occurred in the Lake Tahoe Basin, burning approximately 3,100 acres, 242 residences, and 67 commercial structures. The District suffered minor, but costly, losses as a result of damage caused by the Angora fire to two structures, the Forest Mountain Tank and Pump Station.

<u>Severe Storms</u>: The climate of the Lake Tahoe Basin is conducive to severe storm weather events, which can happen at any time of the year. These severe weather events can be broken down into two categories:

- 1) Severe Thunderstorms
- 2) Severe Winter Storms

Severe Thunderstorms: During the summer months, climatic factors combine to promote the development of thunderstorms. As heated air from lower elevations rises and rapidly cools, intense thunderstorm cells can develop in some of the Lake Tahoe Basin's high elevation landscape.

Severe Winter Storms: A winter storm is an event in which the dominant varieties of precipitation are forms that only occur at cold temperatures, such as snow or sleet, or a rainstorm where ground temperatures are cold enough to allow ice to form, causing an ice storm. Cold moisture-laden air masses are carried from the Gulf of Alaska southward with the Westerlies. Following the storm track, this moist air encounters the Sierra Nevada, becomes unstable as it is forced over this natural barrier, and provides large amounts of precipitation before migrating eastward. In the winter months, heavy snows might be the result, with strong winds accompanying the precipitation.

Hazard Assessment: Severe storms can be quite dangerous. Severe thunderstorms introduce natural hazards of lightening, hail stones, and flooding. Electricity can be interrupted by lightening strikes, property damage can occur if hail stones reach a large diameter, and flooding can occur with particularly intense or prolonged rain events associated with the thunderhead.

Electrical power outages happen with most extreme weather events. Power outages could cause temporary interruptions to the District's water supply. A 6 inch snowstorm can make unplowed roads impassible, and it is possible for roofs to collapse due to the weight of the snow load. Standing trees and power lines can also be brought down by the weight of the snow, especially if it is wet or very dense. Even a few inches of dry snow can form drifts many feet high under windy conditions.

Although snowstorms are usually considered less dangerous than ice storms, the snow brings secondary dangers. Mountain snowstorms can produce large amounts of snow in a short time period, as well as cornices and avalanches. In 1987, a heavy snow load collapsed a covered reservoir owned by the District, threatening the domestic water supply in the Stateline zone.

An additional danger, following a snowy winter, is spring flooding if the snow melts suddenly due to a dramatic rise in air temperature or a rain-on-snow event. As a result of large winter storms, the District experienced several rain-on-snow events in 1983, 1986, and 1997, causing partially treated wastewater spills.

An ice storm involves rain, which freezes upon impact. Ice forming on the roads will make them impassable, disrupting travel and making emergency response and repairs difficult. An ice coating one-fourth inch in thickness is heavy enough to damage trees, and overhead wires disrupting power and communication.

Flooding: A flood is a temporary overflow of an expanse of water that submerges land, such as from a river or lake. As a result, some of the water flows or sits outside of the normal perimeter of the body of water. Causes can range from abnormal snow melt due to untimely warm weather during the winter, to storm events depositing too much rain on already saturated soil. Floods may cause loss of life, property damage, water supply contamination, and loss of power.

The District's property and facilities are located entirely within the mountainous Sierra Nevada, in El Dorado County and Alpine County. Drainages that course from the Sierra Nevada traverse through high-relief, deeply-cut river canyons with only occasional level areas that might be termed floodplains. Regardless, tremendous amounts of water can be gravitationally fed through these river canyons; Alpine County has a long history of flood events.

Hazard Assessment: The risk of floods in the Lake Tahoe Basin is confined primarily to meadows and marshes, and the areas near waterways. The District has a few low lying pump stations and wells that could be impacted in a flood, and there is the potential that the sewer system could be inundated from storm water leaking into manholes. Most likely, the majority of flood related hazards would occur on District Property in Alpine County. The related hazard assessment and mitigation objectives are outlined in the Alpine County Natural Hazard Mitigation Plan.

<u>Drought</u>: A drought is an extended period of months or years when a region experiences a deficiency in its water supply. This occurs when a region receives consistently below average precipitation, either in the form of rain or snow.

Hazard Assessment: Drought can have extensive, far-reaching effects within the District. It can have a substantial impact on the ecosystem, tourism and agriculture of the region. The greatest impact of drought to the District is the threat to the water supply. All District water supplies are drawn from groundwater tables. In drought conditions, depth to water tables increases and well production can decrease. In the worst drought conditions, well production can be severely reduced or eliminated.

Drought also initiates concern for other natural hazards. Wildfire potential grows exponentially as drought conditions lengthen in time. Additionally, to a much lesser extent, drought can be responsible for landslide events. Lowered moisture content weakens soil structure characteristics and increases landslide potential.

Landslides: Landslides are caused when the stability of a slope changes from a stable to an unstable condition. Natural causes include erosion due to loss of vegetation and soil structure. Weakening of a slope can also occur through saturation by snowmelt, or heavy rains. The potential for this type of landslide increases after a wildfire event. Earthquakes can add loads to barely-stable slopes causing liquefaction and destabilizing of slopes. STPUD has facilities, water, and waste water conveyance systems that have been identified as being in geologically active zones. Additionally, human causes which include earthwork, construction, and forestry activities can alter the shape of a slope, or imposes new loads on an existing slope.

Hazard Assessment: Landslides that occur within the District's service area and/or properties are most often experienced as part of a larger, more widespread natural hazard event. Landslides can take place as a result of severe storms, floods, and earthquakes. They can also happen as an aftermath to wildland fires.

The District has several water tanks located on steep hillsides, which could be damaged or destroyed in the event of a major landslide. If electrical lines are compromised within the slide, electrical power can be lost causing momentary interruptions in District Services. Water lines and other buried facilities can be put in danger or lost to a landslide as well.

Another danger is the potential for a land or mudslide due to a malfunction in the District-operated ditch system in Alpine County, which is used for the transportation of fresh water to Indian Creek Reservoir. Recently, the District-operated Snowshoe Thompson Ditch #1 became clogged with debris and overflowed, causing a mudslide. The slide hit a motel located at the base of the slope and caused extensive and costly structural damage.

<u>Avalanches</u>: An avalanche shall refer to any fall, release, or slide of snow in an amount sufficient enough to cause damage to or threaten the safety of people. Avalanches are possible when weak layers of snow within the cumulative seasonal snowpack fail to

support the weight of the snow above and collapse. The result causes the overlying snow to break free and flow down hill.

Hazard Assessment: The effects of an avalanche are for all intents and purposes confined to the areas within and around the avalanche path. The areas of substantial avalanche danger are clearly known and usually avoided. Thus, few unplanned or damage-causing avalanches occur in places where people or property might be threatened. Still, avalanches can and do happen in the Lake Tahoe Basin and potentially could impact STPUD personnel and/or water and wastewater conveyance systems and roadways, especially in remote areas and in Alpine County. The District also has Water Tanks located on steep hillsides which could be vulnerable to avalanches. A massive avalanche could potentially damage and interrupt service for extended periods of time.

<u>High Winds</u>: Significantly high winds can and often do occur at all times of the year in the Lake Tahoe Basin, especially during winter storms and thunderstorms. Falling objects, property damage, downed trees and downed power lines are dangerous risks associated with high winds.

Hazard Assessment: High winds pose potential hazards. Power and phone lines may be knocked over and electrical power might be lost. Downed power lines pose a fire and/or electrocution threat. Much of the District's property is located in heavily forested areas and could be easily damaged by uprooted or downed trees and fallen limbs. Uprooted trees and fallen limbs also pose possible hazards to District vehicles and staff.

Earthquakes: California has often been associated with geologic events and there are several active and inactive faults within the Lake Tahoe basin. Earthquakes can cause a variety of hazards including damage to buildings and bridges, disruption of communications, gas, electric, water, recycled water, and sewer lines. Earthquakes can also often cause flash floods, fires, landslides, and avalanches.

Lakes in seismically active areas, such as Lake Tahoe, are significantly at risk from tsunami and seiches. Geological evidence indicates that the shores of Lake Tahoe may have been hit by seiches and tsunamis as much as 33 feet high in prehistoric times.

Hazard Assessment: Earthquakes can also initiate other natural hazard events. An earthquake can be the direct cause of landslides, avalanches, and dam failure due to seismic shaking of the ground and fracturing that might accompany any shaking. The damages wrought within an earthquake event can be the indirect cause of other natural hazard events too. Damages resulting from an earthquake might be responsible for igniting wildland fires if fallen power lines ignite or gas lines are ruptured.

The primary concern in assessing earthquake hazard is structural damage from the earthquake event. High magnitude earthquakes would most probably cause widespread structural damage to District property, especially near the epicenter of the seismic activity. Too, areas more susceptible to ground shaking are at a greater risk of damage from earthquakes. In that earthquakes cannot be predicted, all of the structures within STPUD's service area and property are at risk of damage to one degree or another.

In an extreme earthquake, dam failure can become a concern. There are 3 small dams on District property in Alpine County at Harvey Place Reservoir and Indian Creek Reservoir. Although these dams have not been damaged in past earthquakes, it is impossible to measure their success in any future hazard event. If the dam of a reservoir were to be compromised as a result of an earthquake, there would be many resulting ramifications to residents in the resulting path of inundation. Fortunately, Alpine County has few residents and threat to life is minimal. Still tremendous property damage could be anticipated in the event of any dam failure resulting from an earthquake.

<u>Dam Failure</u>: Dam Failure is a potential "man-made" natural disaster that has the possibility to impact the District. It is man-made in that the dam itself was constructed through human effort. It is a natural disaster from two perspectives. First, the inundation from released waters resulting from dam failure is related to naturally occurring floodwaters. Second, dam failure would most probably happen in consequence of another natural disaster such as an earthquake, severe storm, or flood.

Hazard Assessment: There are three damns located on land owned by the District in Alpine County: Harvey Place Dam and Harvey Place Auxiliary Dam, which hold back Harvey Place Reservoir, and Indian Creek Dam, which holds back Indian Creek Reservoir. Both of the Harvey Place dams are used to hold treated waste water. If dam failure were to occur, it could result in treated wastewater entering Millich Ditch or Indian Creek (both freshwater channels) and eventually the Carson River, a main source of water for Carson City. There is also the possibility that Diamond Valley Road might be made impassible by mud and debris from a resulting flood.

B. HUMAN HAZARDS

Contamination: The uncontrolled distribution of material in a given environment. The hazards to people and the environment from contamination depend on the nature of the contaminant, the level of contamination, and the extent of the spread of contamination. Waterborne Disease: Waterborne diseases are caused by pathogenic microorganisms which are directly transmitted when contaminated drinking water is consumed. Contaminated drinking water, used in the preparation of food, can be the source of food borne disease through consumption of the same microorganisms.

Fire/Arson: Arson is the crime of maliciously, voluntarily, and willfully setting fire to woodlands or to the buildings, or property of others.

Loss of key Staff: Loss of critical management decision makers and/or loss of on site personnel necessary to maintain or repair equipment and critical water and sewer systems.

Fuel Shortage: An inadequate supply of fuel necessary for emergency response vehicles and back up generators and pumps.

Terrorism/Sabotage: The willful destruction or impairment of facilities or equipment necessary for the continued operation of water and sewer systems.

Canal Failure: Flooding due to a breech of an embankment or channel allowing the uncontrolled flow of water.

Chemical Spill: Chemicals have the ability to react when exposed to other chemicals under certain physical conditions. When chemical reactions are not properly managed, they can create harmful or catastrophic consequences, such as toxic fumes, fires, and explosions. These reactions may result in death and injury to people, damage to physical property, and severe effects on the environment.

Wastewater Spill: Uncontrolled discharge of sewage or unprocessed waste causing contamination of drinking water, property, recreational facilities, and the environment.

C. TECHNOLOGICAL HAZARDS

Power Outage: Power failure can be a defect in a power station, damage to a power line or other part of the distribution system, a short circuit, or the overloading of electricity mains.

Natural Gas Outage: An unexpected disruption in natural gas supply. Utility services are often jeopardized by natural and man-made disasters. Weather related occurrences can lead to loss of heat, resulting in frozen pipes and safety hazards such as fire and explosion.

HVAC Failure: Plumbing & HVAC failures have been the cause of leakages and flooding in numerous buildings, this results in lost time and damage to property, due to failure of boilers, fire water pipes, drainage lines, and can cause associated electric fires. Leakages in plumbing systems are caused by improper assembly of joints, sub-standard fittings, corrosion, pressure surges, traffic loads and non compatible pumping equipment. **Road Closure:** Inability to respond to and move material, personnel, and supplies where needed.

Communication Failure: Inability to communicate with the staff or public regarding safety, and the efficient movement of material, personnel, supplies and equipment. Supervisory Control and Data Acquitision (SCADA) system Failure: Refers to an industrial control system monitoring and coordinating a process. The process can include water treatment and distribution, wastewater collection and treatment, electrical power transmission and distribution, and large communication systems.

Computer Failure: Computer failure can affect the districts ability to maintain control of monitoring equipment. It can also affect communication, information systems, engineering, accounting, purchasing, billing, payables and payroll.

D. IDENTIFIED ASSETS AND POTENTIAL LOSSES

The South Tahoe Public Utility Local Hazard Mitigation Plan identifies critical facilities located within the District and the hazards to which these facilities are susceptible. The the critical facilities and the potential losses that might occur are Reflected in 2013 Appraisal of Selected Assets contained in Addendum 1.

E. Hazard Assessment and Vulnerability Analysis Tables

The Hazard and Risk Assessments of this plan have been quantified and scaled in order to recognize which hazards pose the greatest threat to STPUD's operations and to provide an overall assessment of where those threats lie. From these tables, a measure of the identified hazards was calculated. The Hazard Assessment/Vulnerability Analysis Tables provide the foundation from which to build a more refined comprehension and plan of action to mitigate hazardous threats within the district.

Location: Administration

Administration Building

Date of Analysis: April 16, 1999

Hazard Assessment	Vulnerability Analysis				
Hazard	Probability of	Reaction	Hazard	System	Weight
Туре	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	2	3	6	3	18
Forest Fire	2	2	4	3	12
Severe Storm	3	2	6	2	12
High Winds (70+mph)	2	2	4	1	4
Heavy Snow	3	2	6	1	6
Avalanche	1	3	3	2	6
Landside	1	3	3	2	6
Flood	3	2	6	3	18
Drought	2	1	2	0	0
Hurricane	0	2	0	0	0
Man-made Events					
Contamination	2	3	6	3	18
Waterborne Disease	1	3	3	3	9
Fire/Arson	2	3	6	3	18
Loss of Key Staff	2	2	4	3	12
Fuel Shortage	2	2	4	0	0
Dam Failure	2	3	6	0	0
Terrorism/Sabotage	2	3	6	3	18
Canal Failure	3	3	9	0	0
Chemical Spill	2	3	6	2	12
Wastewater Spill	3	3	9	2	18
Technological Events					
Power Outage	3	3	9	3	27
Natural Gas Outage	2	3	6	2	12
HVAC Failure	2	3	6	0	0
Road Closure	3	3	9	3	27
Communication Failure	2	3	6	2	12
SCADA Failure	2	3	6	0	0
Computer Failure	1	3	3	3	12

Location: Bijou, Ski Run, and Al Tahoe Force Main

Date of Analysis: April 19, 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerabili	Vulnerability Analysis	
Hazard	Probability of	Reaction	Hazard	System	Weight	
Туре	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	2	12	
Forest Fire	2	2	4	0	0	
Severe Storm	3	2	6	1	6	
High Winds (70+mph)	2	2	4	0	0	
Heavy Snow	3	2	6	0	0	
Avalanche	1	3	3	0	0	
Landside	1	3	3	0	0	
Flood	3	2	6	0	0	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Mr. I E						
Man-made Events						
Contamination	2	3	6	0	0	
Waterborne Disease	1	3	3	0	0	
Fire/Arson	2	3	6	0	0	
Loss of Key Staff	2	2	4	0	0	
Fuel Shortage	2	2	4	0	0	
Dam Failure	2	3	6	0	0	
Terrorism/Sabotage	2	3	6	2	12	
Canal Failure	3	3	9	0	0	
Chemical Spill	2	3	6	0	0	
Wastewater Spill	3	3	9	0	0	
Technological Events						
Power Outage	3	3	9	0	0	
Natural Gas Outage	2	3	6	0	0	
HVAC Failure	2	3	6	0	0	
Road Closure	3	3	9	1	9	
Communication Failure	2	3	6	0	0	
SCADA Failure	2	3	6	0		
Computer Failure					0	
Computer ratture	1	3	3	0	0	

Location: Booster Stations

Date of Analysis: June 18, 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerabi	Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight		
Type	Occurrence	Factor	Factor	Impact			
Natural Events							
Earthquake	2	3	6	2	12		
Forest Fire	2	2	4	2	8		
Severe Storm	3	2	6	2	12		
High Winds (70+mph)	2	2	4	2	8		
Heavy Snow	3	2	6	2	12		
Avalanche	1	3	3	2	6		
Landside	1	3	3	2	6		
Flood	3	2	6	2	12		
Drought	2	1	2	0	0		
Hurricane	0	2	0	0	0		
Man-made Events							
Contamination	1	3	3	3	9		
Waterborne Disease	1	3	3	3	9		
Fire/Arson	2	3	6	3	18		
Loss of Key Staff	2	2	4	1	4		
Fuel Shortage	2	2	4	2	8		
Dam Failure	2	3	6	0	0		
Terrorism/Sabotage	2	3	6	3	18		
Canal Failure	3	3	9	0	0		
Chemical Spill	2	3	6	0	0		
Wastewater Spill	3	3	9	0	0		
Technological Events							
Power Outage	3	3	9	1	9		
Natural Gas Outage	2	3	6	0	0		
HVAC Failure	2	3	6	0	0		
Road Closure	3	3	9	1	9		
Communication Failure	2	3	6	1	6		
SCADA Failure	2	3	6	1	6		
Computer Failure	1	3	3	0	0		

Location: District EOC & Operations

1275 Meadow Crest Drive

Date of Analysis: January 2008

Hazard Assessment	Vulnerabi	rability Analysis			
Hazard	Probability of	Reaction	Hazard	System	Weight
Type	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	2	3	6	2	12
Forest Fire	2	2	4	2	8
Severe Storm	3	2	6	1	6
High Winds (70+mph)	2	2	4	1	4
Heavy Snow	3	2	6	1	6
Avalanche	1	3	3	0	0
Landside	1	3	3	0	0
Flood	3	2	6	1	6
Drought	2	1	2	0	0
Hurricane	0	2	0	0	0
Man-made Events					
Contamination	2	3	6	0	0
Waterborne Disease	1	3	3	0	0
Fire/Arson	2	3	6	1	6
Loss of Key Staff	2	2	4	3	12
Fuel Shortage	2	2	4	0	0
Dam Failure	2	3	6	0	0
Terrorism/Sabotage	2	3	6	2	12
Canal Failure	3	3	9	0	0
Chemical Spill	2	3	6	1	6
Wastewater Spill	3	3	9	1	9
Technological Events					
Power Outage	3	3	9	12	10
Natural Gas Outage	2	3		2	18
HVAC Failure	2	3	6	1	6
Road Closure	3		6	1	6
		3	9	1	9
Communication Failure	2	3	6	3	18
SCADA Failure	2	3	6	0	0
Computer Failure	1	3	3	3	9

Location: Emergency Retention Basin

Date of Analysis: August 8, 1999 Reviewed/Updated: December 2017

Hazard Assessment	Vulnerability Analysis				
Hazard	Probability of	Reaction	Hazard	System	Weight
Туре	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	3	3	9	3	27
Forest Fire	3	2	6	2	12
Severe Storm	2	2	4	1	4
High Winds (70+mph)	3	2	6	1	6
Heavy Snow	2	2	4	2	8
Avalanche	1	3	3	1	3
Landside	1	2	2	2	4
Flood	1	2	2	2	4
Drought	2	1	2	0	0
Hurricane	0	2	0	0	0
Man-made Events					
Contamination	2	3	6	0	0
Waterborne Disease	0	3	0	0	0
Fire/Arson	2	2	4	2	8
Loss of Key Staff	2	3	6	3	18
Fuel Shortage	0	1	0	0	0
Dam Failure	1	3	3	3	9
Terrorism/Sabotage	2	3	6	3	18
Canal Failure	0	3	0	0	0
Chemical Spill	0	3	0	0	0
Wastewater Spill					
Technological Events					
Power Outage	0	3	0	0	0
Natural Gas Outage	0	3	0	0	0
HVAC Failure	0	3	0	0	0
Millennium Bug	0	3	0	0	0
Road Closure	2	3	6	1	6
Communication Failure	0	3	0	0	0
SCADA Failure	0	3	0	0	0
Computer Virus	0	3	0	0	0

Location: Export System: A-Line

Date of Analysis: April 1999 Reviewed/Updated: December 20017

Hazard Assessment Vulnerability Analysis						
Hazard	Probability of	Reaction	Hazard	System	Weight	
Туре	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	3	18	
Forest Fire	2	2	4	0	0	
Severe Storm	3	2	6	1	6	
High Winds (70+mph)	2	2	4	0	0	
Heavy Snow	3	2	6	0	0	
Avalanche	1	3	3	0	0	
Landside	1	3	3	1	3	
Flood	3	2	6	1	6	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Man-made Events						
Contamination	2	3	6	0	0	
Waterborne Disease	1	3	3	0	0	
Fire/Arson	2	3	6	0	0	
Loss of Key Staff	2	2	4	1	4	
Fuel Shortage	2	2	4	0	0	
Dam Failure	2	3	6	0	0	
Terrorism/Sabotage	2	3	6	3	18	
Canal Failure	3	3	9	0	0	
Chemical Spill	2	3	6	0	0	
Wastewater Spill	3	3	9	0	0	
-						
Technological Events						
Power Outage	3	3	9	0	0	
Natural Gas Outage	2	3	6	0	0	
HVAC Failure	2	3	6	0	0	
Road Closure	3	3	9	0	0	
Communication Failure	2	3	6	0	0	
SCADA Failure	2	3	6	0	0	
Computer Failure	1	3	3	0	0	

Location: Export System: B-Line

Date of Analysis: April 1999 Reviewed/Updated: December 2017

Hazard Assessment	Vulnerabi	Vulnerability Analysis			
Hazard	Probability of	Reaction	Hazard	System	Weight
Type	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	2	3	6	3	18
Forest Fire	2	2	4	0	0
Severe Storm	3	2	6	1	6
High Winds (70+mph)	2	2	4	0	0
Heavy Snow	3	2	6	0	0
Avalanche	1	3	3	1	3
Landside	1	3	3	2	6
Flood	3	2	6	3	18
Drought	2	1	2	0	0
Hurricane	0	2	0	0	0
Man-made Events					
Contamination	2	3	6	0	0
Waterborne Disease	1	3	3	0	0
Fire/Arson	2	3	6	0	0
Loss of Key Staff	2	2	4	1	4
Fuel Shortage	2	2	4	0	0
Dam Failure	2	3	6	0	0
Terrorism/Sabotage	2	3	6	3	18
Canal Failure	3	3	9	0	0
Chemical Spill	2	3	6	0	0
Wastewater Spill	3	3	9	0	0
Technological Events					
Power Outage	3	3	9	0	0
Natural Gas Outage	2	3	6	0	0
HVAC Failure	2	3	6	0	0
Road Closure	3	3	9	0	0
Communication Failure	2	3	6	0	0
SCADA Failure	2	3	6	0	0
Computer Failure	1	3	3	0	0

Location: Export System: C-Line

Date of Analysis: April 16, 1999 Reviewed/Updated: December 2017

Hazard Assessment Vulnerability Analysis						
Hazard	Probability of	Reaction	Hazard	System	Weight	
Туре	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	3	18	
Forest Fire	2	2	4	0	0	
Severe Storm	3	2	6	1	6	
High Winds (70+mph)	2	2	4	0	0	
Heavy Snow	3	2	6	0	0	
Avalanche	1	3	3	1	3	
Landside	1	3	3	2	6	
Flood	3	2	6	2	12	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Man-made Events						
Contamination	2	3	6	0	0	
Waterborne Disease	1	3	3	0	0	
Fire/Arson	2	3	6	0	0	
Loss of Key Staff	2	2	4	1	4	
Fuel Shortage	2	2	4	0	0	
Dam Failure	2	3	6	0	0	
Terrorism/Sabotage	2	3	6	3	18	
Canal Failure	2	3	9	0	0	
Chemical Spill	2	3	6	0	0	
Wastewater Spill	3	3	9	0	0	
*						
Technological Events						
Power Outage	3	3	9	0	0	
Natural Gas Outage	2	3	6	0	0	
HVAC Failure	2	3	6	0	0	
Road Closure	3	3	9	0	0	
Communication Failure	2	3	6	0	0	
SCADA Failure	2	3	6	0	0	
Computer Failure	1	3	3	0	0	

Location: Fallen Leaf Lake Force Main

Date of Analysis: April 19, 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight	
Туре	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	2	12	
Forest Fire	2	2	4	0	0	
Severe Storm	3	2	6	1	6	
High Winds (70+mph)	2	2	4	0	0	
Heavy Snow	3	2	6	1	6	
Avalanche	1	3	3	1	3	
Landside	1	3	3	1	3	
Flood	3	2	6	1	6	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Man-made Events			-			
Contamination	2	3	6	0	0	
Waterborne Disease	1	3	3	0	0	
Fire/Arson	2	3	6	0	0	
Loss of Key Staff	2	2	4	0	0	
Fuel Shortage	2	2	4	0	0	
Dam Failure	2	3	6	0	0	
Terrorism/Sabotage	2	3	6	2	12	
Canal Failure	3	3	9	0	0	
Chemical Spill	2	3	6	0	0	
Wastewater Spill	3	3	9	0	0	
THE STATE OF THE	3		 			
Technological Events						
Power Outage	3	3	9	0	0	
Natural Gas Outage	2	3	6	0	0	
HVAC Failure	2	3	6	0	0	
Road Closure	3	3	9	1	9	
Communication Failure	2	3	6	0	0	
SCADA Failure	2	3	6	0	0	
Computer Failure	1	3	3	0	0	

Location: Fallen Leaf Lake Sewage System

Date of Analysis: June 18, 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight	
Type	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	3	18	
Forest Fire	2	2	4	3	12	
Severe Storm	3	2	6	2	12	
High Winds (70+mph)	2	2	4	2	8	
Heavy Snow	3	2	6	3	18	
Avalanche	1	3	3	3	9	
Landside	1	3	3	3	9	
Flood	3	2	6	3	18	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Man-made Events						
Contamination	2	3	6	3	18	
Waterborne Disease	1	3	3	3	9	
Fire/Arson	2	3	6	3	18	
Loss of Key Staff	2	2	4	2	8	
Fuel Shortage	2	2	4	3	12	
Dam Failure	2	3	6	0	0	
Terrorism/Sabotage	2	3	6	3	18	
Canal Failure	3	3	9	0	0	
Chemical Spill	2	3	6	0	0	
Wastewater Spill	3	3	9	0	0	
•						
Technological Events						
Power Outage	3	3	9	3	27	
Natural Gas Outage	2	3	6	0	0	
HVAC Failure	2	3	6	0	0	
Road Closure	3	3	9	3	27	
Communication Failure	2	3	6	3	18	
SCADA Failure	2	3	6	3	18	
Computer Failure	1	3	3	0	0	

Location: Finance Division - Accounting

Date of Analysis: April 6, 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight	
Туре	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	2	12	
Forest Fire	2	2	4	2	8	
Severe Storm	3	2	6	1	6	
High Winds (70+mph)	3	2	6	1	6	
Heavy Snow	3	2	6	1	6	
Avalanche	0	3	0	0	0	
Landside	0	3	0	0	0	
Flood	1	2	2	1	2	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Man-made Events					-	
Contamination	2	3	6	0	0	
Waterborne Disease	1	3	3	0	0	
Fire/Arson	2	3	6	2	12	
Loss of Key Staff	2	2	4	3	12	
Fuel Shortage	2	2	4	1	4	
Dam Failure	0	3	0	0	0	
Terrorism/Sabotage	2	3	6	1	6	
Canal Failure	0	3	0	0	0	
Chemical Spill	2	3	6	1	6	
Wastewater Spill						
Technological Events						
Power Outage	1	3	3	2	6	
Natural Gas Outage	1	3	3	1	3	
HVAC Failure	2	3	6	1	6	
Millennium Bug	1	1	1	1	1	
Road Closure	3	3	9	1	9	
Communication Failure	1	3	3	3	9	
SCADA Failure	0	3	0	0	0	
Computer Virus	1	3	3	1	3	

Location: Gravity Sewers Mainline Side

Date of Analysis: April 19, 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight	
Туре	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	1	6	
Forest Fire	2	2	4	0	0	
Severe Storm	3	2	6	1	6	
High Winds (70+mph)	2	2	4	0	0	
Heavy Snow	3	2	6	1	6	
Avalanche	1	3	3	1	3	
Landside	1	3	3	1	3	
Flood	3	2	6	1	6	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Man-made Events						
Contamination	2	3	6	1	6	
Waterborne Disease	1	3	3	0	0	
Fire/Arson	2	3	6	0	0	
Loss of Key Staff	2	2	4	0	0	
Fuel Shortage	2	2	4	0	0	
Dam Failure	2	3	6	0	0	
Terrorism/Sabotage	2	3	6	2	12	
Canal Failure	3	3	9	0	0	
Chemical Spill	2	3	6	1	6	
Wastewater Spill	3	3	9	1	9	
Technological Events						
Power Outage	3	3	9	0	0	
Natural Gas Outage	2	3	6	0	0	
HVAC Failure	2	3	6	0	0	
Road Closure	3	3	9	1	9	
Communication Failure	2	3	6	0	0	
SCADA Failure	2	3	6	0	0	
Computer Failure	1	3	6	0	0	

Location: Gravity Sewers Mainline Trunk

Date of Analysis: April 19, 1999 Reviewed/Updated: December 2017

Hazard Assessment					Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight		
Туре	Occurrence	Factor	Factor	Impact			
Natural Events							
Earthquake	2	3	6	3	18		
Forest Fire	2	2	4	0	0		
Severe Storm	3	2	6	1	6		
High Winds (70+mph)	2	2	4	0	0		
Heavy Snow	3	2	6	1	6		
Avalanche	1	3	3	1	3		
Landside	1	3	3	1	3		
Flood	3	2	6	2	12		
Drought	2	1	2	0	0		
Hurricane	0	2	0	0	0		
Man-made Events							
Contamination	2	3	6	2	12		
Waterborne Disease	1	3	3	0	0		
Fire/Arson	2	3	6	0	0		
Loss of Key Staff	2	2	4	1	4		
Fuel Shortage	2	2	4	0	0		
Dam Failure	2	3	6	0	0		
Terrorism/Sabotage	2	3	6	2	12		
Canal Failure	3	3	9	0	0		
Chemical Spill	2	3	6	0	0		
Wastewater Spill	3	3	9	2	18		
Technological Events	_	_					
Power Outage	3	3	9	0	0		
Natural Gas Outage	2	3	6	0	0		
HVAC Failure	2	3	6	0	0		
Road Closure	3	3	9	1	9		
Communication Failure	2	3	6	0	0		
SCADA Failure	2	3	6	0	0		
Computer Failure	1	3	3	0	0		

Location: Harvey Channel

Alpine County

Date of Analysis: April12,1999

Hazard Assessment Vulnerability An						
Hazard	Probability of	Reaction	Hazard	System	Weight	
Туре	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	1	6	
Forest Fire	2	2	4	1	4	
Severe Storm	3	2	6	2	12	
High Winds (70+mph)	2	2	4	1	4	
Heavy Snow	3	2	6	1	6	
Avalanche	1	3	3	2	6	
Landside	1	3	3	3	9	
Flood	3	2	6	3	18	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Man-made Events						
Contamination	2	3	6	0	0	
Waterborne Disease	1	3	3	0	0	
Fire/Arson	2	3	6	1	6	
Loss of Key Staff	2	2	4	1	4	
Fuel Shortage	2	2	4	0	0	
Dam Failure	2	3	6	0	0	
Terrorism/Sabotage	2	3	6	3	18	
Canal Failure	3	3	9	3	27	
Chemical Spill	2	3	6	0	0	
Wastewater Spill	3	3	9	1	9	
Technological Events						
Power Outage	3	3	9	0	0	
Natural Gas Outage	2	3	6	0	0	
HVAC Failure	2	3	6	0	0	
Road Closure	3	3	9	0	0	
Communication Failure	2	3	6	2	12	
SCADA Failure	2	3	6	0	0	
Computer Failure	1	3	3	0	0	

Location: Harvey Place Reservoir

Alpine County

Date of Analysis: April 12, 1999

Hazard Assessment	Vulnerability Analysis				
Hazard	Probability of	Reaction	Hazard	System	Weight
Type	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	2	3	6	3	18
Forest Fire	2	2	4	2	8
Severe Storm	3	2	6	1	6
High Winds (70+mph)	2	2	4	1	4
Heavy Snow	3	2	6	1	6
Avalanche	1	3	3	1 **	3
Landside	1	3	3	1	3
Flood	3	2	6	2	12
Drought	2	1	2	0	0
Hurricane	0	2	0	0	0
Man-made Events					
Contamination	2	3	6	3	18
Waterborne Disease	1	3	3	2	6
Fire/Arson	2	3	6	2	12
Loss of Key Staff	2	2	4	1	4
Fuel Shortage	2	2	4	1	4
Dam Failure	2	3	6	3	18
Terrorism/Sabotage	2	3	6	3	18
Canal Failure	3	3	9	1	9
Chemical Spill	2	3	6	2	12
Wastewater Spill	3	3	9	3	27
Technological Events					
Power Outage	3	3	9	2	18
Natural Gas Outage	2	3	6	1	6
HVAC Failure	2	3	6	0	0
Road Closure	3	3	9	2	18
Communication Failure	2	3	6	2	12
SCADA Failure	2	3	6	0	0
Computer Failure	1	3	3	0	0

Location: Information Systems

Administration Building

Date of Analysis: April 16, 1999

Hazard Assessment					Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight		
Туре	Occurrence	Factor	Factor	Impact			
Natural Events							
Earthquake	2	3	6	2	18		
Forest Fire	2	2	4	2	8		
Severe Storm	3	2	6	1	6		
High Winds (70+mph)	2	2	4	1	4		
Heavy Snow	3	2	6	1	6		
Avalanche	1	3	3	0	0		
Landside	1	3	3	0	0		
Flood	3	2	6	1	6		
Drought	2	1	2	0	0		
Hurricane	0	2	0	0	0		
Man-made Events							
Contamination	2	3	6	0	0		
Waterborne Disease	1	3	3	0	0		
Fire/Arson	2	3	6	2	12		
Loss of Key Staff	2	2	4	3	12		
Fuel Shortage	2	2	4	1	4		
Dam Failure	2	3	6	0	0		
Terrorism/Sabotage	2	3	6	2	12		
Canal Failure	3	3	9	0	0		
Chemical Spill	2	3	6	1	6		
Wastewater Spill	3	3	9	0	0		
Technological Events							
Power Outage	3	3	9	3	27		
Natural Gas Outage	2	3	6	1	6		
HVAC Failure	2	3	6	1	6		
Road Closure	3	3	9	2	18		
Communication Failure	2	3	6	3	18		
SCADA Failure	2	3	6	1	6		
Computer Failure	1	3	3	3	9		

Location: Indian Creek Reservoir

Alpine County

Date of Analysis: April 12, 1999

Hazard Assessment				Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight	
Type	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	3	18	
Forest Fire	2	2	4	2	8	
Severe Storm	3	2	6	1	6	
High Winds (70+mph)	2	2	4	1	4	
Heavy Snow	3	2	6	1	6	
Avalanche	1	3	3	1	3	
Landside	1	3	3	1	3	
Flood	3	2	6	3	18	
Drought	2	1	2	1	2	
Hurricane	0	2	0	0	0	
Man-made Events						
Contamination	2	3	6	2	12	
Waterborne Disease	1	3	3	2	6	
Fire/Arson	2	3	6	2	12	
Loss of Key Staff	2	2	4	1	4	
Fuel Shortage	2	2	4	0	0	
Dam Failure	2	3	6	3	18	
Terrorism/Sabotage	2	3	6	3	18	
Canal Failure	3	3	9	0	0	
Chemical Spill	2	3	6	2	12	
Wastewater Spill	3	3	9	0	0	
Technological Events	2	2	10	12	10	
Power Outage	3	3	9	2	18	
Natural Gas Outage	2	3	6	0	0	
HVAC Failure	2	3	6	0	0	
Road Closure	3	3	9	0	0	
Communication Failure	2	3	6	2	12	
SCADA Failure	2	3	6	2	12	
Computer Failure	1	3	3	0	0	

Location: Johnson Boulevard Force Main

Date of Analysis: April 19, 1999 Reviewed/Updated: December 2017

Hazard Assessment					Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight		
Туре	Occurrence	Factor	Factor	Impact			
Natural Events							
Earthquake	2	3	6	2	12		
Forest Fire	2	2	4	0	0		
Severe Storm	3	2	6	1	6		
High Winds (70+mph)	2	2	4	0	0		
Heavy Snow	3	2	6	0	0		
Avalanche	1	3	3	0	0		
Landside	1	3	3	0	0		
Flood	3	2	6	0	0		
Drought	2	1	2	0	0		
Hurricane	0	2	0	0	0		
Man-made Events							
Contamination	2	3	6	0	0		
Waterborne Disease	1	3	3	0	0		
Fire/Arson	2	3	6	0	0		
Loss of Key Staff	2	2	4	0	0		
Fuel Shortage	2	2	4	0	0		
Dam Failure	2	3	6	0	0		
Terrorism/Sabotage	2	3	6	1	6		
Canal Failure	3	3	9	0	0		
Chemical Spill	2	3	6	0	0		
Wastewater Spill	3	3	9	0	0		
9							
Technological Events							
Power Outage	3	3	9	0	0		
Natural Gas Outage	2	3	6	0	0		
HVAC Failure	2	3	6	0	0		
Road Closure	3	3	9	1	9		
Communication Failure	2	3	6	0	0		
SCADA Failure	2	3	6	0	0		
Computer Failure	1	3	3	0	0		

Location: Luther Pass Pump Station

Date of Analysis: June 18, 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight	
Туре	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	3	18	
Forest Fire	2	2	4	3	12	
Severe Storm	3	2	6	2	12	
High Winds (70+mph)	2	2	4	2	8	
Heavy Snow	3	2	6	2	12	
Avalanche	1	3	3	2	6	
Landside	1 -	3	3	0	0	
Flood	3	2	6	0	0	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Man-made Events						
Contamination	2	3	6	0	0	
Waterborne Disease	1	3	3	0	0	
Fire/Arson	2	3	6	3	18	
Loss of Key Staff	2	2	4	3	12	
Fuel Shortage	2	2	4	3	12	
Dam Failure	2	3	6	0	0	
Terrorism/Sabotage	2	3	6	3	18	
Canal Failure	3	3	9	0	0	
Chemical Spill	2	3	6	2	12	
Wastewater Spill	3	3	9	0	0	
Technological Events						
Power Outage	3	3	9	2	18	
Natural Gas Outage	2	3	6	1	6	
HVAC Failure	2	3	6	1	6	
Road Closure	3	3	9	2	18	
Communication Failure	2	3	6	2	12	
SCADA Failure	2	3	6	2	12	
Computer Failure	1	3	3	0	0	

Location: Maintenance Office and Buildings

Date of Analysis: April 19, 1999 Reviewed/Updated: December 2017

Hazard Assessment		Vulnerabil	lity Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight
Type	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	2	3	6	1	6
Forest Fire	2	2	4	1	4
Severe Storm	3	2	6	1	6
High Winds (70+mph)	2	2	4	1	4
Heavy Snow	3	2	6	1	6
Avalanche	1	3	3	0	0
Landside	1	3	3	0	0
Flood	3	2	6	1	6
Drought	2	1	2	0	0
Hurricane	0	2	0	0	0
Man-made Events					
Contamination	2	3	6	1	6
Waterborne Disease	1	3	3	1	3
Fire/Arson	2	3	6	3	18
Loss of Key Staff	2	2	4	1	4
Fuel Shortage	2	2	4	1	4
Dam Failure	2	3	6	0	0
Terrorism/Sabotage	2	3	6	2	12
Canal Failure	3	3	9	0	0
Chemical Spill	2	3	6	1	6
Wastewater Spill	3	3	9	1	9
•					
Technological Events					
Power Outage	3	3	9	2	18
Natural Gas Outage	2	3	6	2	12
HVAC Failure	2	3	6	1	6
Road Closure	3	3	9	1	9
Communication Failure	2	3	6	1	6
SCADA Failure	2	3	6	0	0
Computer Failure	1	3	3	1	3

Location: On-Farm Alpine County

Date of Analysis: April 12, 1999 Reviewed/Updated: December 2017

Hazard Assessment	Vulnerability Analysis				
Hazard	Probability of	Reaction	Hazard	System	Weight
Type	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	2	3	6	1	6
Forest Fire	2	2	4	1	4
Severe Storm	3	2	6	2	12
High Winds (70+mph)	2	2	4	1	4
Heavy Snow	3	2	6	1	6
Avalanche	1	3	3	0	0
Landside	1	3	3	1	3
Flood	3	2	6	3	18
Drought	2	1	2	0	0
Hurricane	0	2	0	0	0
Man-made Events					
Contamination	2	3	6	1	6
Waterborne Disease	1	3	3	1	3
Fire/Arson	2	3	6	1 .	6
Loss of Key Staff	2	2	4	1	4
Fuel Shortage	2	2	4	0	0
Dam Failure	2	3	6	2	12
Terrorism/Sabotage	2	3	6	2	12
Canal Failure	3	3	9	3	27
Chemical Spill	2	3	6	0	0
Wastewater Spill	3	3	9	1	9
Technological Events					
Power Outage	3	3	9	0	0
Natural Gas Outage	2	3	6	0	0
HVAC Failure	2	3	6	0	0
Road Closure	3	3	9	2	18
Communication Failure	2	3	6	2	12
SCADA Failure	2	3	6	0	0
Computer Failure	1	3	3	0	0

Location: Phones

Administration Building

Date of Analysis: April 16, 1999

Hazard Assessment	Vulnerability Analysis				
Hazard	Probability of	Reaction	Hazard	System	Weight
Туре	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	2	3	6	3	18
Forest Fire	2	2	4	3	12
Severe Storm	3	2	6	2	12
High Winds (70+mph)	2	2	4	2	8
Heavy Snow	3	2	6	1	6
Avalanche	1	3 -	3	0	0
Landside	1	3	3	0	0
Flood	3	2	6	1	6
Drought	2	1	2	0	0
Hurricane	0	2	0	0	0
Man-made Events					
Contamination	2	3	6	0	0
Waterborne Disease	1	3	3	0	0
Fire/Arson	2	3	6	3	18
Loss of Key Staff	2	2	4	3	12
Fuel Shortage	2	2	4	1	4
Dam Failure	2	3	6	0	0
Terrorism/Sabotage	2	3	6	2	12
Canal Failure	3	3	9	0	0
Chemical Spill	2	3	6	1	6
Wastewater Spill	3	3	9	0	0
•					
Technological Events					
Power Outage	3	3	9	3	27
Natural Gas Outage	2	3	6	1	6
HVAC Failure	2	3	6	2	12
Road Closure	3	3	9	1	9
Communication Failure	2	3	6	3	18
SCADA Failure	2	3	6	1	6
Computer Failure	1	3	3	3	9

Location: Pioneer Village Force Main

Date of Analysis: April 19, 1999 Reviewed/Updated: December 2017

Hazard Assessment					Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight		
Type	Occurrence	Factor	Factor	Impact			
Natural Events							
Earthquake	2	3	6	2	12		
Forest Fire	2	2	4	0	0		
Severe Storm	3	2	6	1	6		
High Winds (70+mph)	2	2	4	0	0		
Heavy Snow	3	2	6	0	0		
Avalanche	1	3	3	0	0		
Landside	1	3	3	0	0		
Flood	3	2	6	0	0		
Drought	2	1	2	0	0		
Hurricane	0	2	0	0	0		
Man-made Events							
Contamination	2	3	6	0	0		
Waterborne Disease	1	3	3	0	0		
Fire/Arson	2	3	6	0	0		
Loss of Key Staff	2	2	4	0	0		
Fuel Shortage	2	2	4	0	0		
Dam Failure	2	3	6	0	0		
Terrorism/Sabotage	2	3	6	2	12		
Canal Failure	3	3	9	0	0		
Chemical Spill	2	3	6	0	0		
Wastewater Spill	3	3	9	0	0		
Technological Events							
Power Outage	3	3	9	0	0		
Natural Gas Outage	2	3	6	0	0		
HVAC Failure	2	3	6	0	0		
Road Closure	3	3	9	1	9		
Communication Failure	2	3	6	0	0		
SCADA Failure	2	3	6	0	0		
Computer Failure	1	3	3	0	0		

Location: PRV's

Date of Analysis: June 18, 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight	
Туре	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	3	18	
Forest Fire	2	2	4	0	0	
Severe Storm	3	2	6	0	0	
High Winds (70+mph)	2	2	4	0	0	
Heavy Snow	3	2	6	2	12	
Avalanche	1	3	3	0	0	
Landside	1	3	3	0	0	
Flood	3	2	6	1	6	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Man-made Events						
Contamination	2	3	6	0	0	
Waterborne Disease	1	3	3	0	0	
Fire/Arson	2	3	6	0	0	
Loss of Key Staff	2	2	4	1	4	
Fuel Shortage	2	2	4	0	0	
Dam Failure	2	3	6	0	0	
Terrorism/Sabotage	2	3	6	2	12	
Canal Failure	3	3	9	0	0	
Chemical Spill	2	3	6	2	12	
Wastewater Spill	3	3	9	2	18	
-						
Technological Events						
Power Outage	3	3	9	0	0	
Natural Gas Outage	2	3	6	0	0	
HVAC Failure	2	3	6	0	0	
Road Closure	3	3	9	2	18	
Communication Failure	2	3	6	1	6	
SCADA Failure	2	3	6	0	0	
Computer Failure	1	3	3	0	0	

Location: Purchasing

Administration Building

Date of Analysis: April 1999

Reviewed/Updated: December 2017

Hazard Assessment				Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight	
Туре	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	3	18	
Forest Fire	2	2	4	3	12	
Severe Storm	3	2	6	3	18	
High Winds (70+mph)	2	2	4	3	12	
Heavy Snow	3	2	6	3	18	
Avalanche	1	3	3	2	6	
Landside	1	3	3	2	6	
Flood	3	2	6	3	18	
Drought	2	1	2	1	2	
Hurricane	0	2	0	0	0	
Man-made Events						
Contamination	2	3	6	0	0	
Waterborne Disease	1	3	3	0	0	
Fire/Arson	2	3	6	1	6	
Loss of Key Staff	2	2	4	0	0	
Fuel Shortage	2	2	4	2	8	
Dam Failure	2	3	6	0	0	
Terrorism/Sabotage	2	3	6	2	12	
Canal Failure	3	3	9	0	0	
Chemical Spill	2	3	6	2	12	
Wastewater Spill	3	3	9	0	0	
Technological Events						
Power Outage	3	3	9	2	18	
Natural Gas Outage	2	3	6	1	6	
HVAC Failure	2	3	6	1	6	
Road Closure	3	3	9	2	18	
Communication Failure	2	3	6	3	18	
SCADA Failure	2	3	6	0	0	
Computer Failure	1	3	3	1	3	

Location: Sewage Pump Stations

Date of Analysis: June 18, 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerabilit	y Analysis
Hazard	Probability of	Reaction	Hazard	System	Weight
Туре	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	2	3	6	3	18
Forest Fire	2	2	4	3	12
Severe Storm	3	2	6	3	18
High Winds (70+mph)	2	2	4	3	12
Heavy Snow	3	2	6	3	18
Avalanche	1	3	3	1	3
Landside	1	3	3	1	3
Flood	3	2	6	3	18
Drought	2	1	2	0	0
Hurricane	0	2	0	0	0
Man-made Events					
Contamination	2	3	6	0	0
Waterborne Disease	1	3	3	0	0
Fire/Arson	2	3	6	3	18
Loss of Key Staff	2	2	4	1	4
Fuel Shortage	2	2	4	3	12
Dam Failure	2	3	6	0	0
Terrorism/Sabotage	2	3	6	3	18
Canal Failure	3	3	9	0	0
Chemical Spill	2	3	6	0	0
Wastewater Spill	3	3	9	0	0
2,				:4	
Technological Events					
Power Outage	3	3	9	2	18
Natural Gas Outage	2	3	6	0	0
HVAC Failure	2	3	6	1	6
Road Closure	3	3	9	3	27
Communication Failure	2	3	6	3	18
SCADA Failure	2	3	6	3	18
Computer Failure	1	3	3	0	0

Location: Snowshoe Thompson Ditch No. 1

Alpine County

Date of Analysis: April 12, 1999

Reviewed/Updated: December 2017

Hazard Assessment	Vulnerabili	Vulnerability Analysis			
Hazard	Probability of	Reaction	Hazard	System	Weight
Type	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	2	3	6	2	12
Forest Fire	2	2	4	2	8
Severe Storm	3	2	6	3	18
High Winds (70+mph)	2	2	4	1	4
Heavy Snow	3	2	6	1	6
Avalanche	1	3	3	1	3
Landside	1	3	3	3	9
Flood	3	2	6	3	18
Drought	2	1	2	1	2
Hurricane	0	2	0	0	0
Man-made Events					
Contamination	2	3	6	1	6
Waterborne Disease	1	3	3	1	3
Fire/Arson	2	3	6	2	12
Loss of Key Staff	2	2	4	1	4
Fuel Shortage	2	2	4	0	0
Dam Failure	2	3	6	0	0
Terrorism/Sabotage	2	3	6	3	18
Canal Failure	3	3	9	3	27
Chemical Spill	2	3	6	0	0
Wastewater Spill	3	3	9	0	0
Technological Events					
Power Outage	3	3	9	0	0
Natural Gas Outage	2	3	6	0	0
HVAC Failure	2	3	6	0	0
Road Closure	3	3	9	1	9
Communication Failure	2	3	6	2	12
SCADA Failure	2	3	6	0	0
Computer Failure	1	3	3	0	0

Location: Tahoe Keys Force Main

Date of Analysis: April 19, 1999

Reviewed/Updated: December 2017

Hazard Assessment					Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight		
Туре	Occurrence	Factor	Factor	Impact			
Natural Events							
Earthquake	2	3	6	2	12		
Forest Fire	2	2	4	0	0		
Severe Storm	3	2	6	1	- 6		
High Winds (70+mph)	2	2	4	0	0		
Heavy Snow	3	2	6	0	0		
Avalanche	1	3	3	0	0		
Landside	1	3	3	0	0		
Flood	3	2	6	1	6		
Drought	2	1	2	0	0		
Hurricane	0	2	0	0	0		
Man-made Events							
Contamination	2	3	6	0	0		
Waterborne Disease	1	3	3	0	0		
Fire/Arson	2	3	6	0	0		
Loss of Key Staff	2	2	4	0	0		
Fuel Shortage	2	2	4	0	0		
Dam Failure	2	3	6	0	0		
Terrorism/Sabotage	2	3	6	1	6		
Canal Failure	3	3	9	0	0		
Chemical Spill	2	3	6	0	0		
Wastewater Spill	3	3	9	0	0		
Technological Events							
Power Outage	3	3	9	0	0		
Natural Gas Outage	2	3	6	0	0		
HVAC Failure	2	3	6	0	0		
Road Closure	3	3	9	1	9		
Communication Failure	2	3	6	0	0		
SCADA Failure	2	3	6	0	0		
Computer Failure	1	3	3	0	0		

Location: Tallac Force Main

Date of Analysis: April 19, 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight	
Туре	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	2	12	
Forest Fire	2	2	4	0	0	
Severe Storm	3	2	6	1	6	
High Winds (70+mph)	2	2	4	0	0	
Heavy Snow	3	2	6	0	0	
Avalanche	1	3	3	0	0	
Landside	1	3	3	0	0	
Flood	3	2	6	0	0	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Man-made Events						
Contamination	2	3	6	0	0	
Waterborne Disease	1	3	3	0	0	
Fire/Arson	2	3	6	0	0	
Loss of Key Staff	2	2	4	0	0	
Fuel Shortage	2	2	4	0	0	
Dam Failure	2	3	6	0	0	
Terrorism/Sabotage	2	3	6	2	12	
Canal Failure	3	3	9	0	0	
Chemical Spill	2	3	6	0	0	
Wastewater Spill	3	3	9	0	0	
Technological Events						
Power Outage	3	3	9	0	0	
Natural Gas Outage	2	3	6	0	0	
HVAC Failure	2	3	6	0	0	
Road Closure	3	3	9	1	9	
Communication Failure	2	3	6	0	0	
SCADA Failure	2	3	6	0	0	
Computer Failure	1	3	3	0	0	

Location: Upper Dressler Ditch

Alpine County

Date of Analysis: April 12, 1999

Reviewed/Updated: December 2017

Hazard Assessment				Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight	
Type	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	2	12	
Forest Fire	2	2	4	1	4	
Severe Storm	3	2	6	1	6	
High Winds (70+mph)	2	2	4	1	4	
Heavy Snow	3	2	6	1	6	
Avalanche	1	3	3	1	3	
Landside	1	3	3	2	6	
Flood	3	2	6	3	18	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Man-made Events						
Contamination	2	3	6	0	0	
Waterborne Disease	1	3	3	0	0	
Fire/Arson	2	3	6	1	6	
Loss of Key Staff	2	2	4	1	4	
Fuel Shortage	2	2	4	0	0	
Dam Failure	2	3	6	0	0	
Terrorism/Sabotage	2	3	6	2	12	
Canal Failure	3	3	9	3	27	
Chemical Spill	2	3	6	0	0	
Wastewater Spill	3	3	9	0	0	
Technological Events						
Power Outage	3	3	9	0	0	
Natural Gas Outage	2	3	6	0	0	
HVAC Failure	2	3	6	0	0	
Road Closure	3	3	9	0	0	
Communication Failure	2	3	6	1	6	
SCADA Failure	2	3	6	0	0	
Computer Failure	1	3	3	0	0	

Location: Upper Truckee Force Main

Date of Analysis: April 19, 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerabil	ity Analysis
Hazard	Probability of	Reaction	Hazard	System	Weight
Туре	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	2	3	6	2	12
Forest Fire	2	2	4	0	0
Severe Storm	3	2	6	1	6
High Winds (70+mph)	2	2	4	0	0
Heavy Snow	3	2	6	0	0
Avalanche	1	3	3	0	0
Landside	1	3	3	0	0
Flood	3	2	6	1	6
Drought	2	1	2	0	0
Hurricane	0	2	0	0	0
Man-made Events					
Contamination	2	3	6	0	0
Waterborne Disease	1	3	3	0	0
Fire/Arson	2	3	6	0	0
Loss of Key Staff	2	2	4	0	0
Fuel Shortage	2	2	4	0	0
Dam Failure	2	3	6	0	0
Terrorism/Sabotage	2	3	6	2	12
Canal Failure	3	3	9	0	0
Chemical Spill	2	3	6	0	0
Wastewater Spill	3	3	9	0	0
Technological Events					
Power Outage	3	3	9	0	0
Natural Gas Outage	2	3	6	0	0
HVAC Failure	2	3	6	0	0
Road Closure	3	3	9	1	9
Communication Failure	2	3	6	0	0
SCADA Failure	2	3	6	0	0
Computer Failure	1	3	3	0	0

Location: Wastewater Treatment Plant

Date of Analysis: August 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight	
Type	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	3	3	9	3	27	
Forest Fire	3	2	6	2	12	
Severe Storm	2	2	4	2	8	
High Winds (70+mph)	3	2	6	2	12	
Heavy Snow	2	2	4	2	8	
Avalanche	1_	3	3	1	3	
Landside	1	2	2	1	2	
Flood	2	2	4	2	8	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Man-made Events		- de				
Contamination	2	3	6	0	0	
Waterborne Disease	2	3	6	0	0	
Fire/Arson	2	2	4	2	8	
Loss of Key Staff	2	3	6	3	18	
Fuel Shortage	2	1	2	1	2	
Dam Failure	1	3	3	1	3	
Terrorism/Sabotage	2	3	6	3	18	
Canal Failure	0	3	0	0	0	
Chemical Spill	2	3	6	1	6	
Wastewater Spill						
Technological Events						
Power Outage	3	3	9	1	9	
Natural Gas Outage	3	3	9	1	9	
HVAC Failure	2	3	6	1	6	
Road Closure	2	3	6	1	6	
Communication Failure	2	3	6	1	6	
SCADA Failure	2	3	6	1	6	
Computer Failure	2	3	6	1	6	

Location: Water Distribution, Primary Lines

Date of Analysis: April 19, 1999 Reviewed/Updated: December 2017

Hazard Assessment					Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight		
Туре	Occurrence	Factor	Factor	Impact			
Natural Events							
Earthquake	2	3	6	2	12		
Forest Fire	2	2	4	0	0		
Severe Storm	3	2	6	0	0		
High Winds (70+mph)	2	2	4	0	0		
Heavy Snow	3	2	6	0	0		
Avalanche	1	3	3	0	0		
Landside	1	3	3	1	3		
Flood	3	2	6	1	6		
Drought	2	1	2	0	0		
Hurricane	0	2	0	0	0		
Man-made Events							
Contamination	2	3	6	3	18		
Waterborne Disease	2	3	6	3	18		
Fire/Arson	2	3	6	0	0		
Loss of Key Staff	2	2	4	1	4		
Fuel Shortage	2	2	4	0	0		
Dam Failure	2	3	6	0	0		
Terrorism/Sabotage	2	3	6	3	18		
Canal Failure	3	3	9	0	0		
Chemical Spill	2	3	6	3	18		
Wastewater Spill	3	3	9	0	0		
Technological Events							
Power Outage	3	3	9	0	0		
Natural Gas Outage	2	3	6	0	0		
HVAC Failure	2	3	6	0	0		
Road Closure	3	3	9	1	9		
Communication Failure	2	3	6	0	0		
SCADA Failure	2	3	6	0	0		
Computer Failure	1	3	3	0	0		

Location: Water Distribution, Secondary

Date of Analysis: April 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerability Analysis		
Hazard	Probability of	Reaction	Hazard	System	Weight	
Type	Occurrence	Factor	Factor	Impact		
Natural Events						
Earthquake	2	3	6	1	6	
Forest Fire	2	2	4	0	0	
Severe Storm	3	2	6	0	0	
High Winds (70+mph)	2	2	4	0	0	
Heavy Snow	3	2	6	0	0	
Avalanche	1	3	3	0	0	
Landside	1	3	3	1	3	
Flood	3	2	6	1	6	
Drought	2	1	2	0	0	
Hurricane	0	2	0	0	0	
Man-made Events						
Contamination	2	3	6	3	18	
Waterborne Disease	2	3	6	3	18	
Fire/Arson	2	3	6	0	0	
Loss of Key Staff	2	2	4	1	4	
Fuel Shortage	2	2	4	0	0	
Dam Failure	2	3	6	0	0	
Terrorism/Sabotage	2	3	6	3	18	
Canal Failure	3	3	9	0	0	
Chemical Spill	2	3	6	3	18	
Wastewater Spill	3	3	9	0	0	
Technological Events						
Power Outage	3	3	9	0	0	
Natural Gas Outage	2	3	6	0	0	
HVAC Failure	2	3	6	0	0	
Road Closure	3	3	9	1	9	
Communication Failure	2	3	6	0	0	
SCADA Failure	2	3	6	0	0	
Computer Failure	1	3	3	0	0	

Location: Water Interties

Date of Analysis: April 19, 1999 Reviewed/Updated: December 2017

Hazard Assessment Vulnerability Analys					
Hazard	Probability of	Reaction	Hazard	System	Weight
Туре	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	2	3	6	1	6
Forest Fire	2	2	4	0	0
Severe Storm	3	2	6	0	0
High Winds (70+mph)	2	2	4	0	0
Heavy Snow	3	2	6	1	6
Avalanche	1	3	3	0	0
Landside	1	3	3	0	0
Flood	3	2	6	1	6
Drought	2	1	2	0	0
Hurricane	0	2	0	0	0
Man-made Events					
Contamination	1	3	3	1	3
Waterborne Disease	1	3	3	1	3
Fire/Arson	0	0	0	0	0
Loss of Key Staff	2	2	4	1	4
Fuel Shortage	0	0	0	0	0
Dam Failure	2	3	6	0	0
Terrorism/Sabotage	2	3	6	1	6
Canal Failure	3	3	9	0	0
Chemical Spill	_ 2	3	6	1	6
Wastewater Spill	3	3	9	0	0
			*		
Technological Events					
Power Outage	3	3	9	0	0
Natural Gas Outage	2	3	6	0	0
HVAC Failure	2	3	6	0	0
Road Closure	3	3	9	1	9
Communication Failure	2	3	6	0	0
SCADA Failure	2	3	6	0	0
Computer Failure	1	3	3	0	0

Location: Water Storage Tanks

Date of Analysis: June 18, 1999

Reviewed/Updated: December 20017

Hazard Assessment Vulnerability Analys					
Hazard	Probability of	Reaction	Hazard	System	Weight
Туре	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	2	3	6	3	18
Forest Fire	2	2	4	1	4
Severe Storm	3	2	6	0	0
High Winds (70+mph)	2	2	4	0	0
Heavy Snow	3	2	6	0	0
Avalanche	1	3	3	2	6
Landside	1	3	3	2	6
Flood	3	2	6	0	0
Drought	2	1	2	0	0
Hurricane	0	2	0	0	0
Man-made Events			-		
Contamination	2	3	6	3	18
Waterborne Disease	2	3	6	3	18
Fire/Arson	2	3	6	0	0
Loss of Key Staff	2	2	4	1	4
Fuel Shortage	2	2	4	1	4
Dam Failure	2	3	6	0	0
Terrorism/Sabotage	2	3	6	3	18
Canal Failure	3	3	9	0	0
Chemical Spill	2	3	6	0	0
Wastewater Spill	3	3	9	0	0
Technological Events					
Power Outage	3	3	9	2	18
Natural Gas Outage	2	3	6	0	0
HVAC Failure	2	3	6	0	0
Road Closure	2	3	9	1	9
Communication Failure	2	2	4	1	4
SCADA Failure	2	2	4	1	4
Computer Failure	1	3	3	0	0

Location: Wells

Date of Analysis: June 18, 1999 Reviewed/Updated: December 2017

Hazard Assessment				Vulnerability Analysis	
Hazard	Probability of	Reaction	Hazard	System	Weight
Туре	Occurrence	Factor	Factor	Impact	
Natural Events					
Earthquake	2	3	6	3	18
Forest Fire	2	2	4	2	8
Severe Storm	3	2	6	2	12
High Winds (70+mph)	2	2	4	2	8
Heavy Snow	3	2	6	2	12
Avalanche	1	3	3	0	0
Landside	1	3	3	0	0
Flood	3	2	6	1	6
Drought	2	1	2	1	2
Hurricane	0	2	0	0	0
Man-made Events					
Contamination	2	3	6	3	18
Waterborne Disease	2	3	6	3	18
Fire/Arson	2	3	6	3	18
Loss of Key Staff	2	2	4	1	4
Fuel Shortage	2	2	4	2	8
Dam Failure	2	3	6	0	0
Terrorism/Sabotage	2	3	6	3	18
Canal Failure	3	3	9	0	0
Chemical Spill	2	3	6	2	12
Wastewater Spill	3	3	9	2	18
Technological Events					
Power Outage	3	3	9	2	18
Natural Gas Outage	2	3	6	0	0
HVAC Failure	2	3	6	0	0
Road Closure	3	3	9	1	9
Communication Failure	2	3	6	3	18
SCADA Failure	2	3	6	3	18
Computer Failure	1	3	3	0	0

III. STPUD NATURAL HAZARD MITIGATION STRATEGY

A. Existing Authorities, Policies, Programs and Resources

The STPUD is a local utility agency with water and wastewater services. Its enabling legislation is the provisions of Section 9 of the "Public Utility District Act", approved May 31, 1921, as amended (Act 6391 of Deering's General Laws). STPUD has the authority to construct and operate works of improvement for water/wastewater related purposes; to execute related contracts, incur debt, and issue bonds for works of improvement; to fix rates, collect charges, and levy assessments for such purposes; and to acquire real property and related property rights such as easements and rights of way, including eminent domain authority if necessary. These core authorities provide STPUD a fundamental basis upon which to implement its hazard mitigation plan...

The STPUD policies are predominantly represented in its adopted STPUD Administrative Code (A codification of the Administration, Water, Sewer, Street Lighting and Groundwater Management Plan Ordinances of the STPUD. January 3, 2019) .These codes and standards set forth uniform requirements and enable the District to comply with all applicable State and Federal laws including the Clean Water Act of 1977, as amended, and the General Pretreatment Regulations (40 CFR Part 403).

By ordinance, the STPUD can establish regulations (codes) and standards and enforce compliance for any current and future changes that affect operations or project implementation. This includes any new improvements to be designed and constructed to withstand or be more resilient in responding to hazards.

The STPUD has a Capital Improvements Plan. This plan describes the infrastructure projects that are planned over the next ten (10) years to meet the needs of the water system and the wastewater system facilities that the Agency manages. These projects can take the form of pipelines, storage tanks, and treatment facilities, The projects are designed to meet regulatory requirements and to replace aging facilities. The Ten Year Financial Plan (Capital Improvement Plan) is modified each year to reflect changes in regulatory requirements and budget constraints. A diverse group of departments at STPUD supports Capital Projects and they include: Design Engineering, Construction Management, CAD/GIS, and Field Operations. Together, these departments ensure that infrastructure projects are implemented in compliance with regulatory requirements and industry standards.

In addition to the Capital Improvement Plan, the STPUD has several Strategic Plans approved by its Board of Directors listing strategic priorities for all aspects of the District's operations. The strategic priorities identify key initiatives related to water supply, sustainability, sanitation, and organizational effectiveness. These priorities were developed with the intent to routinely renew as necessary or as required by statute. Some of these strategic plans include: Urban Water Management Plan; Wastewater Treatment

Plant Master Plan (pending); Water System Optimization Plan, Wastewater Collection System Plan, and Alpine County Recycled Water Master Plan.

B. Administrative and Technical Mitigation Capabilities

Administration	Yes	STPUD's administrative capacity is more than adequate to meet mitigation capabilities.
Planning	Y	Planning is included through the Districts Engineering Department; Finance Department; Operations Department; Field Operations Department and the Information Technology Department
Mitigation Planning	Y	Planning is included through the Districts Engineering Department; Operations Department; and the Information Technology Department
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	Yes	The District has a fully staffed maintenance department with dedicated positions to keep facilities in proper order.
Mutual aid agreements	Yes	The District has mutual aid agreements with many neighboring agencies including, Tahoe City PUD, North Tahoe PUD, City of South Lake Tahoe, CSLT Fire Department, Lake Valley Fire Department; Incline Village GID; Lukins Brothers Water; Tahoe Keys Water; Round Hill GID; and Kingsbury GID.
		Is staffing adequate to enforce regulations?
Staff	Yes	Yes, the District has 115 full time employees that enforce all regulations.
Staff	Yes	Yes, the District has 115 full time employees that enforce all regulations. Is staff trained on bazards and mitigation?
Staff	Yes	Yes, the District has 115 full time employees that enforce all regulations. Is staff trained on hazards and mitigation? Yes, the District does hazard training annually. Is coordination between agencies and staff effective? Yes, the District participates in regularly scheduled interagency meetings with both local agencies, including the
		Yes, the District has 115 full time employees that enforce all regulations. Is staff trained on hazards and mitigation? Yes, the District does hazard training annually. Is coordination between agencies and staff effective? Yes, the District participates in regularly scheduled interagency meetings with both local agencies, including the City of South Lake Tahoe, and regional agencies such as the Forest Service, Lahontan WQCB. Staff to staff communication has been established with all agencies, and emergency response/hazard protocols are in place.
Chief Building Official	Yes N/A	Yes, the District has 115 full time employees that enforce all regulations. Is staff trained on bazards and mitigation? Yes, the District does hazard training annually. Is coordination between agencies and staff effective? Yes, the District participates in regularly scheduled interagency meetings with both local agencies, including the City of South Lake Tahoe, and regional agencies such as the Forest Service, Lahontan WQCB. Staff to staff communication has been established with all agencies, and emergency response/hazard protocols are in place. This is a City, County function and the District coordinates with this entity on an as-needed basis.
		Yes, the District has 115 full time employees that enforce all regulations. Is staff trained on bazards and mitigation? Yes, the District does hazard training annually. Is coordination between agencies and staff effective? Yes, the District participates in regularly scheduled interagency meetings with both local agencies, including the City of South Lake Tahoe, and regional agencies such as the Forest Service, Lahontan WQCB. Staff to staff communication has been established with all agencies, and emergency response/hazard protocols are in place. This is a City, County function and the District coordinates with

South Tahoe Public Utility District Local Hazard Mitigation Plan

Emergency Manager	Yes	The District has a risk manager that will act as an emergency manager during an emergency. Table top emergency exercises are practiced with multiple agencies every 5 years. STPUD also has a safety committee that meets monthly.
Community Planner STPUD coordinates with this entity on a	N/A n as-neede	The Tahoe Regional Planning Agency provides this function and dasis.
Civil Engineer	Yes	The District has an in house engineering department with a staff of 6 licensed engineers trained in all aspects of District functions
GIS Coordinator	Yes	The District has a drafting division that maintains the Districts GIS system. The group has coordinated with outside agencies during emergencies to provide mapping information.
		CORD I D
Technical	Yes	STPUD maintains technical engineering and operating capabilities to assess and mitigate risk, and when necessary, acquires outside resources in the form of consulting engineering and construction firms to help assess and mitigate hazards and provide plans and specifications for implementing mitigation projects.
Warning systems/services (Reverse 911, outdoor warning signals)	Yes	Facilities are manned or monitored on a 24 hour a day 7 day a week basis. The District also utilizes an answering service as backup and is part of reverse 911 local services. STPUD also utilizes a SCADA system for remote monitoring of operations throughout the District.
Hazard data and information	Yes	The District maintains a current SDS data base
Grant writing	Yes	The District has an in house grant writer. The District has utilized the opportunity to apply for both Disaster Funding and Mitigation Funding and continues to seek all funding sources that would help to implement mitigation goals and objectives.

How can these capabilities by expanded and improved to reduce risk? STPUD has incorporated natural and man-made hazard analysis into the Capital Improvement Planning process. As part of the evaluation process to establish a priority project list, the consequence of failure and probably of failure is used to calculate a total risk score as part of the priority project evaluation. This is a recent improvement in the capital improvement planning process to help reduce risks.

C. Fiscal Mitigation Capabilities

Funding Resources (See Descriptions Below):		
Capital improvements project funding	Yes	Funding source is included in
Authority to levy taxes for specific purposes	Yes	The District receives a small portion of local government taxes through an agreement with the Counties
Fees for water, sewer, gas, or electric services	Yes	Fees include funding of operations and capital improvements
Impact fees for new development	Yes	Impact fees are limited by the ordinances regulating new development in the Lake Tahoe Basin.
Storm water utility fee	No	
Incur debt through general obligation bonds and/or special tax bonds	No	The District has the capability to issue general obligation bonds but does not utilize this as a revenue source.
Incur debt through private activities	Yes	The District has obtained private low- interest loans for capital improvement projects
Community Development Block Grant	No	
Other federal funding programs	Yes	The District has been the recipient of FEMA/OES Disaster Funds and has a pending HMGP project;
State funding programs	Yes	State Revolving Loan funding; Department of Water Resources funding

How can these capabilities be expanded and improved to reduce risk? STPUD recognizes that expanding staff resources to pursue additional mitigation funding will help to implement mitigation measures more effectively. An additional grants staff member is proposed for the next fiscal year.

D. MITIGATION GOALS

The goals identified in the STPUD Local Hazard Mitigation Plan are to:

• Save lives and protect property.

South Tahoe Public Utility District Local Hazard Mitigation Plan

- Ensure adequate resources for continued operation.
- Accelerate recovery from disasters.
- Enable post-disaster funding.
- Reduce the impact of future disaster events.

The goals listed above are applicable to all hazards identified in this plan. The objectives of South Tahoe Public Utility District's Local Hazard Mitigation Plan have been formulated by these goals. In Section III.C, these objectives are listed and have been arranged to individually address each hazard.

E. PRIORITIZING MITIGATION MEASURES

In the event of a disaster, we have assessed our facilities and systems and determined a restoration priority list. This list will assist us in prioritizing which facilities/systems will have the greatest impact and allow for the highest level of continued operation.

District Facilities

Administration

Bijou, Ski Run, and Al Tahoe Force Mains

Booster Stations

Customer Service Operations

District EOC & Operations

Emergency Retention Basin

Export System A-Line

Export System B-Line

Export System C-Line

Fallen Leaf Lake Force Main

Fallen Leaf Lake Sewer System

Finance Division-Accounting

Fountain Shop

Gravity Sewer, Mainline Side (laterals)

Gravity Sewer, Mainline Trunk (mainline down street)

Harvey Channel

Harvey Place Reservoir

Information Systems

Indian Creek Reservoir

Johnson Boulevard Force Main

Luther Pass Pump Station

Maintenance Office and Buildings

On-farm System (Alpine County)

Phones

Pioneer Village Force Main

PRV Stations

Purchasing

Sewage Pump Stations

Snowshoe Ditch No. 1 (Alpine County)

Tahoe Keys Force Main

Tallac Force Main

Upper Dressler Ditch

Upper Truckee Force Main

Wastewater Treatment Plant

Water Distribution, Primary Lines (lines going down the street) Water Distribution,

Secondary Lines (service lines to individual properties)

Water Interties and Zone Isolation Valves

Water Storage Tanks

Wells

Facilities Restoration Priority List

Highe	st Priority = 1	Medium Priority =	= 2 Lowest Priority List =	= 3
Priori	ty 1			
	Water Tanks Wells Gravity Sewer – Mai Gravity Sewer – Mai Water Distribution – Bijou Force Main Upper Truckee Force Tahoe Keys / Al Tah Johnson Boulevard F Purchasing Wastewater Treatmer Booster Stations Sewage Pump Station SCADA System Phone System	n Trunk Line Primary Lines Main oe Force Main orce Main nt Plant		
	Maintenance Shop Radio Communicatio Water Distribution — Export System: A-Li Export System: B-Li Luther Pass Pump St Finance Division / A Emergency Retention Information Systems PRV's	Secondary Lines ne ne ation ccounting n Basin (ERB)		
Pr	iority 3			
	Customer Service Op Administration Build Water Interties Pioneer Village Force Fallen Leaf Lake For Fallen Leaf Lake Sev Export System: C-Lin Harvey Place Reserve Diamond Ditch	ling e Main ce Main ver System ne		

F. MITIGATION OBJECTIVES

Following is a list of objectives developed in conjunction with the overall goals of this plan. Each objective involves one or more actions designed to accomplish the objective. The objectives are organized by specific natural and man made hazards and are arranged in order of priority, as identified in the Natural Hazard Rating Table. The highest priority objectives and actions are listed first; the lowest priority objectives and actions listed last.

Wildland Fires

Objective #1: Minimize the threat to lives and property posed by the possibility of wildland fire within STPUD boundaries.

Action 1.1: Create defensible space by eliminating fuel sources within identified District areas subject to wildland fires. Cut and remove trees and vegetation adjacent to structures.

Timeframe: On-going. Funding: Funding required.

Staff: STPUD personnel, Contractor, U.S. Forest Service, and affected government

agencies.

Action 1.2: Install backup power at each water tank, pump, and booster station location. Needed to maintain communication and monitor tank levels with SCADA system, ensuring that pumps will activate, are running, and water levels remain sufficient for fire suppression in the event that power lines are destroyed.

Timeframe: On-going. Funding: Funding required.

Staff: STPUD staff, Contractor.

Action 1.3: Examine options for burying power lines to/from remote sources as additional power backup.

Timeframe: On-going.

Funding: Funding required.

Staff: STPUD staff, Contractor.

Action 1.4: Improve fire flows by a) increasing water delivery pipe size and b) increasing number of pumps and pump capacity.

Timeframe: On-going

Funding: Funding required.

Staff: STPUD staff, Contractor.

Action 1.5: Add new or upsize existing wells, water storage tanks, and install hydrants throughout service area to provide fire flow.

Timeframe: On-going

Funding: Funding required.

Staff: STPUD staff, Contractor.

Action 1.6: Partner with Fire Safety Council to protect District structures.

Timeframe: On-going.

Funding: No funding required at this time.

Staff: STPUD staff, Fire Safety Council staff.

Action 1.7: Determine high risk areas in close proximity to wildlands and improve water supply in those areas.

Timeframe: On-going.

Funding: Funding required.

Staff: STPUD staff.

Severe Storms

Objective #2: Minimize storm related damage from all types of severe storms that impact district facilities.

Action 2.1: Review snow removal, snow removal equipment, and snow storage and drainage capability. Review backup generator capacity and fuel storage and implement improvements

Timeframe: Ongoing

Funding: Funding required. Staff: STPUD staff, Contractor.

Action 2.2: Assess and remove hazard trees.

Timeframe: 3 years

Funding: Funding required. Staff: STPUD staff, Contractor.

Earthquakes

Objective #3: Minimize the threat to lives and property as a result of a possible earthquake.

Action 3.1: Inspect and evaluate all District facilities, including pipes, treatment and pumping structures, roads and dams for seismic stability. Where applicable, upgrade structures to withstand earthquake events.

Timeframe: Ongoing.

Funding: Funding required.

Staff: Outside contract specialists.

Action 3.2: Purchase emergency response equipment, such as pumps and hoses, to help improve effectiveness of response.

Timeframe: Ongoing

Funding: Funding required. Staff: STPUD staff, Consultant.

Floods / Seiche Wave

Objective #4: Minimize the threat to lives and property posed by the possibility of flood within STPUD jurisdiction or on property in Alpine County.

Action 4.1: Review recognized flood-prone areas and match to exposures of personnel, facilities and equipment. Review protection of collection system from I & I.

Timeframe: Ongoing

Funding: No funding required at this time.

Staff: Planning Department.

Action 4.2: Build a sufficient inventory of pumps, sandbags and related equipment to ensure an adequate supply to combat erosion during flood events. Develop a quick response team.

Timeframe: Ongoing.

Funding: Funding required. Staff: To be determined

Action 4.3: Establish a safety zone and prepare an evacuation plan in the event of seismic induced tsunami and/or seiche wave activity.

Timeframe: Ongoing.

Funding: Funding required. Staff: To be determined

Action 4.4: Consider structural improvements of those pump stations that are within 45 feet of the maximum lake level to resist wave impacts as these facilities are renovated.

Timeframe: Ongoing

Funding: No funding required at this time.

Staff: STPUD staff, Contractor.

Landslides

Objective #5: Reduce soil erosion and possible landslide occurrences within STPUD property jurisdiction.

Action 5.1: As part of the District Erosion Control Program, inspect road cuts and fills for signs of slope failure. If necessary, stabilize slopes.

Timeframe: On-going.

Funding: Funding may be required.

Staff: Internal work crews.

Action 5.2: Identify questionable hillsides. Construct "rock pens" and drill & anchor points, and provide cut and fill techniques for finished slopes at the angle of repose at District facilities.

Timeframe: Ongoing

Funding: Funding required.

Staff: Internal and external support.

Drought

Objective #6: Minimize the threat to the natural environment and property posed by the possibility of drought.

Action 6.1: Develop and distribute a Resident's guide to water conservation techniques.

Timeframe: Current and on-going.

Funding: Grant Funded.

Staff: Water Conservation Coordinator.

Action 6.2: Initiate landscaping rebates, commercial water saving programs, and incentive rebates for customer purchase of water saving devices.

Timeframe: Current and on-going.

Funding: Grant Funded.

Staff: Water Conservation Coordinator. **Action 6.3:** Improve back-up well capacity.

Timeframe: Ongoing

Funding: Funding required.

Staff: STPUD staff.

Avalanche

Objective #7: To diminish the threat to lives and property posed by the potential for avalanche by developing effective techniques of informing workers and the public on the level of avalanche danger within the STPUD's backcountry regions.

South Tahoe Public Utility District Local Hazard Mitigation Plan

Action 7.1: Educate District personnel on cold weather survival, avalanche survival techniques, and travel by skis and snowshoes.

Timeframe: On-going.

Funding: Funding required.

Staff: Search and Rescue employees, cold weather survival school, and ski resort personnel.

Action 7.2: Train additional personnel in the safe operation of the Districts Snow Cat vehicles and become a "mutual aid" resource.

Timeframe: On-going.

Funding: Funding required.

Staff: Vendor.

Action 7.3: Assess threat to District facilities and install additional protection where

appropriate.

Timeframe: On-going Funding: Funding required

Staff: STPUD staff

Security

Objective #8: To protect District infrastructure from security breeches.

Action 8.1: Perform a SCADA vulnerability assessment and add upgrades to improve security.

Timeframe: On-going. Funding: Funding required.

Staff: Consultant.

Action 8.2: Perform facility security assessment for 50+ out buildings to include lighting, fencing, CCTV, and intrusion alarms. Install components as time and cost allow for it.

Timeframe: Ongoing

Funding: Funding required.

Staff: Contractor.

Action 8.3: Perform a Business Network Vulnerability assessment and add upgrades to improve security

Timeframe: Ongoing

Funding: Funding required.

Staff: STPUD staff, Contractor.

G. IMPLEMENTING MITIGATION STRATEGIES

The STPUD Hazard Mitigation Plan is designed to function as an enhancement to preexisting plans, ordinance, rules and regulations.

Some of the mitigating actions are new and are not a part of any preexisting government requirement. The implementation of these action strategies will be contingent upon the necessary approvals from the appropriate governmental agencies. Implementation is also dependant on securing necessary funding from yet to be determined sources. STPUD will seek to secure funding for natural hazard mitigation through a variety of avenues including, but not limited to, consulting the Federal Emergency Management Agency's website for a comprehensive list of available federal and state natural hazard mitigation grant funding and federal mitigation programs.

We have placed a primary emphasis on implementing actions that provide the highest cost-to-benefit ratio. The greatest natural hazard threat to lives and property in our area is wildland fire. We have placed a high priority on mitigation activities that will reduce the threat of wildland fires in the District and provide the greatest benefit.

H. PLAN MAINTENANCE

STPUD's Local Hazard Mitigation Plan will be evaluated, at a minimum, every year to determine its continued effectiveness.

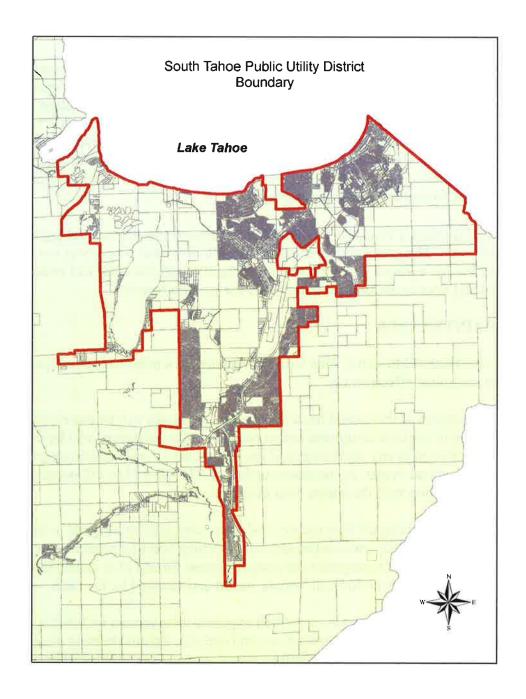
The annual evaluations of the natural hazard mitigation strategies will be examined to assess the number of projects completed and in progress. Also examined will be their effectiveness in relation to any prevailing land use requirements, and experience gained from dealing with actual events. A mandatory update to STPUD's Plan will occur every five years in conjunction with the annual plan evaluation process.

Responsibility for organizing all Plan updates and/or reviews will be assigned to the District's Engineering and Operations Departments. Timing will be coordinated with the El Dorado County Office of Emergency Services. The need for any plan update in excess of the fixed five-year update period will be determined and assessed by the OES.

South Tahoe Public Utility District is committed to public involvement within this hazard mitigation plan. For all plan review evaluations and updates, a public hearing may be held by the STPUD Board. The hearing will be announced and the public will be asked for comments concerning the plan.

In conjunction with El Dorado County, South Tahoe Public Utility District will strive to continue to develop the STPUD LHMP and utilize it as a capital projects planning tool. It is our goal to help the citizens of Lake Tahoe and Alpine County, and the customers of STPUD, to create a safer place to live, work, and play.

ATTACHMENT "A"



ADDENDUM A 2013 Appraisal of Selected Assets

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			76

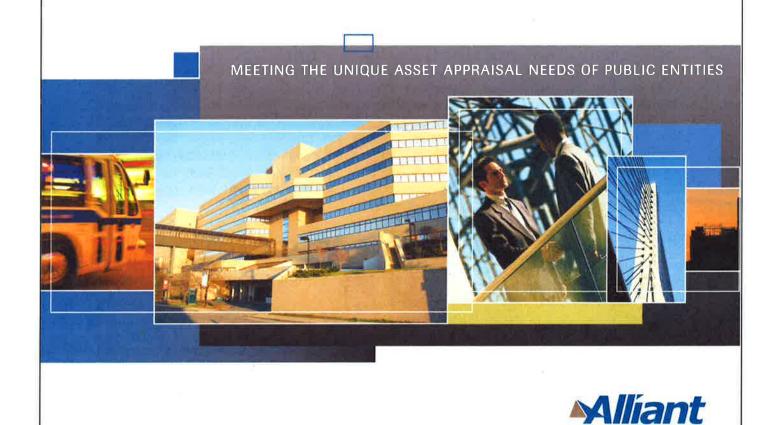
ALLIANT INSURANCE SERVICES

Appraisal Services

SELECTED ASSETS OF

South Tahoe Public Utility District

As of 9/05/2013



Appraisal Date: 9/05/2013

Alliant Insurance Services, Inc. 1301 Dove St, Suite 200 Newport Beach, CA 92660

RE: Appraisal Services for 1 structure for South Tahoe Public Utility District.

In response to your request and authorization, we have undertaken the investigations and analyses necessary to estimate the replacement cost new of the structures contained in the schedule of values for South Tahoe Public Utility District.

Scope of Work:

The scope of this assignment is to develop an opinion of value for replacement cost new of the structures for insurance purposes. The value of the land on which the improvements are attached is not included in this analysis. The most meaningful and reliable approach to determine replacement cost new for the insurable value is the cost approach.

Replacement cost new is the cost of creating a building having similar utility, using current standards of design and materials. It is not necessarily the cost of creating a replica of the existing structure if the improvements are constructed of outdated materials, technique, and design. Excluded from the appraisal are assets of intangible nature, records and drawings, inventory items, personal property and leased property. Insurable value is based on current base construction costs, excluding site improvements, indirect costs, land and entrepreneurial profit.

The services provided include close examination all structures on the list provided. All aspects of the structural improvements which include construction type, quality, size, and other attributes are considered in the analysis. Structure size is based on data provided by the client; the size data is verified during the building analysis. Sources for replacement cost information include, but are not limited to actual historical costs, files, databases, and industry price guides. The selected unit of comparison for the cost approach analysis is cost per square foot, which is consistent with how market participants typically evaluate construction costs.

A Detail Building Report for each structure is developed and provided in this report which indicates general building characteristics and the total replacement cost.

Fluctuations in Values:

It appears that most of the variances in previously reported values are the result of dated information. Other possible reasons for variances may be the result of inaccurate reporting of improvement size, quality or features. Additionally, previously reported values may have been calculated using an estimate average price per square foot, while not taking into consideration individual building characteristics, local and current cost adjustments for each structure.

Value Comparison Report:

A review of the Value Comparison Report and the individual building detail reports reflects some changes in the replacement cost values. The appraised values reflect the replacement cost of the building improvements only and do not include personal property or business interruption values.

The Value Comparison Report, found before the Appraisal Building Detail Report pages, identifies and explains the variance ratios and applicable changes of the structures' attributes including square footage and/or other features identified during the site inspections.

Overall, the differences in the estimated values for the structures appear to be primarily due to the updating of current replacement costs. The structures appear to be well built and well maintained properties with the overall value changes falling within a reasonable range.

We appreciate the opportunity to work with you on this project and hope that the findings and detailed information on the individual structures is helpful to you and the client. Please contact us if we can be of any further assistance.

Sincerely,

Alliant Appraisal Services

CERTIFICATION

We the undersigned do hereby certify that to the best of my knowledge and belief except as otherwise noted in this report:

- 1. We have previously appraised properties of this type and are competent to appraise this property.
- 2. That the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and is my personal, unbiased professional analyses, opinions, and conclusions.
- 3. That we have no present or prospective interest in the property that is the subject of this report, and I have no personal interest or bias with respect to the parties involved. The appraisal assignment was not based on a requested minimum valuation, a specific valuation, or the approval of a loan.
- 4. That our compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.
- 5. That, to the best of our knowledge and belief, the reported analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and the Standards of Professional Practice of the Appraisal Institute and the Uniform Standards of Professional Appraisal Practice (USPAP). Standards rules 2-2(c).
- 6. Alliant Appraiser, Wanda Gindlesperger has made on-site inspections of the properties in this report.
- 7. No one has provided significant professional assistance to Alliant Appraisal Services or the persons preparing this report.
- 8. That, the use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.

Alliant Appraisal Services

The client and intended user of this report are Alliant Insurance Services and their client. The purpose of this report is for use in insurance placement. A cost approach is utilized to develop the insurable value. This is part of the fee simple interest in the structure.

ASSUMPTIONS AND LIMITING CONDITIONS

To assist the reader in interpreting the report, such assumptions and limiting conditions as related to the properties considered in this report are set forth as follows:

SPECIAL ASSUMPTIONS AND LIMITING CONDITIONS

None

STANDARD ASSUMPTIONS AND LIMITING CONDITIONS

- 1. The conclusions and opinions expressed in this report apply to the date of the survey.
- 2. The appraiser assumes no responsibility for economic, physical or demographic factors which may affect or alter the opinions in this report if said economic, physical or demographic factors were not present as of the date of the letter of transmittal accompanying this report. The appraiser is not obligated to predict future political, economic or social trends.
- 3. Disclosure of the contents of this appraisal report is governed by the Code of Professional Ethics and the Standards of Professional Practice of the Appraisal Institute and the Uniform Standards of Professional Appraisal Practice (USPAP).
- 4. In preparing this report, the appraiser was required to rely on information furnished by other individuals or found in previously existing records and/or documents. Unless otherwise indicated, such information is presumed to be reliable. However, no warranty, either express or implied, is given by the appraiser for the accuracy of such information and the appraiser assumes no responsibility for information relied upon later found to have been inaccurate. No responsibility is assumed for errors or omissions, or for information not disclosed which might otherwise affect the valuation estimate. The appraiser reserves the right to make such adjustments to the analyses, opinions and conclusions set forth in this report as may be required by consideration of additional data or more reliable data that may become available.
- No opinion as to the title of the subject is rendered. The scope of this assignment is limited to the extent that ownership is not at issue.
- 6. The appraiser assumes no responsibility for hidden or non-apparent conditions of the structures that render the subject property more or less valuable. No responsibility is assumed for arranging for engineering, geologic or environmental studies that may be required to discover such hidden or non-apparent conditions.

- 7. The appraiser has not been provided any written information regarding the presence of any material or substance on or in any portion of the subject property or improvements thereon, which material or substance possesses or may possess toxic, hazardous and/or other harmful and/or dangerous characteristics.
- 8. Appraisers are not generally qualified to investigate or test for the presence of such materials or substances. The presence of such materials or substances may adversely affect the value of the subject property. The value estimated in this report is predicated on the assumption that no such material or substance is present on or in the subject property or in such proximity thereto that it would cause a loss in value. The appraiser assumes no responsibility for the presence of any such substance or material on or in the subject property, nor for any expertise or engineering knowledge required to discover the presence of such substance or material.
- 9. This report assumes the subject property is in compliance with all federal, state and local environmental laws, regulations and rules.
- 10. The subject property is assumed to be in full compliance with all applicable zoning and land use regulations and restrictions.
- 11. The property is assumed to have all required licenses, permits, certificates, consents or other legislative and/or administrative authority from any local, state or national government or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based.
- 12. No opinion is expressed as to the value of subsurface oil, gas or mineral rights or whether the property is subject to surface entry for the exploration or removal or such materials, except as is expressly stated.
- Maps, plats and exhibits included or referenced in this report are for illustration only to serve as an aid in visualizing matters discussed within the report. They should not be considered as surveys or relied upon for any other purpose, nor should they be removed from, reproduced or used apart from the report.
- 14. No opinion is intended to be expressed for matters which require legal expertise or specialized investigation or knowledge beyond that customarily employed by real estate appraisers.
- 15. The liability of the appraiser is limited to the client only and to the fee actually received. If any legal action is brought against the appraiser, and the appraiser prevails, the party initiating such legal action shall reimburse the appraiser for all costs, including legal fees, incurred by the appraiser.
- 16. Possession of this report, or a copy of it, does not carry with it the right of publication. Without the written consent of the appraiser, this report may not be used for any purpose by any person other than the party to whom it is addressed. In any event, this report may be used only with proper written qualification and only in its entirety for its stated purpose. Neither all, nor any part, of the contents

- of this report shall be disseminated to the public through advertising media, public relations, news media, sales media, or any public means of communication without prior written consent and approval of the appraiser.
- 17. The property that is the subject of this report is within a geographic area prone to earthquakes and other seismic disturbances. Except as specifically indicated in the report, no seismic or geologic studies have been provided to the appraiser concerning the geologic and/or seismic condition of the subject property. The appraiser assumes no responsibility for the possible effect on the subject property of seismic activity and/or earthquakes.
- 18. Testimony or attendance in court or at any other hearing is not required by reason or rendering this report, unless such arrangements are made a reasonable time in advance of said hearing. Further, unless otherwise indicated, separate arrangements shall be made concerning compensation for the appraiser's time to prepare for and attend any such hearing.
- 19. The appraiser finds no obvious evidence of structural deficiencies in any improvements located on the subject property. However, the appraiser assumes no responsibility for hidden defects or non-conformity with specific governmental requirements, such as fire, building and safety, earthquake or occupancy codes, unless inspections by qualified independent professionals or governmental agencies were provided to the appraiser. Further, the appraiser is not a licensed engineer or architect and assumes no responsibility for structural deficiencies not apparent to the appraiser at the time of inspection.
- 20. No termite, dry rot, wet rot, pest or other infestation report was made available to the appraiser. It is assumed that there is no related damage or infestation, unless otherwise stated.
- 21. No engineering survey has been made by the appraiser. Except as specifically stated, data relative to size and area of the subject property was taken from sources considered reliable and no encroachment of the subject properties considered to exist.
- 22. No soils or geological studies or reports were made available to the appraiser. It is therefore assumed that there are no soil conditions which negatively affect the subject property. As no hydrology studies were available for review, it is assumed that any drainage through or across the subject property would be contained, and the property under appraisement would not be subject to flooding.
- 23. The inspection of the subject property could not determine if asbestos was present in the building structure. No report was made available concerning the presence/absence of asbestos, and therefore the appraiser has not considered the presence of asbestos as a factor in this appraisal.
- 24. The Americans with Disabilities Act (ADA) became effective January 26, 1992. The appraiser has not made a specific compliance survey and analysis of the subject property to determine whether or not it is in conformity with the various detailed requirement of the ADA. It is possible that a compliance survey of the property, together with a detailed analysis of the requirements of the ADA, could

well reveal that the subject property is not in compliance with one or more of the requirements of the Act. If so, this fact could have a negative effect upon the value of the subject property. Since the appraisers have no direct evidence relating to this issue, possible non-compliance with the requirements of the ADA in estimating the value of the property has not been considered.

/alue Com	<u>parison</u>	Report
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Y DISTRICT

Appraisal Inspection Date 9/5/2013

Appraiser Name: Wanda Gindlesperger, SRA

						, .pp. 010	01 11441110. 11441	ida Gilialooporgoli, oli vi
Existing Real Property Insured Value)	Updated Real Property (Insured Value)	Prop	ge in Real erty (\$/%) red Value)	Existing Real Property per SF (Insured Value)	Updated Real Property per SF (Insured Value)	Existing Size (SF)	Updated Size (SF)	Notes
\$ 14,927,266	\$ 15,681,600	\$	754,334	N/A	N/A			This is the Harvey Place Reservoir
			5.05%					which has a capacity of 3,800
								acre-feet of water. Included in this
								capacity is the normal storage of
								3,000 acre-feet of reclaimed water
								and 800 acre-feet of flood water.
								There is an additional 250 acre-fee
								of dead storage. The updates
								replacement cost is higher than
								previously indicated . Sources for
								replacement cost information inclu-
								but are not limited to, water treatme
								plant cost databases, industry price
								guidelines, manufacturers' costs,
								plant modeling software and histor
								cost data.
								Client Escorts:
								Nancy Hussman / Human Resource
								Director
								Hal Bird / Land Application Mgr
\$ 14,927,266	\$ 15,681,600	\$	754,334		A SECTION		400	
			5.05%					
\$ 14,927,266	\$ 15,681,600	\$	754,334					
			5.05%					

SOUTH TAHOE PUBLIC UTILITY DISTRICT BUILDING DETAIL REPORT

As of: 9/5/2013

Page: 1

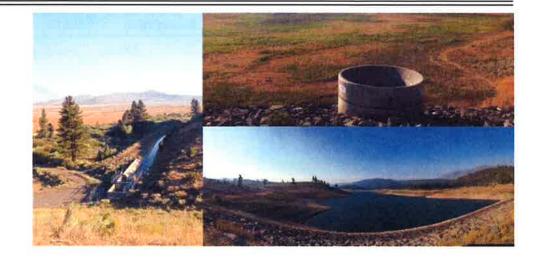
3LIC UTILITY DISTRICT

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96120

ERVOIR



VALUATION CONCLUSIONS

Replacement Cost New:

15,681,600

Exclusion Amount:

0

Replacement Cost Less Exclusions:

15,681,600

ervoir replaced the Indian Creek Reservoir as the District's storage reservoir in d to contain all District wastewater effluent as well as maximum flood flow. The litches to supply certain land owners with reclaimed wastewater from the summer released water is used for irrigation.

I in the Diamond Valley, Wade Valley, and Fredericksburg areas. Harvey Place D acre-feet of water. Included in this capacity is the normal storage of 3,000 800 acre-feet of flood water. There is an additional 250 acre-feet of dead

SOUTH TAHOE PUBLIC UTILITY DISTRICT BUILDING DETAIL REPORT

As of: 9/5/2013

Page: 2

ww.stpud.us/alpineco.html

rces Director

Page 1

Includes B & M

Real Property Trend Factor:

3.88%

Personal Property Trend Factor: 0.02%

cupancy	Construction	Auto Spklr	Year Built	Year Apprs		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
Q. FT.	Class: C	Yes	200	6 2006	EQ:	G	No	No	No	2013	\$10,313,985	\$2,088,919	\$0	\$12,402,904
ADMINISTRATION	MASONRY CONST	r/wood	ROOF		Flood	1: A	No	No	No	2014	\$10,714,168	\$2,089,337	\$0	\$12,803,505
RATION : 100%														
2. FT.	Class: B	No	1980	0 2005	EQ:	G	No	No	No	2013	\$674,252	\$770,619	\$0	\$1,444,871
OUMP STATION ICY PUMP STATION	ALL REINFORCED	CONC	RETE		Flood	1: A	No	No	No	2014	\$700,413	\$770,773	\$0	\$1,471,186
Q. FT. ILTER BUILDING JILDING : 0%	Class: S ALL STEEL	No	1968	3 2005	EQ: Flood		No No	No No	No No	2013	\$2,127,424 \$2,209,968	\$743,590 \$743,739	\$0 \$0	\$2,871,014 \$2,953,707
Q. FT. SECONDARY RY CLARIFIERS 0%	Class: B ALL REINFORCED	No CONC	1966 RETE	6 2005	EQ: Flood		No No	No No	No No	2013	\$7,278,574 \$7,560,983	\$807,827 \$807,989	\$0 \$0	\$8,086,401 \$8,368,972

Page 2 Includes B & M

Real Property Trend Factor:

3.88%

Personal Property Trend Factor: 0.02%

cupancy	Construction	Auto Spkir	Year Built		Zor	Real ie Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
۵. FT.	Class: C	No	196	6 2005	EQ: G	No	No	No	2013	\$469,052	\$579,095	\$0	\$1,048,147
UMP STATION	MASONRY CONS	T/WOOI	ROOF		Flood: A	No	No	No	2014	\$487,251	\$579,211	\$0	\$1,066,462
DING								2					
2. FT.	Class: C	No	198		EQ: G	No	No	No	2013	\$195,803	\$59,732	\$0	\$255,535
)RAGE BLDG. _Y FOR FILES BLDG.	MASONRY CONS	T/WOOI) ROOF		Flood: A	No	No	No	2014	\$203,400	\$59,744	\$0	\$263,144
а. FT.	Class: C	No	1966		EQ: G	No	No	No	2013	\$236,398	\$47,358	\$0	\$283,756
3ARAGE NCE BUILDING #1	MASONRY CONS	T/WOOL	ROOF		Flood: A	No	No	No	2014	\$245,570	\$47,367	\$0	\$292,937
Q. FT.	Class: C	No	1980	2005	EQ: G	No	No	No	2013	\$460,988	\$94,639	\$0	\$555,627
3ARAGE	MASONRY CONST	r/wood	ROOF		Flood: A	No	No	No	2014	\$478,874	\$94,658	\$0	\$573,532
ANCE BUILDING #2										* · · · - , · · ·	*,-20	**	¥, >

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

Personal Property Trend Factor:

3.88% 0.02%

\$301,549

\$310,420

\$0

\$0

January 27, 2014

ccupancy	Construction	Auto Spkir	Year Built	Year Apprs		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
۵. FT.	Class: C	No	198	0 2005	EQ:	G	No	No	No	2013	\$165,813	\$135,227	\$0	\$301,040
3ARAGE	MASONRY CONS	T/WOOE	ROOF	:	Flood	d: A	No	No	No	2014	\$172,247	\$135,254	\$0	\$307,501
ANCE BUILDING #3												, ,		, ,
2 1														
2. FT.	Class: C	No	198				No	No	No	2013	\$149,727	\$41,778	\$0	\$191,505
3ARAGE NICE BUILDING #4 - OR STORAGE	MASONRY CONS	T/WOOL	ROOF		Flood	1: A	No	No	No	2014	\$155,536	\$41,786	\$0	\$197,322
2 . FT.	Class: C	No	198		EQ:	G	No	No	No	2013	\$2,003,943	\$502,020	\$0	\$2,505,963
3ARAGE NCE BUILDING #5	MASONRY CONS	T/WOOL) ROOF	:	Flood	d: A	No	No	No	2014	\$2,081,696	\$502,120	\$0	\$2,583,816

No

No

No

No

No

2013

2014

\$228,251

\$237,107

\$73,298

\$73,313

page.

۵. FT.

RAGE BUILDING

Class: S

STORAGE BUILDING ALL STEEL

No

1995 2005 EQ: G

Flood: A

Page 4 Includes B & M

Real Property Trend Factor:

3.88%

Personal Property Trend Factor: 0.02%

Ω	n2%

January	27,	201	4
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ccupancy	Construction	Auto Spkir	Year Built			Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
λ. FT.	Class: B	No	2009	2005	EQ:	G	No	No	No	2013	\$103,140	\$78,334	\$0	\$181,474
NT PLANT SAMPLER	ALL REINFORCED	CONC	RETE		Flood	: A	No	No	No	2014	\$107,142	\$78,350	\$0	\$185,492
NT PLANT SAMPLER														
<u>.</u> . FT.	Class: B	No	1958	3 2005	FO:	G	No	No	No	2013	\$4,851,007	\$0	\$0	\$4,851,007
RIMARY CLARIFIER				2000	Flood		No	No	No	2014	\$5,039,226	\$0	\$0	\$5,039,226
: 0%														
Q. FT.	Class: C	No		2005			No	No	No	2013	\$807,266	\$543,095	\$0	\$1,350,361
COMPRESSOR	MASONRY CONST	7/WOOL	D ROOF		Flood	: A	No	No	No	2014	\$838,588	\$543,204	\$0	\$1,381,792
Q. FT.	Class: B	No	1959	2005	EQ:	G	No	No	No	2013	\$1,408,233	\$100,327	\$0	\$1,508,560
EQUILIZATION BED JILIZATION BASIN : 0%	ALL REINFORCED	CONC	RETE		Flood:	A	No	No	No	2014	\$1,462,872	\$100,347	\$0	\$1,563,219

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

3.88% Personal Property Trend Factor: 0.02%

ccupancy	Construction	Auto Spklr	Year Built			Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
Q. FT.	Class: B	No	1958	3 2005	EQ:	G	No	No	No	2013	\$8,173,626	\$1,134,550	\$0	\$9,308,176
AERATION BASIN A BASINS	ALL REINFORCED) CONC	RETE		Flood	d: A	No	No	No	2014	\$8,490,763	\$1,134,777	\$0	\$9,625,540
Q. FT.	Class: B	No	1958	3 2005			No No	No	No	2013	\$2,044,600	\$0	\$0	\$2,044,600
ONDS : 0%	ALL REINPORCEL	CONC	KEIE		Flood	I: A	No	No	No	2014	\$2,123,930	\$0	\$0	\$2,123,930
2. FT.	Class: B	No		3 2005			No	No	No	2013	\$1,930,778	\$851,235	\$0	\$2,782,013
PUMP STATION APING STATION	ALL REINFORCED) CONC	RETE		Flood	l: A	No	No	No	2014	\$2,005,692	\$851,405	\$0	\$2,857,097
2. FT.	Class: C	No	2009	2005	EO:	C	No	No	No	2013	¢552 920	¢977 2 <i>46</i>	¢a	¢1 420 47E
2UMP STATION ICY GENERATOR	MASONRY CONST				Flood		No	No	No No	2014	\$552,829 \$574,279	\$877,346 \$877,521	\$0 \$0	\$1,430,175 \$1,451,800

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Includes B & M

Real Property Trend Factor: Personal Property Trend Factor: 0.02%

3.88%

ccupancy	Construction	Auto Spkir	Year Built		Zon	Real e Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
). FT.	Class: C	No	1968	3 2005	EQ: G	No	No	No	2013	\$33,525	\$42,253	\$0	\$75,778
/ALVE HOUSE ICY RETENTION .LVE HOUSE)	MASONRY CONS	T/WOOL	ROOF		Flood: A	No	No	No	2014	\$34,826	\$42,261	\$0	\$77,087
SQ. FT.	Class: B	No		1 2005	EQ: G	No	No	No	2013	\$2,011,049	\$0	\$0	\$2,011,049
3ASIN ICY RETENTION	ALL REINFORCED) CONCI	RETE		Flood: A	No	No	No	2014	\$2,089,078	\$0	\$0	\$2,089,078
2. FT.	Class: S	No	1968	3 2005	EQ: G	No	No	No	2013	\$158,111	\$0	\$0	\$158,111
STORAGE BUILDING STORAGE	ALL STEEL				Flood: A	No	No	No	2014	\$164,246	\$0	\$0	\$164,246
), FT.	Class: D	No	1999	2005	EQ: G	No	No	No	2013	\$0	\$0	\$0	\$0
'ORTABLE OFFICE RAILER	ALL COMB (WOOD	FRAMI	≣)		Flood: A	No	No	No	2014	\$0	\$0	\$0	\$0

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

Personal Property Trend Factor: 0.02%

3.88%

January 27, 2014

scupancy	Construction	Auto Spklr	Year Y Built A			Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
FT.	Class: N	No	1995	2005	EQ:	G	No	No	No	2013	\$0	\$1,014,204	\$0	\$1,014,204
ICABLE					Floor	1: A	No	No	No	2014	\$0	\$1.014.407	\$0	\$1,014,407
:MERGENCY										2014	V O	ψ1,014,401	40	ψ1,σ14,4σ1

), FT.	Class: C	No	1960	2005	EQ:	G	No	No	No	2013	\$403,054	\$270,454	\$0	\$673,508
PUMP STATION REEK PUMP SEWER RION LOWER E	MASONRY CC	NST/WOOD	ROOF		Flood	: A	No	No	No	2014	\$418,692	\$270,508	\$0	\$689,200
FT.	Class: S	No	2003	2005	EQ:	G	No	No	No	2013	\$425,656	\$98,354	\$0	\$524,010
SLUDGE STORAGE	ALL STEEL				Flood	: A	No	No	No	2014	\$442,171	\$98,374	\$0	\$540,545

not map due to rmation

OR

2. FT.	Class: C	No	2004	2005 EQ: G	No	No	No	2013	\$6,587,515	\$2,185,636	\$0	\$8,773,151
310 BUILDING	MASONRY CO	NST/WOOD	ROOF	Flood: A	No	No	No	2014	\$6,843,111	\$2,186,073	\$0	\$9,029,184

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

Personal Property Trend Factor: 0.02%

3.88%

January 27, 2014

ccupancy	Construction	Auto Spklr	Year Built			Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
not map due to														
rmation												*****		****
2. FT.	Class: S	No	2004	2005	EQ:		No	No	No	2013	\$229,382	\$84,147	\$0	\$313,529
ORITE BUILDING	ALL STEEL				Flood	1: A	No	No	No	2014	\$238,282	\$84,164	\$0	\$322,446
not map due to														
FT.	Class: N/A	No	1961	2005	EQ:	G	No	No	No	2013	\$1,642,537	\$0	\$0	\$1,642,537
PROCESS PIPING OUND PROCESS I PLANT)					Flood	1: A	No	No	No	2014	\$1,706,267	\$0	\$0	\$1,706,267
). FT.	Class: S	No	1970	2005	EQ:	G	No	No	No	2013	\$171,228	\$161,117	\$0	\$332,345
DOSTER STATION LACK BART LIFT	ALL STEEL				Flood	l:	No	No	No	2014	\$177,872	\$161,149	\$0	\$339,021
not map due to														
2. FT.	Class: C	Yes	1968	2005	EQ:	G	No	No	No	2013	\$1,281,628	\$8,724,214	\$0	\$10,005,842
IFT STATION ASS LIFT STATION	MASONRY CONST	r/wood	ROOF		Flood	l:	No	No	No	2014	\$1,331,355	\$8,725,959	\$0	\$10,057,314

page.

: 0%

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor: Personal Property Trend Factor: 0.02%

3.88%

January 27, 2014

ccupancy	Construction	Auto Spklr	Year Built			Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
cision: ZIP Code														
). FT.	Class: C	No	1970	2005	EQ:	G	No	No	No	2013	\$412,559	\$235,003	\$0	\$647,562
.IFT STATION	MASONRY CONS	T/WOOI	ROOF		Floor	d:	No	No	No	2014	\$428,566	\$235,050	\$0	\$663,616
BEACH LIFT											, ,	,,	**	,,
not map due to rmation														
λ. FT.	Class: C	No	1970	2005	EQ:	G	No	No	No	2013	\$412,559	\$235,003	\$0	\$647,562
.IFT STATION REEK LIFT STATION	MASONRY CONS	T/WOOI	ROOF		Flood	d:	No	No	No	2014	\$428,566	\$235,050	\$0	\$663,616
not map due to														
). FT.	Class: C	No	1970	2005			No	No	No	2013	\$412,559	\$235,003	\$0	\$647,562
JIFT STATION CH LIFT STATION	MASONRY CONS	T/WOO[OROOF		Flood	i:	No	No	No	2014	\$428,566	\$235,050	\$0	\$663,616
not map due to mation														
). FT.	Class: C	No	1970	2005	EQ:	G	No	No	No	2013	\$412,559	\$235,003	\$0	\$647,562
.IFT STATION HARDSON LIFT	MASONRY CONS	T/WOOI	ROOF		Floor	i:	No	No	No	2014	\$428,566	\$235,050	\$0	\$663,616

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

January 27, 2014

Real Property Trend Factor:

Personal Property Trend Factor: 0.02%

3.88%

			Janu	iary Z	7, 2014	,							
ccupancy	Construction	Auto Spklr	Year Built	Year Apprs	Zon	Real e Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
not map due to					0.								
rmation													
). FT.	Class: D	No	197	0 2005	EQ: G	No	No	No	2013	\$412,559	\$238,503	\$0	\$651,062
JFT STATION	ALL COMB (WOOL	D FRAM	E)		Flood:	No	No	No	2014	\$428,566	\$238,551	\$0	\$667,117
Z LIFT STATION													
										13			
ld not map this ≀EET		_											
). FT.	Class: C	No	197	0 2005	EQ: G	No	No	No	2013	\$384,100	\$273,732	\$0	\$657,832
.IFT STATION -	MASONRY CONST	r/wood	ROOF	:	Flood:	No	No	No	2014	\$399,003	\$273,787	\$0	\$672,790
:YS LIFT STATION													
ld not map this													
2. FT.	Class: C	No	196	5 2005	EQ: G	No	No	No	2013	\$1,031,398	\$443,895	\$0	\$1,475,293
IFT STATION -	MASONRY CONST	I/WOOD	ROOF	:	Flood:	No	No	No	2014	\$1,071,416	\$443,984	\$0	\$1,515,400
RUCKEE LIFT SW END OF BARBRA													
ld not map this													

Includes B & M

Real Property Trend Factor:

Personal Property Trend Factor:

3.88% 0.02%

January 27, 2014

ccupancy	Construction		Year Built			Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
.FT.	Class: S	No	1970	2005	EQ:	G	No	No	No	2013	\$127,386	\$78,334	\$0	\$205,720
.IFT STATION -	ALL STEEL				Flood	i:	No	No	No	2014	\$132,329	\$78,350	\$0	\$210,679
CH LIFT STATION														
ld not map this														
.FT.	Class: S	No	1970	2005	EQ:	G	No	No	No	2013	\$127,386	\$78,334	\$0	\$205,720
.IFT STATION =	ALL STEEL				Flood	t:	No	No	No	2014	\$132,329	\$78,350	\$0	\$210,679
CH LIFT STATION														
ld not map this														
). FT.	Class: D	No		2005			No	No	No	2013	\$1,340,818	\$313,338	\$0	\$1,654,156
.IFT STATION -	ALL COMB (WOO	D FRAME	Ξ)		Flood	i: C	No	No	No	2014	\$1,392,842	\$313,401	\$0	\$1,706,243
! MOUNTAIN LIFT														
V. ET.	Ol o	<u> </u>	10-0	0005	F.						A. - 1 - 1 - 1	A		
). FT. .IFT STATION	Class: C MASONRY CONS	No T/MOOD		2005	EQ: Flood		No No	No No	No No	2013	\$154,710	\$261,115	\$0	\$415,825
JET STATION	IVINGUINKT CUNS	17VV UUD	ROUF		רוטטט	i. U	No	INO	No	2014	\$160,713	\$261,167	\$0	\$421,880

page.

)F BELLEVUE LIFT @ EL DORADO

Page 12
Includes B & M

Real Property Trend Factor:

Personal Property Trend Factor: 0.02%

3.88%

ccupancy	Construction		Year Built	Year Apprs	Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
ld not map this													
). FT.	Class: C	No	197	0 2005	EQ: G	No	No	No	2013	\$721,979	\$522,230	\$0	\$1,244,209
IFT STATION LIFT STATION #1	MASONRY CONS	T/WOO[O ROOF	=	Flood:	No	No	No	2014	\$749,992	\$522,334	\$0	\$1,272,326
ld not map this													
Σ. FT.	Class: C	No	199	6 2005	EQ: G	No	No	No	2013	\$447,308	\$256,761	\$0	\$704,069
.IFT STATION . STORAGE	MASONRY CONS	T/WOOI	ROOF	:	Flood:	No	No	No	2014	\$464,664	\$256,812	\$0	\$721,476
											ē		
ld not map this													
), FT.	Class: D	No	197	0 2005	EQ: G	No	No	No	2013	\$190,809	\$182,780	\$0	\$373,589
SENERATOR ATION #1 FOR)	ALL COMB (WOO	D FRAM	E)		Flood:	No	No	No	2014	\$198,212	\$182,817	\$0	\$381,029
ld not map this													

Includes B & M

Real Property Trend Factor:

3.88% Personal Property Trend Factor: 0.02%

January 27, 2014

				, –	.,								
scupancy	Construction	Auto Spkir	Year Built		Zon	Real e Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
). FT.	Class: B	No	1970	2005	EQ: G	No	No	No	2013	\$515,699	\$522,230	\$0	\$1,037,929
JFT STATION -	ALL REINFORCED	CONC	RETE		Flood:	No	No	No	2014	\$535,708	\$522,334	\$0	\$1,058,042
T STATION #2													
.FT.	Class: S	No	1970	2005	EQ: G	No	No	No	2013	\$151,442	\$161,117	\$0	\$312,559
IFT STATION LIFT STATION	ALL STEEL				Flood:	No	No	No	2014	\$157,318	\$161,149	\$0	\$318,467
Id not map this													
.FT.	Class: S	No	1970	2005	EQ: G	No	No	No	2013	\$151,442	\$161,117	\$0	\$312,559
IFT STATION E LIFT STATION	ALL STEEL				Flood:	No	No	No	2014	\$,157,318	\$161,149	\$0	\$318,467
ld not map this													
). FT.	Class: C	No	1970	2005	EQ: G	No	No	No	2013	\$515,699	\$417,784	\$0	\$933,483
JFT STATION LIFT STATION	MASONRY CONS	T/WOOI	D ROOF		Flood:	No	No	No	2014	\$535,708	\$417,868	\$0	\$953,576

January 27, 2014

Page 14 Includes B & M

Real Property Trend Factor:

3.88%

Personal Property

ty	Trend	Factor:	0.02%

scupancy	Construction	Auto Spkir	Year Built		Zone	Real Prop	Pers Prop	BI / Rents	<u>Year</u>	Real Property	Personal Property	BI / Rents	Totals
). FT.	Class: D	No	198	0 2005	EQ: G	No	No	No	2013	\$257,850	\$208,892	\$0	\$466,742
JFT STATION FT STATION	ALL COMB (WOOD) FRAM	E)		Flood:	No	No	No	2014	\$267,855	\$208,934	\$0	\$476,789
). FT.	Class: C	No	197	0 2005	EQ: G	No	No	No	2013	\$309,420	\$235,003	\$0	\$544,423
.IFT STATION VILLAGE SEWER ION	MASONRY CONST	100W	ROOF		Flood:	No	No	No	2014	\$321,425	\$235,050	\$0	\$556,475
). FT.	Class: D	No	199	7 2005	EQ: G	No	No	No	2013	\$360,989	\$208,892	\$0	\$569,881
.IFT STATION -	ALL COMB (WOOD	FRAM	E)		Flood:	No	No	No	2014	\$374,995	\$208,934	\$0	\$583,929
IFT STATION													
ld not map this													
Q. FT.	Class: D	No	1997	7 2005	EQ: G	No	No	No	2013	\$639,843	\$270,454	\$0	\$910,297
.IFT STATION -	ALL COMB (WOOD				Flood: C	No	No	No	2014	\$664,669	\$270,508	\$0	\$935,177

SA LIFT STATION

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

3.88%

Personal Property Trend Factor: 0.02%

January	27,	2014
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scupancy	Construction	Auto Spklr	Year Built	Year Apprs	Zone	Real Prop		BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
<u>.</u> λ. FT.	Class: D	No	1970	2005	EQ: G	No	No	No	2013	\$75,292	\$88,779	\$0	\$164,071
ENERATOR D CAMP OR BLDG	ALL COMB (WOO			2000	Flood:	No	No	No	2014	\$78,213	\$88,797	\$0	\$167,010
ld not map this	Olassi O	N	407/	2005	F2 0	N	N		2042	0.440.550	0005.000	40	A447 700
IFT STATION	Class: C MASONRY CONS	No T/WOOD	1970 ROOF		EQ: G Flood:	No No	No No	No No	2013	\$412,559 \$428,566	\$235,003 \$235,050	\$0 \$0	\$647,562 \$663,616
FT STATION													
ld not map this													
). FT.	Class: C	No	1970	2005	EQ: G	No	No	No	2013	\$319,922	\$271,547	\$0	\$591,469
.IFT STATION - MAIN	MASONRY CONS	T/WOOD	ROOF		Flood:	No	No	No	2014	\$332,335	\$271,601	\$0	\$603,936
EAF LAKE LIFT	la .												
not map due to rmation													

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor: Personal Property Trend Factor: 0.02%

3.88%

January 27, 2014

ld not map this

			Janu	ary 2	1, 20	114								
ccupancy	Construction	Auto Spkir	Year Built			Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI <i>I</i> Rents	Totals
. FT.	Class: B	No	197	2005	EQ:	G	No	No	No	2013	\$103,140	\$73,112	\$0	\$176,252
JET STATION EAF LAKE ELECTRIC ION #1 (ES #1)	ALL REINFORCED	CONC	RETE		Flood	l:	No	No	No	2014	\$107,142	\$73,127	\$0	\$180,269
ld not map this														
. FT.	Class: B	No		2005			No	No	No	2013	\$103,140	\$73,112	\$0	\$176,252
JET STATION EAF LAKE ELECTRIC ION #2 (ES #2)	ALL REINFORCED	CONC	KEIE		Flood		No	No	No	2014	\$107,142	\$73,127	\$0	\$180,269
ld not map this														
. FT.	Class: B	No	1970	2005	EQ:	G	No	No	No	2013	\$103,140	\$73,112	\$0	\$176,252
IFT STATION EAF LAKE ELECTRIC ION #3 (ES #3)	ALL REINFORCED	CONC	RETE		Flood	:	No	No	No	2014	\$107,142	\$73,127	\$0	\$180,269
0.000														

Includes B & M

Real Property Trend Factor:

Personal Property Trend Factor:

3.88% 0.02%

\$176,252

\$180,269

\$0

\$0

January 27, 2014

scupancy	Construction	Auto Spkir	Year Built	Year Apprs		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
. FT.	Class: B	No	197	0 2005	EQ:	G	No	No	No	2013	\$103,140	\$73,112	\$0	\$176,252
JIFT STATION EAF LAKE ELECTRIC ION #5 (ES #5)	ALL REINFORCED	CONC	RETE		Flood	:	No	No	No	2014	\$107,142	\$73,127	\$0	\$180,269
. FT. JET STATION	Class: B	No	197	0 2005	EQ:		No No	No	No	2013	\$103,140	\$73,112	\$0	\$176,252
EAF LAKE ELECTRIC ION #6 (ES #6)	ALL REINFORGED	CONC	KEIL		riood	•	NO	No	No	2014	\$107,142	\$73,127	\$0	\$180,269
.FT.	Class: B	No	197	0 2005	EQ:		No	No	No	2013	\$103,140	\$73,112	\$0	\$176,252
IFT STATION EAF LAKE ELECTRIC ION #7 (ES #7)	ALL REINFORCED	CONC	RETE		Flood	:	No	No	No	2014	\$107,142	\$73,127	\$0	\$180,269

ION #8 (ES #8)

EAF LAKE ELECTRIC

Class: B

No

ALL REINFORCED CONCRETE

1970 2005 EQ: G

Flood:

No

No

No

No

No

No

2013

2014

\$103,140

\$107,142

\$73,112

\$73,127

page.

. FT.

.IFT STATION

Page 18 Includes B & M

Real Property Trend Factor:

3.88%

Personal Property Trend Factor: 0.02%

scupancy	Construction		Year Built			Zone	Real Prop	Pers Prop	BI / Rents	<u>Year</u>	Real Property	Personal Property	BI / Rents	Totals
.FT.	Class: B	No	197	0 2005	EQ:	G	No	No	No	2013	\$103,140	\$73,112	\$0	\$176,252
.IFT STATION EAF LAKE ELECTRIC ION #9 (ES #9)	ALL REINFORCED	CONC	RETE		Flood	l:	No	No	No	2014	\$107,142	\$73,127	\$0	\$180,269
.FT.	Class: B	No	1970	0 2005	EQ:	G	No	No	No	2013	\$103,140	\$73,112	\$0	\$176,2 5 2
/ACUUM VALVE	ALL REINFORCED				Flood		No	No	No	2014	\$107,142	\$73,127	\$0	\$180,269
EAF LAKE VACUUM ATION #3														
ld not map this														
, FT.	Class: B	No	1970	2005	EQ:	G	No	No	No	2013	\$103,140	\$73,112	\$0	\$176,252
ACUUM VALVE	ALL REINFORCED	CONC	RETE		Flood	:	No	No	No	2014	\$107,142	\$73,127	\$0	\$180,269
EAF LAKE VACUUM ATION #4								×						
ld not map this														

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

3.88% Personal Property Trend Factor: 0.02%

January 27, 2014

ccupancy	Construction	Auto Spklr	Year Built	Year Apprs		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
. FT.	Class: C	No	197	0 2005	EQ:	G	No	No	No	2013	\$103,140	\$73,112	\$0	\$176,252
/ACUUM VALVE	MASONRY CONS	T/WOOE	ROOF	:	Flood	i:	No	No	No	2014	\$107,142	\$73,127	\$0	\$180,269
EAF LAKE VACUUM ATION #5														
Id not map this														
. FT.	Class: B	No	197				No	No	No	2013	\$103,140	\$73,112	\$0	\$176,252
/ACUUM VALVE	ALL REINFORCED	CONC	RETE		Flood	:	No	No	No	2014	\$107,142	\$73,127	\$0	\$180,269
EAF LAKE VACUUM ATION #6														
.FT.	Class: B	No		2005			No	No	No	2013	\$103,140	\$73,112	\$0	\$176,252
/ACUUM VALVE	ALL REINFORCED	CONC	RETE		Flood	:	No	No	No	2014	\$107,142	\$73,127	\$0	\$180,269
EAF LAKE VACUUM ATION #7														
. FT.	Class: B	No		2005			No	No	No	2013	\$103,140	\$73,112	\$0	\$176,252
/ACUUM VALVE	ALL REINFORCED	CONC	RETE		Flood	:	No	No	No	2014	\$107,142	\$73,127	\$0	\$180,269

EAF LAKE VACUUM ATION #8

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Real Property Trend Factor:

3.88%

Personal Property Trend Factor: 0.02%

January 2	27, 2014
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ccupancy	Construction	Auto Spklr	Year Built	Year Apprs		Zone	Real Prop	Pers Prop	BI / Rents	<u>Year</u>	Real Property	Personal Property	BI / Rents	Totals
·														
). FT.	Class: S ALL STEEL	No	197	8 2005	EQ: Flood:		No	No No	No	2013	\$309,420	\$104,446	\$0	\$413,866
PUMPING STATION WELL	ALL STEEL				F1000:		No	No	No	2014	\$321,425	\$104,467	\$0	\$425,892
ld not map this														
). FT.	Class: C	No	199:	2 2005	EQ:	G	No	No	No	2013	\$294,305	\$256,864	\$0	\$551,169
PUMPING STATION WELL #2	MASONRY CONS	T/WOO!	O ROOF		Flood:		No	No	No	2014	\$305,724	\$256,915	\$0	\$562,639
Id not map this														
), FT.	Class: S	No	1956	2005	EQ:		No	No	No	2013	\$77,355	\$9,576	\$0	\$86,931
STORAGE BUILDING STORAGE	ALL STEEL				Flood:		No	No	No	2014	\$80,356	\$9,578	\$0	\$89,934
ld not map this ≀EET														

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

Personal Property Trend Factor:

3.88% 0.02%

\$530,359

January 27, 2014

Flood:

PUMPING STATION MASONRY CONST/WOOD ROOF

DD WELL #2

				, -	-,									
cupancy	Construction	Auto Spkir	Year Built		Z	Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
). FT.	Class: C	No	1957	7 2005	EQ:	G	No	No	No	2013	\$51,570	\$10,445	\$0	\$62,015
² UMPING STATION CK WELL #1 & #2	MASONRY CONS	T/WOO[ROOF		Flood:		No	No	No	2014	\$53,571	\$10,447	\$0	\$64,018
Ω FT.	Class: D	No	1981	1 2005	EQ: (G	No	No	No	2013	\$352,945	\$291,802	\$0	\$644,747
PUMPING STATION WELL	ALL COMB (WOO	D FRAM	E)		Flood:		No	No	No	2014	\$366,639	\$291,860	\$0	\$658,499
ld not map this														
≀. FT.	Class: C	No	1960	2005	EQ: (G	No	No	No	2013	\$979,936	\$382,662	\$0	\$1,362,598
PUMPING STATION IB WELL	MASONRY CONS	T/WOOD	ROOF		Flood:		No	No	No	2014	\$1,017,958	\$382,739	\$0	\$1,400,697
). FT.	Class: C	No	2004	2005	EQ: (G	No	No	No	2013	\$309,420	\$208,892	\$0	\$518,312

No

2014

\$321,425

\$208,934

Includes B & M

Real Property Trend Factor:

3.88%

January 27, 2014 Personal Property Trend Factor: 0.02%

ccupancy	Construction	Auto Spklr	Year Built			Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
). FT.	Class: C	No	1966	2005	EQ:	G	No	No	No	2013	\$206,280	\$104,446	\$0	\$310,726
PUMPING STATION ELL #2	MASONRY CONS	T/WOOL	ROOF		Floor	d:	No	No	No	2014	\$214,284	\$104,467	\$0	\$318,751

). FT.	Class: C	No	1974	2005 EQ: G	No	No	No	2013	\$0	\$0	\$0	\$0
PUMPING STATION	MASONRY CO	NST/WOOD	ROOF	Flood:	No	No	No	2014	\$0	\$0	\$0	\$0
VENUE WELL												,

ld not map this

₹EET

λ. FT.	Class: C	No	1961	2005 EQ: G	No	No	No	2013	\$154,710	\$52,223	\$0	\$206,933
PUMPING STATION	MASONRY CON	IST/WOOD	ROOF	Flood:	No	No	No	2014	\$160.713	\$52,233	\$0	\$212,946
A VIEW WELL									*****	,,	*-	,,

ld not map this

). FT.	Class: D	No	1994	2005 E	Q: G	No	No	No	2013	\$412,559	\$208,892	\$0	\$621,451
PUMPING STATION	ALL COMB (WC	OD FRAME)		FI	od:	No	No	No	2014	\$428,566	\$208.934	\$0	\$637.500
MELL										¥ 1.20,000	+ ,	**	400 1,000

Includes B & M

Real Property Trend Factor: Personal Property Trend Factor: 3.88% 0.02%

January 27, 2014

Auto Real BI/ Real Personal BI/ Year Year Pers Construction ccupancy **Built Apprs Property Totals** Spklr Zone Prop Prop Rents Year **Property** Rents Class: D No 1990 2005 EQ: G 2013 No No No \$21,992 \$18,037 \$0 \$40,029 PUMPING STATION ALL COMB (WOOD FRAME) Flood: No No No 2014 \$22,845 \$18,041 \$0 \$40,886 **VELL** Q. FT. Class: D 1994 2005 EQ: G No 2013 \$1,495,528 \$313,338 \$0 \$1,808,866 No No No ²UMPING STATION ALL COMB (WOOD FRAME) Flood: C No No No 2014 \$1,866,955 \$1,553,554 \$313,401 \$0 **ELD WELL** : 0%). FT. Class: C No 2010 2005 EQ: G No No 2013 \$2,503,095 \$282,384 \$2,785,479 No \$0 **2UMPING STATION** MASONRY CONST/WOOD ROOF Flood: No No Νo 2014 \$2,600,215 \$282,440 \$0 \$2,882,655 EAD WELL #3). FT. Class: D No 1999 2005 EQ: G No 2013 \$214,932 \$412,117 No No \$197,185 \$0 **VELL** ALL COMB (WOOD FRAME) Flood: No No No 2014 \$420,495 \$223,271 \$197,224 \$0 cision: ZIP Code

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor: Personal Property Trend Factor: 0.02%

3.88%

ccupancy	Construction	Auto Spklr	Year Built	Year Apprs		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
). FT.	Class: D	No	194	6 2005	EQ:	G	No	No	No	2013	\$103,140	\$81,962	\$0	\$185,102
VELL	ALL COMB (WOOL	FRAM	IE)		Floor	d:	No	No	No	2014	\$107,142	\$81,978	\$0	\$189,120
). FT.	Class: D	No	199	9 2005	EQ:	G	No	No	No	2013	\$0	\$0	\$0	\$0
PUMPING STATION WELL - OFFLINE	ALL COMB (WOOL				Flood		No	No	No	2014	\$0	\$0	\$0	\$0
), FT.	Class: C	No		5 2005			No	No	No	2013	\$154,710	\$62,668	\$0	\$217,378
PUMPING STATION OOSTER STATION	MASONRY CONST	17WOOL	KOOF		Flood	1: C	No	No	No	2014	\$160,713	\$62,681	\$0	\$223,394
₹. FT.	Class: C	No	196	5 2005	EQ:	G	No	No	No	2013	\$206,280	\$94,001	\$0	\$300,281
PUMPING STATION VE BOOSTER	MASONRY CONST	r/wooe	ROOF		Flood	1: C	No	No	No	2014	\$214,284	\$94,020	\$0	\$308,304

Includes B & M

Real Property Trend Factor:

3.88% Personal Property Trend Factor: 0.02%

January 27, 2014

scupancy	Construction	Auto Spkir	Year Built	Year Apprs	Zon	Real e Prop	Pers Prop		Year	Real Property	Personal Property	BI / Rents	Totals
λ. FT.	Class: C	No	196	5 2005	EQ: G	No	No	No	2013	\$120,534	\$94,659	\$0	\$215,193
PUMPING STATION MOUNTAIN STATION	MASONRY CONS	T/WOOI	O ROOF		Flood; C	No	No	No	2014	\$125,211	\$94,678	\$0	\$219,889
ld not map this													
). FT.	Class: C	No	201		EQ: G	No	No	No	2013	\$177,570	\$1,121,778	\$0	\$1,299,348
PUMPING STATION SOOSTER STATION	MASONRY CONS	T/WOOI	O ROOF		Flood: C	No	No	No	2014	\$184,460	\$1,122,002	\$0	\$1,306,462
. FT.	Class: C	No	1970		EQ: G	No	No	No	2013	\$616,479	\$164,401	\$0	\$780,880
² UMPING STATION N BOOSTER	MASONRY CONS	T/WOOL	ROOF		Flood: C	No	No	No	2014	\$640,398	\$164,434	\$0	\$804,832
Id not map this REET	Class: S	No	1970	2005	EQ: G	No	No	No	2013	\$124,650	\$123,936	\$0	\$248,5 8 6
PUMPING STATION	ALL STEEL	110	157		Flood:	No	No	No	_				
EEK FILTER PLANT									2014	\$129,486	\$123,961	\$0	\$253,447

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300STER STATION

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Includes B & M

January 27, 2014

Real Property Trend Factor: Personal Property Trend Factor: 0.02%

3.88%

			Janu	aly Z	7, 2014								
ccupancy	Construction		Year Built		Zon	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
). FT.	Class: S	No	1961	2005	EQ: G	No	No	No	2013	\$52,601	\$62,668	\$0	\$115,269
PUMPING STATION SEK BOOSTER TANK STATION	ALL STEEL				Flood:	No	No	No	2014	\$54,642	\$62,681	\$0	\$117,323
. FT.	Class: S	No	1970	2005	EQ: G	No	No	No	2013	\$28,321	\$20,304	\$0	\$48,625
PUMPING STATION BOOSTER	ALL STEEL				Flood: C	No	No	No	2014	\$29,420	\$20,308	\$0	\$49,728
ld not map this													
λ. FT.	Class: D	No	1970	2005	EQ: G	No	No	No	2013	\$482,809	\$530,698	\$0	\$1,013,507
PUMPING STATION AIRSTRIPPER	ALL COMB (WOOL	D FRAMI	E)		Flood: C	No	No	No	2014	\$501,542	\$530,804	\$0	\$1,032,346

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Includes B & M

Real Property Trend Factor:

3.88%

Personal Property Trend Factor: 0.02%

January	27,	201	4
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cupancy	Construction	Auto Spklr	Year Built	Year Apprs		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
), FT,	Class: D	No	2000	2005	EQ:	G	No	No	No	2013	\$433,187	\$192,834	\$0	\$626,021
PUMPING STATION MOUNTAIN	ALL COMB (WOOL	D FRAM	E)		Floor	d: C	No	No	No	2014	\$449,995	\$192,873	\$0	\$642,868

ld not map this

). FT.	Class: C	No	1997	2005 EQ: G	No	No	No	2013	\$257,850	\$147,269	\$0	\$405,119
PUMPING STATION	MASONRY COM	NST/WOOD	ROOF	Flood: C	No	No	No	2014	\$267.855	\$147,298	¢n.	\$415,153
FROOSTER								2017	\$201,033	\$147,230	40	\$41J,1JJ

ld not map this

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. FT.	Class: D	No	1994	2005	EQ:	G	No	No	No	2013	\$16,695	\$13,971	\$0	\$30,666
PUMPING STATION	ALL COMB (WOO	D FRAME)			Flood	:	No	No	No	2014	\$17,343	\$13,974	\$0	\$31,317
BOOSTER STATION										2011	ψ17 ₁ 0-10	ψ10,31 <i>4</i>	40	φσι,σιι

Id not map this

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

3.88% Personal Property Trend Factor: 0.02%

January 27, 2014

	Spklr	Built	Apprs		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
Class: S	No	1970	2005	EQ:	G	No	No	No	2013	\$486,126	\$0	\$0	\$486,126
ALL STEEL				Flood	:	No	No	No	2014	\$504,988	\$0	\$0	\$504,988
Class: S	No	1970	2005			No	No	No	2013	\$2,124,434	\$0	\$0	\$2,124,434
ALL STEEL				Flood	:	No	No	No	2014	\$2,206,862	\$0	\$0	\$2,206,862
Class: S	No	1970	2005	EQ:	G	No	No	No	2013	\$333,960	\$0	\$0	\$333,960
ALL STEEL				Flood	:	No	No	No	2014	\$346,918	\$0	\$0	\$346,918
Class: S	No	1970	2005	EQ:	G	No	No	No	2013	\$1,547,098	\$0	\$0	\$1,547,098
ALL STEEL				Flood	:	No	No	No	2014	\$1,607,125	\$0	\$0	\$1,607,125
	Class: S ALL STEEL Class: S ALL STEEL	Class: S No ALL STEEL Class: S No Class: S No	Class: S No 1970 Class: S No 1970 ALL STEEL Class: S No 1970	Class: S No 1970 2005 ALL STEEL Class: S No 1970 2005 ALL STEEL	Class: S No 1970 2005 EQ: ALL STEEL Flood Class: S No 1970 2005 EQ: ALL STEEL Flood Class: S No 1970 2005 EQ:	Class: S No 1970 2005 EQ: G ALL STEEL Flood: Class: S No 1970 2005 EQ: G ALL STEEL Flood:	Class: S No 1970 2005 EQ: G No ALL STEEL Flood: No Class: S No 1970 2005 EQ: G No ALL STEEL Flood: No Class: S No 1970 2005 EQ: G No Class: S No 1970 2005 EQ: G No Class: S No 1970 2005 EQ: G No	Class: S No 1970 2005 EQ: G No No No ALL STEEL Flood: No No No ALL STEEL Flood: No No No Class: S No 1970 2005 EQ: G No No No Class: S No 1970 2005 EQ: G No No No Class: S No 1970 2005 EQ: G No No	Class: S	Class: S No 1970 2005 EQ: G No No No 2013 ALL STEEL Flood: No No No No 2014 Class: S No 1970 2005 EQ: G No No No No 2013 ALL STEEL Flood: No No No No 2014	Class: S No 1970 2005 EQ: G No No No No 2013 \$2,124,434 ALL STEEL Flood: No No No No 2013 \$333,960 ALL STEEL Flood: No No No No 2014 \$346,918 Class: S No 1970 2005 EQ: G No No No No 2014 \$346,918	Class: S No 1970 2005 EQ: G No No No No 2013 \$2,124,434 \$0 ALL STEEL Flood: No No No No 2014 \$2,206,862 \$0 Class: S No 1970 2005 EQ: G No No No No 2013 \$333,960 \$0 ALL STEEL Flood: No No No No 2014 \$346,918 \$0 Class: S No 1970 2005 EQ: G No No No No 2013 \$1,547,098 \$0	Class: S No 1970 2005 EQ: G No No No No 2013 \$2,124,434 \$0 \$0 \$0 ALL STEEL Flood: No No No 2014 \$2,206,862 \$0 \$0 Class: S No 1970 2005 EQ: G No No No No 2013 \$333,960 \$0 \$0 ALL STEEL Flood: No No No No 2014 \$346,918 \$0 \$0 Class: S No 1970 2005 EQ: G No No No No 2014 \$346,918 \$0 \$0

ld not map this

Includes B & M

Real Property Trend Factor:

Personal Property Trend Factor: 0.02%

3.88%

January 27, 2014

ccupancy	Construction	Auto Spkir	Year Built			Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
). FT.	Class: S	No	2010	2005	EQ:	G	No	No	No	2013	\$609,420	\$0	\$0	\$609,420
NK - GROUND L NATER TANK	ALL STEEL				Flood	d:	No	No	No	2014	\$633,065	\$0	\$0	\$633,065
ld not map this														
2. FT.	Class: S	No	2010	2005			No	No	No	2013	\$559,710	\$0	\$0	\$559,710
NK - GROUND AL. W WATER TANK	ALL STEEL				Flood	l:	No	No	No	2014	\$581,427	\$0	\$0	\$581,427
ld not map this														
Q. FT.	Class: S	No	1995	2005	EQ:		No	No	No	2013	\$614,673	\$0	\$0	\$614,673
NK - GROUND GAL. EAD WATER TANK	ALL STEEL				Flood	;	No	No	No	2014	\$638,522	\$0	\$0	\$638,522
ld not map this														
2. FT.	Class: S	No	1970	2005	EQ:	G	No	No	No	2013	\$347,710	\$0	\$0	\$347,710
NK - GROUND AL.	ALL STEEL				Flood	l:	No	No	No	2014	\$361,201	\$0	\$0	\$361,201

page.

! MOUNTAIN WATER

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Includes B & M

January 27, 2014

Real Property Trend Factor: Personal Property Trend Factor: 0.02%

3.88%

cupancy	Construction	Auto Spklr	Year Built	Year Apprs	Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
ld not map this													
2. FT.	Class: S	No	197	0 2005	EQ: G	No	No	No	2013	\$347,700	\$0	\$0	\$347,700
NK - GROUND AL. ! MOUNTAIN WATER	ALL STEEL				Flood:	No	No	No	2014	\$361,191	\$0	\$0	\$361,191
ld not map this													
Q. FT.	Class: S	No	200	9 2005	EQ: G	No	No	No	2013	\$495,071	\$0	\$0	\$495,071
NK - GROUND AL. *CLUB WATER	ALL STEEL				Flood:	No	No	No	2014	\$514,280	\$0	\$0	\$514,280
					5.								
Q. FT.	Class: S	No	197	0 2005	EQ: G	No	No	No	2013	\$696,226	\$0	\$0	\$696,226
ANK - GROUND AL. ; WATER TANKS (1)	ALL STEEL				Flood:	No	No	No	2014	\$723,240	\$0	\$0	\$723,240

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Includes B & M

January 27, 2014

Real Property Trend Factor:

3.88% Personal Property Trend Factor: 0.02%

ccupancy	Construction	Auto Spklr		Year Apprs		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
). FT.	Class: S	No	1998	3 2005	EQ:	G	No	No	No	2013	\$329,700	\$0	\$0	\$329,700
NK - GROUND AL.	ALL STEEL				Floor	d:	No	No	No	2014	\$342,492	\$0	\$0	\$342,492
AS VALLEY WATER														

ld not map this

2. FT.	Class: S	No	1970 2005 EQ: G	No	No	No	2013	\$773,549	\$0	\$0	\$773,549
NK - GROUND	ALL STEEL		Flood:	No	No	No	2014	\$803,563	\$0	\$0	\$803,563
AL.											

EK WATER TANK

). FT.	Class: S	No	1970 2005 EQ: G	No	No	No	2013	\$309,420	\$0	\$0	\$309,420
NK - GROUND AL.	ALL STEEL		Flood:	No	No	No	2014	\$321,425	\$0	\$0	\$321,425

WATER TANK

ld not map this

). FT.	Class: S	No	2003 2005 EQ: G	No	No	No	2013	\$329,700	\$0	\$0	\$329,700
NK - GROUND	ALL STEEL		Flood: C	No	No	No	2014	\$342,492	\$0	¢n.	\$342,492
AI							2017	407Z,73Z	φυ	ΨU	\$342,492

10UNTAIN WATER

Page 32 Includes B & M

Real Property Trend Factor:

3.88%

Personal Property Trend Factor: 0.02%

Januar	y 27, 2014
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scupancy	Construction		Year Built		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
p												2.0	
Q. FT.	Class: S	No	197	0 2005	EQ: G	No	No	No	2013	\$329,700	\$0	\$0	\$329,700
ANK - GROUND AL. `ER TANK	ALL STEEL				Flood:	No	No	No	2014	\$342,492	\$0	\$0	\$342,492
2. FT.	Class: S	No	197	0 2005	EQ: G	No	No	No	2013	\$2,062,797	\$0	\$0	\$2,062,797
NK - GROUND GAL. E WATER TANK #1	ALL STEEL				Flood:	No	No	No	2014	\$2,142,834	\$0	\$0	\$2,142,834
ld not map this													
Q. FT.	Class: S	No	1970	2005	EQ: G	No	No	No	2013	\$1,237,678	\$0	\$0	\$1,237,678
NNK - GROUND GAL. E WATER TANK #2	ALL STEEL				Flood:	No	No	No	2014	\$1,285,700	\$0	\$0	\$1,285,700
ld not map this REET													
Q, FT,	Class: S	No	1970	2005	EQ: G	No	No	No	2013	\$329,700	\$0	\$0	\$329,700
NK - GROUND AL. E WATER TANK #1	ALL STEEL				Flood:	No	No	No	2014	\$342,492	\$0	\$0	\$342,492

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

Personal Property Trend Factor:

3.88%

January 27, 2014

			ound	u. , _	, 2017								
ccupancy	Construction	Auto Spklr	Year Built		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
ld not map this													
Д. FT.	Class: S	No	197	0 2005	EQ: G	No	No	No	2013	\$329,700	\$0	\$0	\$329,700
ANK - GROUND AL. E WATER TANK #2	ALL STEEL				Flood:	No	No	No	2014	\$342,492	\$0	\$0	\$342,492
ld not map this													
2. FT.	Class: S	No	197	0 2005	EQ: G	No	No	No	2013	\$1,031,398	\$0	\$0	\$1,031,39
NK - GROUND GAL. ANK #1	ALL STEEL				Flood:	No	No	No	2014	\$1,071,416	\$0	\$0	\$1,071,410
ld not map this	-												
Q. FT.	Class: S	No	199		EQ: G	No	No	No	2013	\$515,699	\$0	\$0	\$515,69
ANK - GROUND AL. ANK #2	ALL STEEL				Flood:	No	No	No	2014	\$535,708	\$0	\$0	\$535,708

ld not map this

Page 34 Includes B & M

Real Property Trend Factor:

3.88%

Personal Property Trend Factor: 0.02%

January 27, 2014

ccupancy	Construction		Year Built			Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
). FT.	Class: C	No	200	0 2005	EQ:	G	No	No	No	2013	\$63,854	\$61,198	\$0	\$125,052
3ATELINE TANKS BUILDING	MASONRY CONS	T/WOOI	ROOF		Flood:		No	No	No	2014	\$66,332	\$61,210	\$0	\$127,542
ld not map this														
REET 1. FT.	Class: C	No	199	5 2005	EQ:	G	No	No	No	2013	\$28,384	\$27,321	\$0	\$55,705
/ALVE BUILDING	MASONRY CONST				Flood:		No	No	No	2014	\$29,485	\$27,327	\$0	\$56,811
). FT.	Class: S	No	2000	2005	EQ:		No	No	No	2013	\$309,420	\$0	\$0	\$309,420
NK - GROUND AL.	ALL STEEL				Flood:		No	No	No	2014	\$321,425	\$0	\$0	\$321,425
). FT.	Class: C	No	1980	2005	EQ:	G	No	No	No	2013	\$77,355	\$11,489	\$0	\$88,844
STORAGE BUILDING AVENUE STORAGE	MASONRY CONST	/WOOD	ROOF		Flood:	С	No	No	No	2014	\$80,356	\$11,491	\$0	\$91,847

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

Personal Property Trend Factor: 0.02%

3.88%

ccupancy	Construction		Year Built		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
2. FT. 3ARAGE 1 SHOP	Class: C MASONRY CONST	No F/WOOD		2005	EQ: G Flood: C	No No	No No	No No	2013	\$309,420 \$321,425	\$52,223 \$52,233	\$0 \$0	\$361,643 \$373,658
λ. FT.	Class: D	No	1980	2005	EQ: G	No	No	No	2013	\$44,045	\$12,413	\$0	\$56,458
STORAGE BUILDING VEHICLE	ALL COMB (WOOL) FRAMI			Flood: C	No	No	No	2014	\$45,754	\$12,415	\$0	\$58,169
). FT. PORTABLE OFFICE RADISE OFFICE	Class: D ALL COMB (WOOD	No FRAMI	1990 ≣)	2005	EQ: G Flood: C	No No	No No	No No	2013	\$145,854 \$151,513	\$21,422 \$21,426	\$0 \$0	\$167,276 \$172,939
). FT. STORAGE BUILDING STORAGE	Class: D ALL COMB (WOOD	No D FRAME		2005	EQ: G Fłood: C	No No	No No	No No	2013	\$103,140 \$107,142	\$20,300 \$20,304	\$0 \$0	\$123,440 \$127,446

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

January 27, 2014

Real Property Trend Factor:

3.88% Personal Property Trend Factor: 0.02%

			variue	11 y Z	1, 20	17								
ccupancy	Construction	Auto Spklr			Z	Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
FT.	Class: N	No	1960	2005	EQ:	E	No	No	No	2013	\$14,369,721	\$0	\$0	\$14,369,721
LACE DAM					Flood:		No	No	No	2014	\$14,927,266 * Member	\$0 changes pendin	\$0 g Alliant acceptan	\$14,927,266
2. FT.	Class: B	No	1989	2005	EQ:	E	No	No	No	2013	\$521,438	\$109,340	\$0	\$630,778
DIVERSION RE	ALL REINFORCE	CONC	RETE		Flood:		No	No	No	2014	\$541,670	\$109,362	\$0	\$651,032
RESERVOIR OUTLET														
). FT.	Class: S	No	1989	2005	EQ:		No	No	No	2013	\$45,015	¢45 224	\$0	\$60.220
OMPRESSOR	ALL STEEL	NO	1969	2005	Flood:		No	No	No	-		\$15,324		\$60,339
JOINI REGOOK	ALL OILLE				1 1000.		140	140	110	2014	\$46,762	\$15,327	\$0	\$62,089
PLACE RESERVOIR SOR BUILDING														
not map due to														
FT.	Class: N	No	1989	2005	EQ:	E	No	No	No	2013	\$4,235,426	\$0	\$0	\$4,235,426
LACE AUXILLARY					Flood:		No	No	No	2014	\$4,399,761	\$0	\$0	\$4,399,761
: 0%														
not map due to mation														
FT.	Class: N	No	1989	2005	EQ: (G	No	No	No	2013	\$431,092	\$0	\$0	\$431,092
ON STRUCTURE CHANNEL ON STRUCTURE					Flood:		No	No	No	2014	\$447,818	\$0	\$0	\$447,818
not map due to														

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

3.88% Personal Property Trend Factor: 0.02%

ccupancy	Construction	Auto Spkir	Year Built		Z	one	Real Prop	Pers Prop	BI / Rents	Үеаг	Real Property	Personal Property	BI / Rents	Totals
FT.	Class: B	No	1989	2005	EQ: E	E	No	No	No	2013	\$2,126,341	\$0	\$0	\$2,126,341
ICABLE	ALL REINFORCE	D CONC	RETE		Flood:		No	No	No	2014	\$2,208,843	\$0	\$0	\$2,208,843
DITCH										2011	V 2,200,010	40	Ψ	ψ£,200,043
: 0%														
not map due to														
rmation														
2. FT.	Class: N	No	1967	2005	EQ: E	E	No	No	No	2013	\$4,323,858	\$0	\$0	\$4,323,858
					Flood:		No	No	No	2014	\$4,491,624	\$0	\$0	\$4,491,624
REEK DAM													,	. , , , , , , , , , , , , , , , , , , ,
: 0%														
,FT,	Class: CB	No	2009	2005	EQ: E	Ε	No	No	No	2013	\$308,647	\$517,766	\$0	\$826,413
	CONCRETE BLOC	CK			Flood:		No	No	No	2014	\$320,623	\$517,870	\$0	\$838,493
cision: ZIP Code														
FT _z	Class: N	No	1989	2005	EQ: E		No	No	No	2013	\$161,765	\$0	\$0	\$161,765
IR					Flood:		No	No	No	2014	\$168,041	\$0	\$0	\$168,041
LACE RESERVOIR												·	, -	¥ ,
not map due to														
FT.	Class: N	No	1989	2005	EQ: E		No	No	No	2013	\$1,617,646	\$0	\$0	\$1,617,646
IR					Flood:		No	No	No	2014	\$1,680,411	\$0	\$0	\$1,680,411
REEK RESERVOIR											. ,,-,-	+*	**	÷-,,000,111
not map due to mation														

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

3.88%

Personal Property Trend Factor:

0	0	2%

			Janu	ary 2	7, 20)14						Personal Prop	perty Trend Factor:	0.02%
scupancy	Construction	Auto Spklr	Year Built			Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Γotals
FT,	Class: B	No	1980	2005	EQ:	G	No	No	No	2013	\$96,915	\$67,614	\$0	\$164,529
JFT STATION -	ALL REINFORCE	CONCR	RETE		Flood	: C	No	No	No	2014	\$100,675	\$67,628	\$0	\$168,303
ld not map this														
FT.	Class: B	No	1980	2005	EQ:	G	No	No	No	2013	\$96,915	\$67,614	\$0	\$164,529
.IFT STATION -	ALL REINFORCED) CONCR	RETE		Flood	:C	No	No	No	2014	\$100,675	\$67,628	\$0	\$168,303
ld not map this														
2. FT.	Class: D	No	1940	2005	EQ:	Ε	No	No	No	2013	\$124,990	\$12,786	\$0	\$137,776
	ALL COMB (WOO) FRAME	Ē)		Flood:	:D	No	No	No	2014	\$129,840	\$12,789	\$0	\$142,629
2. FT.	Class: S	No	2002	2 2005	EQ:	E	No	No	No	2013	\$411,599	\$126,111	\$0	\$537,710
LDING & OFFICE	ALL STEEL				Flood:	D	No	No	No	2014	\$427,569	\$126,136	\$0	\$553,705

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

3.88% Personal Property Trend Factor: 0.02%

January 27, 2014

scupancy	Construction		Year Year Built Apprs		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
"FT ₊	Class: D	No	2006	EQ:	E	No	No	No	2013	\$7,549	\$0	\$0	\$7,549
	ALL COMB (WOO	D FRAME)	Floor	d:	No	No	No	2014	\$7,842	\$0	\$0	\$7,842
not map due to mation													
FT.	Class: D	No	1970	EQ:	G	No	No	No	2013	\$5,393	\$0	\$0	\$5,393
	ALL COMB (WOO	D FRAME)	Floor	d:	No	No	No	2014	\$5,602	\$0	\$0	\$5,602
λ. FT.	Class: D ALL COMB (WOO	No D FRAME	2007	EQ:		No No	No No	No No	2013	\$10,784 \$11,202	\$0 \$0	\$0 \$0	\$10,784 \$11,202
). FT.	Class: D	No		EQ:	G	No	No	No	2013	\$21,568	\$0	\$0	\$21,568
	ALL COMB (WOO	D FRAME)	Floor	d:	No	No	No	2014	\$22,405	\$0	\$0	\$22,405
Q. FT.	Class: C	No	2006	EQ:	G	No	No	No	2013	\$1,237,678	\$1,253,352	\$0	\$2,491,030
WELL, CONTROLS E, STORAGE	MASONRY CONS	T/WOOD I	ROOF	Floor	d:	No	No	No	2014	\$1,285,700	\$1,253,603	\$0	\$2,539,303

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Includes B & M

January 27, 2014

Real Property Trend Factor:

3.88% Personal Property Trend Factor: 0.02%

ccupancy	Construction	Auto Spklr		Year Apprs	8-	Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
 λ. FT.	Class: C	No	196	0	EQ:		No	No	No	2013	\$324,891	ф02 <i>EE</i> 7	φa	P400 440
. г (_{іт}	MASONRY CONS				Flood:		No	No	No	/-		\$83,557	\$0	\$408,448
	WASSINT CONS	1777001	D ROOI		11000.		140	140	140	2014	\$337,497	\$83,574	\$0	\$421,071
2. FT.,	Class:	No	198	8	EQ:	G	No	No	No	2013	\$2,062,797	\$0	\$0	\$2,062,797
7.5	UNKNOWN				Flood:		No	No	No	2014	\$2,142,834	\$0	\$0	\$2,142,834
H, CONCRETE ED										2014	Ψ Σ , 1 42,004	Ψ	\$0	42, 172,004
Q. FT.	Class:	No	186	0	EQ:	E	No	No	No	2013	\$2,062,797	\$0	\$0	\$2,062,797
H, PIPED	UNKNOWN				Flood:		No	No	No	2014	\$2,142,834	\$0	\$0	\$2,142,834

cision: ZIP Code														
FT	Class:	No	1860)	EQ: I	E	No	No	No	2013	\$1,031,398	\$0	\$0	\$1,031,398
4	UNKNOWN				Flood:		No	No	No	2014	\$1,071,416	\$0	\$0	\$1,071,416
sision: ZIP Code														

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

3.88%

Personal Property Trend Factor: 0.02%

scupancy	Construction	Auto Spklr	Year Built	Year Apprs		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
≀. FT _* ;	Class:	No	186	0	EQ:	E	No	No	No	2013	\$1,547,098	\$0	\$0	\$1,547,098
.H, PIPED	UNKNOWN				Floor	d:	No	No	No	2014	\$1,607,125	\$0	\$0	\$1,607,125
cision: ZIP Code														
FT.	Class:	No	198	9	EQ:	E	No	No	No	2013	\$3,094,195	\$0	\$0	\$3,094,195
E DITCH SECTIONS H, PIPED	UNKNOWN				Floor	d:	No	No	No	2014	\$3,214,250	\$0	\$0	\$3,214,250
FT.	Class:	No	198	9	EQ:	E	No	No	No	2013	\$1,547,098	\$0	\$0	\$1,547,098
O FEET S DIRT DITCH, 2.5 NCRETE LINED DH dision: ZIP Code	UNKNOWN				Flood	±	No	No	No	2014	\$1,607,125	\$0	\$0	\$1,607,125
FT.	Class: B	No			EQ:	G	No	No	No	2013	\$103,140	\$10,445	\$0	\$113,585
RATION	ALL REINFORCED	CONC	RETE		Flood	i:	No	No	No	2014	\$107,142	\$10,447	\$0	\$117,589
FT,	Class: A	No	198	3	EQ:	G	No	No	No	2013	\$20,628	\$2,611	\$0	\$23,239
ANFORD CAMP	NON COMB STEE	L FRAM	E		Flood	i:	No	No	No	2014	\$21,428	\$2,612	\$0	\$24,040

CPEPP PROPERTY SCHEDULE SOUTH TAHOE PUBLIC UTILITY DISTRICT (CSRMA)

Includes B & M

Real Property Trend Factor:

3.88% Personal Property Trend Factor: 0.02%

			ounc	.u. , _	., 201									
ccupancy	Construction		Year Built	Year Apprs	Zo	one	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
Q. FT _e	Class: B	No	201	0	EQ: G	3	No	No	No	2013	\$887,003	\$647,565	\$0	\$1,534,568
	ALL REINFORCE	CONC	RETE		Flood: C		No	No	No	2014	\$921,419	\$647,695	\$0	\$1,569,114
WATER BOOSTER											. ,	•		, , ,
ATION														
cision: Nearest									Ŷ.					
'00-1739] Lake Tahoe	:													
oe, -120.01282														
FT.	Class: B	No	200	9	EQ: G	3	No	No	No	2013	\$752,921	\$490,896	\$0	\$1,243,817
	ALL REINFORCE	CONC	RETE		Flood: C		No	No	No	2014	\$782,134	\$490,994	\$0	\$1,273,128
EAD WELL #3														
WATER														
NT FACILITY														
FT _a	Class: C	Yes	200	6	EQ: G		No	No	No	2013	\$4,125,594	\$0	\$0	\$4,125,594
	MASONRY CONS	T/WOOL	ROOF	•	Flood:		No	No	No	2014	\$4,285,667	\$0	\$0	\$4,285,667
100%														
⊋. FT,₃:	Class: ZZ	No	201	2	EQ: G		No	No	No	2013	\$2,700,000	\$2,700,000	\$0	\$5,400,000
	(N/A)				Flood:		No	No	No	2014	\$2,804,760	\$2,700,540	\$0	\$5,505,300
& SECONDARY REATMENT BASINS														

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Includes B & M

January 27, 2014

Real Property Trend Factor:

3.88%

Personal Property Trend Factor:	0.02%

ccupancy	Construction	Auto Spklr		Year Apprs		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
λ. FT _{th}	Class: B	No	201	1	EQ:	G	No	No	No	2013	\$720,000	\$420,000	\$0	\$1,140,000
	ALL REINFORCE	D CONC	RETE		Flood	l:	No	No	No	2014	\$747,936	\$420,084	\$0	\$1,168,020
FT.	Class: N/A	No	196	1 2005	EQ:	A2	No	No	No	2013	\$0	\$0	\$0	\$0
PROCESS PIPING COUND PROCESS DISTRICT					Flood	:	No	No	No	2014	\$0	\$0	\$0	\$0
ld not map this														
Q. FT	Class: C	No	201	2	EQ:	Е	No	No	No	2013	\$140,000	\$1,190,000	\$0	\$1,330,000
	MASONRY CONS	ST/WOOI	O ROOF		Flood	•	No	No	No	2014	\$145,432	\$1,190,238	\$0	\$1,335,670
2. FT.	Class: B	No	201:	2	EQ:		No	No	No	2013	\$2,700,000	\$2,700,000	\$0	\$5,400,000
	ALL REINFORCE	D CONC	RETE		Flood:	:	No	No	No	2014	\$2,804,760	\$2,700,540	\$0	\$5,505,300

Page 44 Includes B & M

Real Property Trend Factor:

January 27, 2014

3.88% Personal Property Trend Factor: 0.02%

ccupancy	Construction	Auto Year Year Spklr Built Apprs	Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
Personal Property	BI / Rents	Totals				Yea	r	Real Property	Personal Property	BI / Rents	Totals
\$45, 276, 476	\$0	\$195,094,070	(GRAND	TOT	ALS: 20	14	\$155,630,515	\$45,285,539	\$0	\$200,916,054
\$10,813,133	\$0	\$26,534,340		SPRII	NKLER	RED: 20	14	\$16,331,190	\$10,815,296	\$0	\$27,146,486
\$34,463,343	\$0	\$168,559,730	UI	NSPRII	NKLER	RED: 20	14 \$	\$139,299,325	\$34,470,243	\$0	\$173,769,568
\$0	\$0	\$0		EART	THQUA	KE: 20	14	\$0	\$0	\$0	\$0
\$0	\$0	\$0			FLO	OD: 20	14	\$0	\$0	\$0	\$0

SIGNED / ACCEPTED BY:		



Wanda M. Gindlesperger

Certified Appraiser License No. CA AR033507 Wanda Gindlesperger has more than nine years of experience in the appraisal and valuation of real estate. Prior to joining Alliant Appraisal Services, Wanda was a Managing Partner for Direct Appraisals Group. Her duties included leadership and direction to the company's team of appraisers, and development of related IT solutions the helped ensure the accurate and timely delivery of appraisal services to clients nationwide.

She has extensive experience in the appraisal of a wide variety of property types as noted below.

Education and Professional Designations

Wanda Gindlesperger earned her Bachelor of Science in Statistics at the University of the Philippines. She also holds a Diploma in Client/Server Programming from the Computer Learning Center in Los Angeles, California graduating summa cum laude.

She has completed all the required coursework from the Appraisal Institute to earn her professional designation of SRA. She has taken classes with The American Society of Appraisers toward being certified as an Appraisal Reviewer.

She has earned the following designations/certifications:

- Associate Member of the Appraisal Institute
- Certified Residential Real Estate Appraiser
- State of California Certified Programming Instructor

Appraisal and Valuation Project Experience

Samples of prior appraisal and valuation projects include:

- Schools and other Public Entity structures
- Unit-In-Place appraisals for the Veterans Administration Housing Assets
- Places of Worship and Recreational facilities
- Multi-Family Properties and Apartment Complexes
- Vacant Land for Subdivision and Housing Development



ADDENDUM B

Plan Revisions

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Substantive 2017 Plan Revisions

Section I.A. District Profile Updated

Section II.D. Identified Assets and Potential Losses tables removed from main body of report and replaced with Addendum A – 2013 appraisal of Selected Assets.

<u>Section III.C.</u> Mitigation Objectives updated as follows:

Wildland Fires Objective #1, Action 1.4 Action 1.4: Model fire flows throughout the service area and determine where improvements are needed most.

Action Deleted from plan - This Action was accomplished as part of the District 2016 Water System Optimization Plan

Severe Storms Objective #2, Action 2.2 Action 2.2: Assess existing older structures (including building and tanks) for snow load and

wind load capacity.

Action Deleted from plan – the assessment of District staff is that the only building with this issue was the old Administrative Building, which has been removed and replaced.

Earthquakes Objective #2, Action 3.2

Action 3.2: Distribute and employee guide on techniques to prepare for an earthquake, currently being developed by Community Council.

Action Deleted from plan as it was completed.

Drought Objective #6, Action 6.4

Action 6.4: Investigate expanded use of reclaimed water to mitigate drought impact.

Deleted from plan – this was completed as part of the Diamond Valley Ranch Master Plan and Environmental Impact effort.

ERB Failure/Inundation Objective #9, Action 9.1 and 9.2

Action 9.1: Prevent or Mitigate Emergency Retention Basin Failure/Inundation

Action 9.2: Install engineering controls as determined in action 9.1

Deleted both actions from plan – these were completed as part of the ERB replacement project in 2011.