Town of Copperton

Jurisdictional Annex to the
Salt Lake County Hazard Mitigation Plan

Month XXXX | Draft X.X

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Town of Copperton Annex

To participate in this multi-jurisdictional hazard mitigation plan (MJHMP) update for Salt Lake County (SLCo), the governing body of the town of Copperton passed a formal resolution, a copy of which is maintained at the local government offices.

Planning Process Contact Information

Table 1 provides information on the point of contact during the updating of the MJHMP.

Table 1: Contact Information for the Town of Copperton

Name	Contact Information
Madison Warner	**Phone:** 801-743-7100; **email:** Mwarner@unifiedfire.org

The town of Copperton has a fully integrated approach to hazard mitigation planning and program implementation. During the 2024 update process, the MJHMP participation roles in Table 2 were recorded.

Table 2: Participant List for the Town of Copperton

Name	Title	Jurisdiction
Madison Warner	Municipal Planner at Salt Lake County Emergency Management	Kearns, Copperton, and Magna
Brad Jewett	Intelligence Specialist	Salt Lake County Emergency Management

Jurisdiction Profile

Date of Incorporation

Copperton became a metro township in January 2017, then converted to a town on May 1, 2024.

Location and Description

The town of Copperton is located southwest of Salt Lake City. The town is approximately 0.3 square miles in area and is approximately 5,400 feet above sea level. It is renowned for its picturesque landscapes and historical importance. The Copperton Historic District, which is listed on the National Register of Historic Places, includes over 230 contributing buildings.

Population

The 2022 American Community Survey 5-Year Estimate from the U.S. Census Bureau records the population of the town of Copperton as 865 people.

Demographics

Most of the 865 people are between the ages of 25 and 34, with a median age of 32; 461 are females (53.3%) and 404 are males (46.7%). English is the primary language in 88.4% of homes,, with 7.9% Spanish, and 3.7% other languages.

Brief History

In 1926, Copperton was established by the Utah Copper Company as a residential area and model city for its employees. It was designed to showcase company-subsidized family life featuring model brick and stucco homes, a community park, and amenities like electricity and paved streets. Construction of housing units ended in the 1930s and company-furnished housing ended in 1955. The town was added to the National Register of Historic Places in 1986 preserving its unique history and architecture.

Climate

The town of Copperton experiences a humid subtropical climate (Cfa Köppen classification) characterized by hot, humid summers and mild winters with consistent precipitation throughout the year. Average highs are approximately 78°F in the summer and approximately 33°F in the winter. Annual precipitation is approximately 16 inches annually with snowfall averaging 79 inches annually.

Public Services

The town of Copperton offers a wide range of public services through the Greater Salt Lake Municipal Services District (MSD). The MSD provides staffing and administrative support and other services and handles planning and zoning, business licensing, code enforcement, inspections, emergency planning, and related municipal services. Public works services are contracted with SLCo Public Works, which encompasses the construction and maintenance of roads, snow removal, and street lighting.

Governing Body

The town of Copperton’s governing body is the Copperton Council, which includes the Mayor, Deputy Mayor, and three council members.

Development Trends

The community is physically separated from development in nearby communities by mining operation buffer areas.

Jurisdiction-Specific Hazards and Risk

The Calculated Priority Risk Index (CPRI) is a comprehensive assessment tool for evaluating and prioritizing risks in a given context. It considers various factors, such as probability, impact, and urgency, to determine the level of risk associated with events or situations. The results for each hazard, including its risk factor (RF) value, are shown in Table 3. The results are based on the criteria in Table 3 and the equation that follows it. The CPRI helps organizations and individuals make informed decisions about risk management and mitigation strategies. It provides a systematic approach to identifying and addressing potential issues, allowing for a more efficient allocation of resources and proactive risk prevention. With the CPRI, stakeholders can prioritize their focus on the most critical risks, leading to more effective risk management and, ultimately, better outcomes.

Table 3: Calculated Priority Risk Index Values for the Town of Copperton

Type of Hazard Event	Probability of Future Events	Spatial Extent	Severity of Life/ Property Impact	Warning Time	Duration	Response Capacity	Risk Factor Value
Avalanche	0	0	0	0	0	0	0
Drought	3	4	2	1	4	2	2.6
Earthquake	3	4	4	4	4	3	3.6
Extreme Heat	3	4	3	1	4	2	2.9
Extreme Cold	2	4	2	1	3	1	2.1
Flooding	2	1	2	2	3	3	2.1
Landslide/ Slope Failure	2	1	1	0	4	1	1.5
Radon	4	4	3	1	4	1	3.1
Heavy Rain	3	3	2	3	1	1	2.3
High Wind	2	3	2	1	1	2	1.9
Lightning	3	1	1	1	1	3	1.8
Severe Winter Weather	3	4	2	1	3	2	2.5
Tornado	1	1	3	4	1	1	1.9
Wildfire	2	2	2	4	3	2	2.3
Dam Failure	2	3	3	3	2	3	2.6
Civil Disturbance	3	1	2	3	4	1	2.4
Cyberattack	3	3	2	4	4	3	2.9
Hazardous Materials Incident (Transportation & Fixed Facility)	4	2	3	4	4	3	3.4

Type of Hazard Event	Probability of Future Events	Spatial Extent	Severity of Life/ Property Impact	Warning Time	Duration	Response Capacity	Risk Factor Value
Public Health Epidemic/ Pandemic	2	4	3	1	4	2	2.6
Terrorism	1	3	4	4	3	4	2.9

Table 4: Criteria for the Calculated Priority Risk Index

Risk Index Factor	Degree of Risk Level		Criteria	Factor Weight for Degree of Risk Level
Probability of Future Events	1	Unlikely	Less than 1 percent probability of occurrence in the next year or a recurrence interval of greater than every 100 years.	30%
	2	Occasional	1 to 10 percent probability of occurrence in the next year or a recurrence interval of 11 to 100 years.	
	3	Likely	11 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years.	
	4	Highly Likely	91 to 100 percent probability of occurrence in the next year or a recurrence interval of less than 1 year.	
Spatial Extent	1	Limited	Less than 10% of the planning area could be impacted.	10%
	2	Small	10%–25% of the planning area could be impacted	
	3	Significant	25%–50% of the planning area could be impacted.	
	4	Extensive	50%–100% of the planning area could be impacted.	
Severity of Life/Property Impact	1	Negligible	Less than 5% of the affected area's critical and non-critical facilities and structures are damaged/ destroyed. Only minor property damage and minimal disruption of life. Temporary shutdown of critical facilities.	30%
	2	Limited	More than 5% and less than 25% percent of property in the affected area is damaged/ destroyed. Complete shutdown of critical facilities for more than one day but less than one week.	
	3	Critical	More than 25% and less than 50% of property in the affected area was damaged/ destroyed. Complete shutdown of critical facilities for over a week but less than one month.	
	4	Catastrophic	Over 50% of critical and non-critical facilities and infrastructures in the affected area are damaged/	

Risk Index Factor	Degree of Risk Level		Criteria	Factor Weight for Degree of Risk Level
			destroyed. Complete shutdown of critical facilities for more than one month.	
Warning Time	1	Self-defined	More than 24 hours	10%
	2	Self-defined	12 to 24 hours.	
	3	Self-defined	6 to 12 hours.	
	4	Self-defined	Less than 6 hours.	
Duration	1	Brief	Up to 6 hours.	10%
	2	Intermediate	Up to one day.	
	3	Extended	Up to one week.	
	4	Prolonged	More than one week.	
Response Capacity	1	High	Significant resources and capability to respond to this kind of event; staff are trained, experienced, and ready.	10%
	2	Medium	Some resources and capability to respond to this kind of staff; some staff may be trained, experienced, and ready while others may need additional support.	
	3	Low	Limited resources and capability to respond to this kind of event; additional staff or staff training needed.	
	4	None	No resources and capability to respond this kind of event; additional outside support would be required.	

RISK FACTOR (RF) EQUATION

RF Value = [(Probability x 0.30) + (Spatial Extent x 0.10) + (Severity of Life/Property Impact x 0.30) + (Warning Time x 0.10) + (Duration x 0.10) + (Response Capacity x 0.10)]

Hazards with an RF value greater than or equal to 2.5 are considered high risk. Those with RF values of 2.0 to 2.4 are considered moderate risk hazards, and those with an RF value less than 2.0 are considered low risk. The highest possible RF value is 4.

Hazard Event History

Examining hazard event histories provides valuable insights to inform decision-making and help prioritize resources for risk prevention and response efforts. Table 5 lists the hazard events impacting the town of Copperton planning area since the 2019 plan update, as recorded in the Storm Events Database from the National Centers for Environmental Information.

Table 5: History of Hazard Events in the Town of Copperton

Type of Hazard Event	FEMA Disaster #	Date(s)	Damage or Impacts	Description
Avalanche	N/A	N/A	N/A	N/A
Drought	N/A	1930s: The Great Salt Lake and streams experienced low water levels 1950s–1960s: The Great Salt Lake experienced even lower water levels than in the 1930s. 2020: Utah experienced its driest year on record, with record dry soils and low snowpack. 2021: The Great Salt Lake reached an all-time record low due to a drought.	Air quality issues, potential for greater ecosystem collapse.	The entire county faces risk of historic drought.
Earthquake	DR-4548-UT	A 5.7M earthquake was felt March 2020. 1962: Magna 5.2M earthquake and the 1992 Western Traverse Mountains 4.2M earthquake[1]. The Magna earthquake caused minor damage to buildings in several cities and towns within one mile	Some structural damage was reported, mostly on the south end of Copperton. Walls were cracked, plaster was knocked off, and lead paint dust was released. The Greater Salt Lake Municipal Services District, which includes Copperton, received 219 damage reports online. Tens of thousands lost power.	The Wasatch Fault is considered overdue for a major earthquake, with a 57% chance of a 6.0M or greater earthquake occurring in the next 50 years. The Copperton quadrangle may experience significant ground shaking due to nearby faults, primarily the West Valley fault zone and the Wasatch fault zone, but also the Harkers fault and an unnamed fault in the southwest part of the quadrangle for which the time of latest movement is not known. Numerous earthquakes greater than 4.0 magnitude have occurred near

[1] Christensen, 1992; University of Utah Seismograph Stations, 2010a; Figure 3.

Type of Hazard Event	FEMA Disaster #	Date(s)	Damage or Impacts	Description
		(1.6 km) to the southwest of the epicenter, which was approximately 5 miles (8 km) north of Copperton.		the Copperton quadrangle over the past century. The proximity of Bingham Canyon Mine is a concern for larger land mass movement due to an earthquake.
Extreme Heat	N/A	Summers of 2020, 2021, 2022, 2023, 2024	Reported 9 deaths in Northern Utah, an upward trend in heat exposure and heat-related deaths since 2015. Excessive heat can also affect infrastructure.	Specific impacts on Copperton were not available, but general impacts include increased risk of heat-related illness and increased power demand for cooling systems.
Extreme Cold	N/A	Winter of 2022 & 2023	2022: 5 people experiencing homelessness died from cold-related exposure in Salt Lake City, but this threat could impact neighboring jurisdictions.	Specific impacts on Copperton were not available, but extreme cold can contribute to hypothermia and other cold-related illness/ . Increased demand for heating systems. Potential for frozen pipes or other service disruptions.
Flooding	N/A	N/A	Some minor flooding reported by residents due to faulty storm drain.	Minor residential and commercial damage occurred.
Landslide/ Slope Failure	N/A	April 10, 2013	No reported damage to the town of Copperton, as this slide was the result of mining activity and took place in a restricted area with controlled access and distance from the town.	Two massive landslides carried about 145 million tons of waste rock into the open pit at Bingham Canyon, the largest copper mine in the U.S.
Radon	N/A	Radon is present in soils.	The specific impacts of radon in the area are not known (i.e., exact count of illnesses known to be caused by radon), but test results have indicated elevated radon levels in the area.	As shown in Figures 147 and 148 in Volume 1, elevated radon levels have been found in the Copperton area.
Heavy Rain	N/A	N/A	N/A	There have been some significant rains, but no major damage associated.

Type of Hazard Event	FEMA Disaster #	Date(s)	Damage or Impacts	Description
High Wind	N/A	September 8, 2020	N/A	Salt Lake County and surrounding areas experienced a severe windstorm with winds exceeding 100 mph in some areas.
Lightning	N/A	N/A	N/A	N/A
Severe Winter Weather	N/A	N/A	N/A	There have been some significant winter storms, but no major damage was associated.
Tornado	N/A	N/A	N/A	N/A
Wildfire		June 17, 2022 July 30, 2019	Barney's Wash fire Small brush fire	This fire got close to Copperton but was handled by UFA, South Jordan, West Jordan, and Rio Tinto. This was a brush fire. Small brush fire in 2019 on private property south of Copperton. There were issues with access as UFA had to wait for Rio Tinto personnel to give them access.
Dam Failure	N/A	N/A	There are three dams near Copperton with significant hazard ratings that could affect the area.	The inundation areas of these dams are southeast of the town but could impact roadways or other infrastructure that are critical to the town.
Civil Disturbance	N/A	N/A	N/A	N/A
Cyberattack	N/A	N/A	N/A	N/A
Hazardous Materials Incident (Transportation & Fixed Facility)	N/A	N/A	N/A	Rio Tinto stores wastewater from the Bingham Canyon Mine, one of the largest open-pit copper mines in the world and a massive source of toxic chemicals. There are TRI facilities nearby
Public Health Epidemic/ Pandemic	DR-4525-UT	January 20, 2020 – May 11, 2023	Unknown degree of damage done to community and local economy	A pandemic of SARS-CoV-2 (also known as COVID-19) killed millions and has many medical repercussions that are still being studied. There is no specific data on Copperton residents who were affected medically or otherwise.
Terrorism	N/A	N/A	N/A	N/A

National Flood Insurance Program Summary

The town of Copperton participates in the National Flood Insurance Program (NFIP). Table 6 displays statistics related to the NFIP. The town of Copperton does not participate in the Community Rating System.

Table 6: National Flood Insurance Program Status for the Town of Copperton[2]

Init FHBM Identified	Init FIRM Identified	Current Effective Map Date	Adopted Date	Date Joined NFIP	Tribal
12/18/85	12/18/85	9/25/09	2009	6/3/20	No

No information was available regarding active NFIP policies, coverage amounts, losses or payments for the Town of Copperton.

Copperton has designated the Director of Planning and Development Services as the Floodplain Administrator. The duties of the Floodplain Administrator are supported by the Greater Salt Lake Municipal Services District (MSD). The current Flood Damage Prevention and Control Ordinance was adopted on 10/20/2021. The current FIRM became effective 9/25/2009. The MSD is responsible for issuing floodplain permits in MSD Member Communities, including Copperton. The permits include a description of all work, including the kind and type of construction, proposed intent, and location. Substantial damage/substantial improvement structures are identified through the permitting process. Structures that are determined to be substantially damaged or substantial improvements are required to come into compliance with current codes. The MSD Building Department provides guidance on how to build in accordance with existing building codes.

Jurisdiction-Specific Vulnerabilities and Impacts

Table 7 provides information on the vulnerable assets in the town of Copperton, including its critical facilities, highlighting the [town's vulnerability to identified hazards. By understanding the risks associated with these assets, local authorities can develop proactive strategies to mitigate vulnerabilities and ensure the safety and functionality of these important assets during hazard events. This data is invaluable for decision-making and prioritizing resources for emergency response and preparedness efforts, ultimately contributing to more effective risk management and greater resilience in the community.

Community assets that may be vulnerable to hazards in Copperton include the 865 residents, 1 fire station, Copperton Park, and the Bingham Canyon Lions Club community center. Primary roads in Copperton are 10200 South, SR 48 (New Bingham Hwy), and SR 209 (Old Bingham Hwy). The Rio Tinto Kennecott copper mine is a significant industry near Copperton. It is accessed through Copperton and the Kennecott office building is just outside the town. Natural resources in the area include the mineral contents in the nearby hills, vegetation and wildlife in the foothills, and Bingham Creek. The Copperton Historic District includes 237 buildings and 2 contributing structures in the town, mainly homes built for

[2] FIRM = Flood Insurance Rate Map, FHBM = Flood Hazard Boundary Map

employees of the Utah Copper Company between 1926 to 1941. Copperton Community Methodist Church is also listed on the NRHP.

Table 7: Jurisdiction-Specific Vulnerabilities and Impacts in the City of Copperton

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
Avalanche	People	N/A
Drought	People	*Vulnerability:* Drought can affect all populations in Copperton. Prolonged drought conditions can pose serious challenges for vulnerable groups, including seniors, children, low-income households, and individuals experiencing homelessness. *Impacts:* These residents may struggle to afford rising water bills, install water-efficient fixtures, or maintain cooling during extreme heat. Limited access to water can increase the risk of heat-related illnesses and worsen air quality as dust and particulates become more prevalent. Additionally, food security may be impacted if locally grown produce becomes scarce or if prices rise due to agricultural strain across the region. Public health can decline due to water rationing and loss/damage to green or natural spaces.
	Structures	*Vulnerability:* All structures in Copperton are vulnerable to drought. *Impacts:* Many homes in Copperton, especially older ones, may have outdated plumbing systems and appliances that use more water than current efficiency standards allow. As drought persists, properties without waterwise landscaping are more likely to contribute to fire risk from dry vegetation near buildings. Without adequate irrigation alternatives, both curb appeal and safety may decline in residential neighborhoods.
	Economic Assets	*Vulnerability:* Local businesses are vulnerable, particularly those that are dependent on a consistent water supply. *Impacts:* Local businesses that depend on a consistent water supply may experience financial setbacks. Restrictions on water use can reduce business activity, increase operational costs, or result in temporary closures. For a small community like Copperton, the ripple effects of even modest economic disruptions can be significant.
	Natural, Historic, and Cultural Resources	*Vulnerability:* Vegetation in foothills and Copperton Park is vulnerable to drought. *Impacts:* Drought can have a visible impact on Copperton's natural environment, reducing the vitality of parks, greenways, and surrounding foothills. Vegetation loss not only affects the look of public spaces but also degrades habitat for local wildlife. Historic properties, especially those with landscaping or irrigation-dependent grounds, may suffer neglect or deterioration. Airborne dust from dry soils can contribute to respiratory issues and affect the enjoyment of outdoor cultural amenities.
	Critical Facilities and Infrastructure	*Vulnerability:* Copperton's culinary water supply is vulnerable to ongoing drought. *Impacts:* Ongoing drought may strain Copperton's culinary water supply, requiring conservation measures or temporary restrictions. Water-dependent operations at facilities such as senior centers, clinics, and schools could be disrupted. Dry conditions also elevate the

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
		risk of wildfires, which can threaten key infrastructure like power lines and water treatment systems. Soil degradation from extended dryness can increase flood risk when sudden rainfall occurs, placing pressure on stormwater systems.
	Community Activities	*Vulnerability:* Community events and Copperton Park are vulnerable to the impacts of drought. *Impacts:* Parks and gathering areas in Copperton may become less inviting or safe during drought due to heat stress, dry grass, and limited irrigation. Community events may be scaled back or canceled during peak summer months to protect public health. Public outreach is essential to promote water conservation strategies, encourage heat safety practices, and educate residents about drought-tolerant landscaping options.
Earthquake	People	*Vulnerability:* All Copperton residents are vulnerable. Vulnerable populations, including the elderly, young children, low-income individuals, and unsheltered persons, may be more affected by an earthquake. *Impacts:* Health impacts can be severe, especially if people are trapped under collapsed homes or other structures.
	Structures	*Vulnerability:* All homes and other structures in Copperton are vulnerable. The 2020 earthquake highlighted the risk, and the brick houses that are predominant in Copperton are historically known to fail during earthquakes. *Impacts:* Unreinforced masonry structures are likely to experience extensive damage from a moderate or strong earthquake. This is a significant concern, as not all residents have the tools or the funds to improve their homes or businesses to withstand a significant earthquake. Residents may be injured and are likely to be displaced if homes are damaged.
	Economic Assets	*Vulnerability:* Businesses throughout the region are vulnerable. *Impacts:* Economic impacts could be great due to direct damage to businesses and service disruptions. Failure of utility and transportation systems can affect businesses' ability to function. In addition, recovery for the community and businesses may be lengthy. Access to emergency services, such as police, fire, and emergency medical services (EMS), may be disrupted.
	Natural, Historic, and Cultural Resources	*Vulnerability:* The Historic District and the environment are vulnerable to earthquakes. *Impacts:* The resources could be severely damaged due to an earthquake. Unreinforced masonry buildings could be affected. Local vegetation and wildlife could be impacted by an earthquake.
	Critical Facilities and Infrastructure	*Vulnerability:* The fire station and all town infrastructure could be negatively affected due to physical damage, utilities failure, and medical surges. *Impacts:* Access to emergency services, such as fire stations, police stations, or medical facilities, could be compromised.
	Community Activities	*Vulnerability:* Community events are vulnerable to earthquakes.

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
		Impacts: Community gatherings could lead to an increased risk to public safety if an earthquake were to occur in the middle of an event. Future events may be canceled.
Extreme Heat	People	*Vulnerability:* Extreme heat can affect all Copperton residents *Impacts:* In Copperton, extended periods of high temperatures pose a serious health risk. Outdoor workers and residents without access to reliable air conditioning face the highest risk of heat exhaustion or heat stroke. As summer temperatures rise, especially during midday, hospital visits may increase, while outdoor recreation decreases due to the unsafe conditions. Residents will face increased energy costs for cooling systems.
	Structures	*Vulnerability:* All structures in Copperton are vulnerable to extreme heat. *Impacts:* Prolonged heat can stress buildings and infrastructure in Copperton. Roads and pavements may crack, and roofing materials can deteriorate under intense sunlight. Structures lacking proper insulation or cooling systems may become dangerously hot inside, placing residents at risk and overloading electrical systems.
	Economic Assets	*Vulnerability:* All businesses in Copperton are vulnerable to extreme heat. *Impacts:* Businesses in Copperton face rising cooling costs during periods of extreme heat. Companies reliant on outdoor services may need to limit work hours or reduce output, resulting in lost revenue. Recreational venues, including parks and local outdoor markets, could see a drop in attendance, especially during the hottest parts of the day.
	Natural, Historic, and Cultural Resources	*Vulnerability:* Copperton Park is vulnerable to extreme heat. *Impacts:* Local parks and green spaces may suffer from drying vegetation and declining wildlife activity, especially if heat is paired with limited water supply. Trees and plants may become more vulnerable to disease or fire. Additionally, prolonged heat may accelerate the weathering of historic structures, public monuments, and art installations.
	Critical Facilities and Infrastructure	*Vulnerability:* Community centers and power infrastructure are vulnerable to extreme heat. *Impacts:* Essential facilities such as clinics, senior centers, and community shelters in Copperton may experience spikes in utility use as they work to keep interiors cool. Power demand for air conditioning can strain the grid, increasing the risk of localized outages. Fire danger also grows during extreme heat, particularly in areas with dry vegetation.
	Community Activities	*Vulnerability:* Community events are vulnerable to extreme heat. *Impacts:* Community events held during the summer months are at risk of being delayed, relocated, or canceled if cooling measures are not available. Public participation in outdoor gatherings may decrease, especially during excessive heat warnings, limiting community engagement.
	People	*Vulnerability:* All residents are potentially vulnerable to extreme cold. Severe cold spells can be especially hazardous in Copperton for

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
Extreme Cold		vulnerable groups, including seniors, young children, lower-income families, and individuals without stable housing. *Impacts:* Residents without reliable heating, insulation, or winter clothing may struggle to stay safe. Outdoor workers are also at risk of hypothermia and frostbite if protective gear and shelter are not accessible.
	Structures	*Vulnerability:* All structures are vulnerable to extreme cold. *Impacts:* Cold temperatures can cause pipes to freeze and burst in both older and newer homes lacking proper insulation. Prolonged exposure to cold can weaken roofing materials and compromise structural components, especially when followed by heavy snowfall. Repeated freeze–thaw cycles can deteriorate wood, brick, and metal components of buildings over time.
	Economic Assets	*Vulnerability:* Businesses and household budgets are vulnerable to extreme cold. *Impacts:* Heating expenses tend to spike during winter storms and cold snaps, placing a financial burden on both households and businesses. Companies may need to adjust hours of operation or delay projects due to weather-related barriers. The town may also face increased costs for maintaining warming shelters or assisting residents with heating needs.
	Natural, Historic, and Cultural Resources	*Vulnerability:* Wildlife, vegetation, and the Historic District are vulnerable to extreme cold. *Impacts:* Extreme cold can take a toll on native wildlife in Copperton, particularly species not well adapted to sudden drops in temperature. Vegetation may also suffer, especially if cold is accompanied by wind or ice. Historic properties may be at risk of material damage or structural wear due to the expansion and contraction of building components.
	Critical Facilities and Infrastructure	*Vulnerability:* Cold weather can stress key systems in Copperton, including emergency services, utility lines, and water distribution systems. *Impacts:* Power outages are more likely when ice or snow accumulates on lines. Burst pipes in critical facilities, such as fire stations or clinics, could disrupt service delivery during emergencies.
	Community Activities	*Vulnerability:* Community activities are vulnerable to extreme cold. *Impacts:* Outdoor events and programs may be canceled if temperatures become dangerously low or snow makes travel difficult. Icy roads and unreliable vehicles can prevent residents from attending both recreational and essential services. Without sufficient heating in public spaces, community gatherings may have to be postponed or moved indoors.
Flooding	People	*Vulnerability:* People near Bingham Creek or low-lying areas are vulnerable to flooding. No Special Flood Hazard Zones (SFHZs) are within the town boundaries. *Impacts:* Individuals may need rescuing from high waters. Waterborne hazardous materials from Kennecott Mine could pose an additional risk, especially if they overflow Bingham Creek reservoir. Unsheltered populations, young children, low income, and the elderly are a

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
		significant concern. Persons displaced by flooding may need public shelter.
	Structures	*Vulnerability:* No SFHZs are within Copperton. Some structures near Bingham Creek or in low-lying areas may be vulnerable to flooding. *Impacts:* Structures may be affected if they are exposed to floodwaters. Damage can include foundation damage, cracked pipes, damaged electrical systems, and mold. In addition, entire structures can be carried away if the water is moving very fast.
	Economic Assets	*Vulnerability:* Kennecott mine and other businesses are vulnerable to flooding. *Impacts:* Flooding could interrupt commerce and cause major interruptions to Kennecott Mine, particularly if roadways are damaged or closed. Rebuilding structures affected by flooding could be a significant cost for the town if financial assistance is not provided or the homeowner does not have flood insurance.
	Natural, Historic, and Cultural Resources	*Vulnerability:* Wildlife, vegetation, and the Historic District are vulnerable to flooding. *Impacts:* Flooding can impact local wildlife and flora/fauna with the sheer amount of water and debris that move into the area. This could impact historical buildings or infrastructure, especially if they do not have flood insurance or the funds to rebuild.
	Critical Facilities and Infrastructure	*Vulnerability:* Roads and utilities are vulnerable to flooding. *Impacts:* Floodwater could damage roads and utilities, and carry hazardous materials. Access to emergency services like police, fire, and medical facilities would be impacted by flooding.
	Community Activities	*Vulnerability:* Community events and Copperton Park are vulnerable to flooding. *Impacts:* The time it takes for the town to recover from a significant flooding event would impact the ability to have community events. Local parks or businesses may not be able to operate.
Landslide/ Slope Failure	People	*Vulnerability:* The majority of landslide risk is associated with Kennecott Mine. This could include its employees. The slope on the north end of town has moderate susceptibility to landslides and could pose a risk to residents. *Impacts:* People could be injured if caught in a landslide. If the mine is affected, residents could lose wages or experience other impacts from possible closures or inability to work.
	Structures	*Vulnerability:* The majority of landslide risk is associated with Kennecott Mine. This could include its structures. The slope on the north side of town may pose a risk of landslide to nearby structures. *Impacts:* Homes could be damaged, and residents displaced. Repairs may be difficult or costly.
	Economic Assets	*Vulnerability:* The majority of landslide risk is associated with Kennecott Mine. *Impacts:* This could disrupt or halt mine operations and lead to loss of revenue and lost wages for employees.
	Natural, Historic, and	*Vulnerability:* Vegetation and environmental contamination are vulnerable to landslides.

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
	Cultural Resources	*Impacts:* Landslide can impact local vegetation with excess debris in certain areas that may affect air or water quality. With Rio Tinto nearby, hazardous materials can seep into the soil or impact local wildlife and vegetation.
	Critical Facilities and Infrastructure	*Vulnerability:* Major roadways in and near Copperton, utilities, and emergency response are in landslide-susceptible areas. *Impacts:* Landslides could disrupt transportation to the town or to those who are employed at the Kennecott Mine. Managing debris after an incident would affect the ability of public works to complete their day-to-day duties. In addition, excess debris could affect essential services like power, water, medical facilities, police, and fire. Road access becomes an issue.
	Community Activities	*Vulnerability:* Community activities are vulnerable to landslides. *Impacts:* Community activities could be impacted if recreation areas, local businesses, or residential homes cannot be rebuilt or restored to their original condition.
Radon	People	*Vulnerability:* There are a significant number of properties throughout Copperton that have high radon levels. Seventy-seven percent of homes tested in the Copperton zip code have dangerous radon levels. *Impacts:* Radon increases risk of lung cancer for people exposed to it.
	Structures	Structures: Radon doesn't directly damage structures, but structural design or deterioration may contribute to radon accumulation. *Impacts:* Radon can seep through cracks in foundations or walls and accumulate in homes, putting occupants at risk of lung cancer. There are properties throughout Copperton with high radon levels. Radon kits are available through the state and other online services, but the cost may prevent people from purchasing them.
	Economic Assets	*Vulnerability:* Businesses and home values are vulnerable to high radon levels. *Impacts:* The cost of remediation for high radon levels and radon monitoring services may prevent people from reducing their radon levels. This can affect overall home prices and the local economy if it is known that the area has high radon levels.
	Natural, Historic, and Cultural Resources	*Vulnerability:* Historical structures and the environment are vulnerable to radon exposure. *Impacts:* Local vegetation and wildlife can be impacted by radon. In addition, historical structures may be affected by radon, especially if it is not mitigated or they have poor ventilation. Older homes may have structural deterioration that contributes to radon entering the home.
	Critical Facilities and Infrastructure	*Vulnerability:* Fire station and community centers are vulnerable to radon. *Impacts:* Critical facilities and infrastructure may be impacted if there are high radon levels because remediation is required. Occupants may be exposed to radon. Radon may also impact access to critical facilities if people have existing health conditions.
	Community Activities	*Vulnerability:* Community activities have minimal vulnerability to radon exposure.

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
		Impacts: Radon poses a higher risk from long-term indoor exposure. Attendance at community activities, especially those held indoors, could be impacted if radon levels are high. Those who are immunocompromised or have existing health conditions may choose not to attend because of the health risks associated with radon.
Heavy Rain	People	*Vulnerability:* Heavy rain can occur anywhere in the city, and all individuals are potentially vulnerable. *Impacts:* Individuals may need rescuing from high waters. Waterborne hazardous materials from Kennecott Mine could pose an additional risk, especially if the Bingham Creek reservoir overflows. Unsheltered populations, young children, low-income individuals, and the elderly are a significant concern.
	Structures	*Vulnerability:* Structures near low-lying areas or impervious surfaces could be affected by ponding or high runoff during heavy rain. *Impacts:* Structures may be affected if they are exposed to localized flooding. This can include foundation damage, cracked pipes, damaged electrical systems, and mold. In addition, entire structures can be carried away if the water is moving very fast.
	Economic Assets	*Vulnerability:* All businesses in Copperton are vulnerable to heavy rain. *Impacts:* Heavy rain and localized flooding could interrupt commerce and cause major interruptions to Kennecott Mine. Repairs to damaged structures or infrastructure could be a significant cost if financial assistance is not provided or the homeowner does not have flood insurance.
	Natural, Historic, and Cultural Resources	*Vulnerability:* Wildlife, vegetation, and waterways are vulnerable to heavy rain. *Impacts:* Flooding can impact local wildlife and flora/fauna with the sheer amount of water and debris that move into the area. Heavy rain can cause erosion and damage to habitats. Historical homes could also be damaged by flooding.
	Critical Facilities and Infrastructure	*Vulnerability:* Roads, utilities, and emergency response systems are vulnerable to heavy rain. *Impacts:* Localized flooding from heavy rain could damage roads and utilities, and carry hazardous materials. Access to emergency services, such as police, fire, and medical facilities, could be disrupted.
	Community Activities	*Vulnerability:* Outdoor events and recreation are vulnerable to heavy rain. *Impacts:* Outdoor events may be disrupted or canceled due to heavy rain. Local parks or businesses might not be able to operate. It may take significant time for the town to recover from damage caused by heavy rain.
High Wind	People	*Vulnerability:* All residents in Copperton can face risks during high wind events, especially those who are outdoors or near structures and trees. *Impacts:* Blowing debris, falling branches, and damaged infrastructure can cause injuries. Wind-related hazards may be especially dangerous for children, seniors, and individuals with mobility challenges, who may have limited ability to seek shelter quickly.

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
	Structures	*Vulnerability:* Buildings in Copperton, particularly older homes, sheds, and fences, are vulnerable to wind-related damage. *Impacts:* Shingles can be lifted, windows shattered, and trees or utility poles may fall onto roofs or vehicles. Wind can also loosen signs and lightweight materials from commercial properties, creating additional hazards.
	Economic Assets	*Vulnerability:* Copperton businesses are vulnerable to high wind. *Impacts:* Storm damage can temporarily or permanently shut down small businesses, especially those without adequate insurance coverage. Clean-up costs and service disruptions can affect local commerce. Businesses that depend on consistent access to customers or transportation routes may experience revenue losses.
	Natural, Historic, and Cultural Resources	*Vulnerability:* Copperton Park and historic homes are vulnerable to high wind. *Impacts:* Strong winds can damage trees, wildlife habitats, and park infrastructure in Copperton's green spaces. If historic landmarks or cultural sites are impacted and lack proper insurance or funding for repair, it may be difficult to restore them to their original condition.
	Critical Facilities and Infrastructure	*Vulnerability:* Power lines, roads, and emergency response systems are vulnerable to high wind. *Impacts:* Windstorms can down power lines, damage utility systems, and scatter debris across local roads, making emergency response more difficult. Disruptions to road access can delay fire, EMS, and law enforcement operations. Public infrastructure like water systems and electrical grids may also be affected, particularly in more remote parts of the community.
	Community Activities	*Vulnerability:* Outdoor events and recreation are vulnerable to high wind. *Impacts:* Outdoor gatherings, such as fairs or sporting events, may need to be canceled or delayed due to safety concerns during high wind events. Without proper shelter or medical staff on-site, the risk of injury during these storms increases.
Lightning	People	*Vulnerability:* Lightning presents a direct danger to anyone caught outside during storms, which potentially includes all Copperton residents. Those involved in recreation or outdoor work are most vulnerable. *Impacts:* Those in proximity to a lightning strike can be seriously injured or killed. Individuals may also be harmed by secondary effects of lightning, such as structure fires, electrical surges, or when lightning strikes water or conductive surfaces nearby.
	Structures	*Vulnerability:* Homes, barns, and outbuildings may be struck by lightning. *Impacts:* Lightning strikes can cause fires or electrical damage. Buildings without proper lightning protection systems are at higher risk, especially if they have outdated electrical infrastructure or are located in exposed areas.
	Economic Assets	*Vulnerability:* All Copperton businesses are vulnerable to lightning.

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
		Impacts: Fires or damage resulting from lightning strikes can cause costly repairs for local businesses. Prolonged closures may follow if critical systems are damaged. If such incidents are publicized, they may also impact the community's reputation for safety and deter new residents or business development.
	Natural, Historic, and Cultural Resources	*Vulnerability:* Environment, wildfire risk, and risk to historic homes to lightning. *Impacts:* Lightning can ignite dry vegetation in Copperton, potentially sparking wildfires that damage ecosystems. Public safety and infrastructure, transportation, and other local resources may be overwhelmed by cascading effects like wildfires or medical surges. Historic buildings and cultural landmarks may be especially difficult to repair if they are not insured or if restoration resources are limited.
	Critical Facilities and Infrastructure	*Vulnerability:* Lightning can damage power infrastructure, communication towers, and electrical substations. *Impacts:* Damage to utilities can result in power outages or electrical surges. Medical responders could experience increased demand if lightning strikes cause injuries, and response efforts may be delayed if infrastructure is compromised.
	Community Activities	*Vulnerability:* Outdoor events, recreation, sports, and markets are vulnerable to lightning. *Impacts:* Outdoor events may be canceled due to lightning risks, particularly if shelter options are limited. Repeated interruptions during summer events could reduce attendance and engagement in community programs.
Severe Winter Storm	People	*Vulnerability:* All residents are potentially vulnerable. Cold snaps and snowstorms pose significant risks in Copperton, particularly for seniors, young children, low-income households, and unsheltered residents. *Impacts:* Individuals working outdoors, such as construction crews or service workers, are vulnerable to frostbite and hypothermia if safety precautions are not in place. Snow accumulation can also isolate residents who lack the means or ability to clear paths or driveways.
	Structures	*Vulnerability:* All structures are vulnerable to severe winter storms. *Impacts:* Buildings with flat or poorly maintained roofs are susceptible to collapse under heavy snow or ice loads. In older structures, pipes may freeze and burst during prolonged cold periods. Fluctuating temperatures can cause expansion and contraction of building materials, leading to gradual structural wear.
	Economic Assets	*Vulnerability:* All Copperton businesses to severe winter storms. *Impacts:* Local commerce may slow or halt altogether if roads remain uncleared or if facilities cannot maintain heat. Heating costs may rise for residents and businesses alike. Snow events may also interrupt operations for delivery services, contractors, and tourism-related businesses.
	Natural, Historic, and Cultural Resources	*Vulnerability:* Parks, mature trees, and historic homes are vulnerable to severe winter storms. *Impacts:* Parks and trees can suffer from broken limbs and root damage due to ice buildup. Historical structures may also face

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
		increased stress during severe weather, especially if roofs or foundations are not built to handle significant snow weight.
	Critical Facilities and Infrastructure	*Vulnerability:* Utilities, roads, and emergency response systems are vulnerable to severe winter storms. *Impacts:* Utilities in Copperton can be interrupted by ice or snow. If public works teams are unable to clear roads in a timely manner, emergency responders may be delayed. Extended exposure to cold can strain community infrastructure such as heating centers, water towers, and substations.
	Community Activities	*Vulnerability:* Community events are vulnerable to severe winter storms. *Impacts:* Outdoor events during the winter months may be canceled if snow removal and heating support are unavailable. Residents may be unable to attend community gatherings or access essential services if roads become impassable or cars fail to start in subzero temperatures.
Tornado	People	*Vulnerability:* Though rare, tornadoes remain a possibility in Copperton and all residents are at risk. *Impacts:* Tornadoes can cause serious injury or death. People in mobile homes or older, unreinforced structures are at greater risk. A tornado strike can disrupt transportation and limit access to hospitals, schools, and other essential services. Emergency responders may face increased demands due to injuries and displacement.
	Structures	*Vulnerability:* Homes, businesses, and public buildings are all vulnerable to tornadoes. *Impacts:* Structures may experience roof damage, shattered windows, or even full structural collapse during a tornado. Buildings without basements or safe rooms provide less protection. Recovery time can be lengthy, especially if damage is widespread.
	Economic Assets	*Vulnerability:* All Copperton businesses are vulnerable to tornadoes. *Impacts:* Businesses may close temporarily or permanently following a tornado, particularly if they lack insurance coverage or emergency funds. Job loss and economic disruption can follow, especially in small communities where businesses are tightly woven into local infrastructure and services.
	Natural, Historic, and Cultural Resources	*Vulnerability:* Parks, natural plants and wildlife, and historic homes are vulnerable to tornadoes. *Impacts:* Tornadoes can damage vegetation, parks, and wildlife corridors in and around Copperton. Historical buildings made of older materials are especially vulnerable and may be difficult to restore. Loss of cultural spaces like community halls or public landmarks can have lasting emotional and economic effects.
	Critical Facilities and Infrastructure	*Vulnerability:* Utilities and emergency facilities, such as the fire station, are vulnerable to tornado damage. *Impacts:* Water and power services can be interrupted if distribution lines are affected. Blocked roads may prevent timely access for ambulances, fire trucks, or police vehicles. Re-establishing power and communications could take days, depending on the extent of destruction.

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
	Community Activities	*Vulnerability:* Community centers and events are vulnerable to tornadoes. *Impacts:* Community centers and recreation facilities may be shut down for repairs, limiting access to programs and services. Outdoor events would need strong contingency plans or cancellations if tornado risks increase. Rebuilding efforts may take priority, reducing the availability of public spaces for months following a disaster.
Wildfire	People	*Vulnerability:* Copperton is located near the foothills of the Oquirrh mountains where wildfires are more likely than more urban areas. All residents are potentially at risk. *Impacts:* Urban interface wildfire areas can pose a health and safety hazard due to unpredictable or fast-moving fires. Residents may be evacuated from homes. Limited transportation routes to town could increase risk. There are health concerns about hazardous materials exposure if the fire starts at Rio Tinto and moves into Copperton. Wildfire smoke contributes to unhealthy air quality, which may impact Copperton residents even if the fire is not nearby.
	Structures	*Vulnerability:* All structures in Copperton are in close proximity to a moderate to high wildfire risk area and are at risk. Those closest to the foothills are at the highest risk. *Impacts:* Wildfire can damage structures and affect emergency services. If people do not have insurance, they may not be able to afford residential repairs.
	Economic Assets	*Vulnerability:* Local businesses could suffer if they do not have the funds to repair damage. If the area is prone to burning, there is also the reputational impact, where people do not want to visit if it is not safe or high risk.
	Natural, Historic, and Cultural Resources	*Vulnerability:* Natural spaces and resources, such as vegetation and wildlife, as well as historic homes, are vulnerable to wildfires. *Impacts:* Wildfires can lead to the loss of natural spaces and wildlife habitats and may increase erosion. Historic buildings would need to be rebuilt. The extensive open space surrounding Copperton raises concerns about small brush fires that could grow. Nearby Rio Tinto land poses a risk, as any fire or chemical leak could impact Copperton's vegetation and wildlife.
	Critical Facilities and Infrastructure	*Vulnerability:* Fire station, utilities, and roadways are vulnerable to wildfires. *Impacts:* Interruptions to utilities and transportation are possible. Power could be turned off if it is deemed unsafe by Rocky Mountain Power. Road access and communications are concerns if emergency services cannot reach residents. Medical services would be impacted if they have to run on a generator or other limited power source.
	Community Activities	*Vulnerability:* Community activities and events are vulnerable to wildfires. *Impacts:* Events may be disrupted or possibly canceled, especially in outdoor areas like parks, if there is high wildfire risk. Areas with a lot of brush or natural vegetation present a high risk, which may deter people from engaging in recreation in those areas.

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
Dam Failure	People	*Vulnerability:* There are three dams in Copperton, one ranked as high hazard and two rated as significant hazard—Kennecott Mine Bingham Creek, Kennecott Mine Small Reservoir, and Large Bingham Reservoir Distilling Basin. *Impacts:* The dams are located downslope of most residences and are not likely to directly impact people. However, access to emergency services, such as police, fire, or medical, support could be disrupted if the Kennecott Mine Bingham Creek Dam has a sunny day failure that spills into West Jordan. Public health could be impacted if there is no clean drinking water or if there is a power failure.
	Structures	*Vulnerability:* The Kennecott Mine Bingham Creek sunny day failure for dam inundation would impact surrounding jurisdictions. Direct vulnerability to Copperton structures is low. *Impacts:* Significant flooding could occur, impacting emergency vehicle access to and from Copperton.
	Economic Assets	*Vulnerability:* Business disruptions throughout Copperton are possible. *Impacts:* Flooding could cause substantial travel delays for residents and local businesses, which impacts the economy. Recovery efforts are tied to the amount of money or insurance people have to be able to rebuild after a dam failure. In addition, further inspections may be required for structures that are affected by a dam failure if there are any hazardous materials in the Rio Tinto-owned dams.
	Natural, Historic, and Cultural Resources	*Vulnerability:* Vegetation, wildlife, and historic homes are vulnerable to dam failure. *Impacts:* Local vegetation and wildlife could be impacted if there is a dam failure. Historical buildings are at risk, especially if an insurance policy or adequate funds are not available to make repairs after flooding or other damage from a dam failure.
	Critical Facilities and Infrastructure	*Vulnerability:* Roads and downstream critical facilities are vulnerable to dam failure. *Impacts:* The Kennecott Mine Bingham Creek sunny day failure for dam inundation would impact surrounding jurisdictions. It could cause significant flooding and impact emergency vehicle access to and from Copperton.
	Community Activities	*Vulnerability:* All community events are vulnerable to dam failure. *Impacts:* Community activities would be affected, especially outdoor events, due to impacts on local vegetation, particularly if exposed to chemicals or other hazardous materials from the dam failure. Plants may not grow in certain areas, and it can also affect air quality.
Civil Disturbance	People	Possible risk to health or safety. A civil disturbance could overwhelm local resources and potentially impact access to emergency services if people are injured.
	Structures	Looting or damage to buildings is possible.
	Economic Assets	Theft or interruption of services/transportation. It can affect Copperton from a reputation standpoint if people are afraid to visit or live in the area after a civil disturbance. They may also be concerned about crime.

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
	Natural, Historic, and Cultural Resources	Local business owners may be impacted if they cannot afford repairs associated with property damage.
	Critical Facilities and Infrastructure	Service/transportation interruption. Power and water service could be affected if they are struck or shut down. Police and fire could be impacted if roads are inaccessible.
	Community Activities	Outdoor community activities would be impacted if it is not safe or vandalism is likely.
Cyberattack	People	Communication interruptions or power failure is a concern for vulnerable populations.
	Structures	A cyberattack could impact the physical security of buildings or residential homes if the security system can be hacked into. In addition, a cyberattack could affect fire suppression systems or evacuation methods, which would exacerbate the issue.
	Economic Assets	Flow of commerce could be interrupted. This could impact payroll or other virtual systems for emergency services, local businesses, government services, or residential homes (like paying a mortgage or utility bill). If people cannot use the internet or are locked out a specific account, it is challenging to pay bills, complete projects, or access information.
	Natural, Historic, and Cultural Resources	Natural, historic, and cultural resources could be impacted if the cyberattack accesses critical infrastructure like water or power. This could disrupt the energy grid by manipulating data or overriding emergency systems. It could flood areas, redirect emergency services, or shut off power.
	Critical Facilities and Infrastructure	Delivery of utilities could be affected. In addition, critical infrastructure could be compromised if the hacker is asking for a ransom or the cyberattack cannot be resolved in a reasonable time for power/water infrastructure to come online. Shelters would have to be set up to provide essential services.
	Community Activities	Community activities can be impacted from a reputational perspective if there is no public trust. The public may not want to go to certain areas or visit local businesses in Copperton if they are affected by a cyberattack.
Hazardous Materials Incident (Transporta-tion & Fixed Facility)	People	High risk of exposure due to the proximity of the industrial mining operation. This can include respiratory illnesses or other health impacts from exposure.
	Structures	Could require people to evacuate or shelter in place. Structures would have to complete HazMat cleanup if they were exposed to hazardous materials or in the area affected by an incident.
	Economic Assets	Mainly would affect operations at Rio Tinto but could also affect small businesses in the town. Local businesses may not financially recover from business loss after hazmat clean up, whether that's from a reduction in customers or the amount of time they were closed.
	Natural, Historic, and	Could severely damage local vegetation. Natural, historical, and cultural resources would be affected by the exposure to hazardous materials. Remediation or ventilation may be needed.

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
	Cultural Resources	
	Critical Facilities and Infrastructure	Possible interruption of essential services like fire, police, and EMS. Access to medical facilities could be impacted if there are significant road closures.
	Community Activities	Outdoor community activities could be impacted if the local vegetation was affected by the hazardous materials. Outdoor recreation may be a concern for vulnerable populations.
Public Health Epidemic/Pandemic	People	Direct risk due to contagious/severe illnesses. Vulnerable populations are especially at risk if they are exposed, which could overwhelm medical facilities or create a medical surge.
	Structures	If medical facilities are overwhelmed, additional local facilities or temporary structures may have to be identified to accommodate patients.
	Economic Assets	Interruptions of normal business operations, potential reduction in the workforce, and social distancing restrictions that can impact local businesses.
	Natural, Historic, and Cultural Resources	Increased use of outdoor spaces as seen with the COVID-19 pandemic. Restricted access to outdoor areas or historical buildings if social distancing is required. This can also impact the visitation to those areas if people do not want to socially distance or are afraid of the potential exposure.
	Critical Facilities and Infrastructure	Increased use of public health resources, leading to a medical surge. Illness for public safety or healthcare professionals if they are working with or exposed to patients experiencing symptoms.
	Community Activities	Community activities and events would be impacted by social distancing requirements. People may opt for virtual instead of in-person activities.
Terrorism	People	People could be scared to recreate outside due to previous terrorism events or could sustain injuries from a terrorism event.
	Structures	Structures could sustain damage from a terrorism event and the owner's financial situation could affect their ability to make repairs. If it is commercial property, they may be concerned about future terrorism events and choose to relocate.
	Economic Assets	The reputation of the area post-terrorism event could affect the local businesses, whether those are existing or new. A new business may not want to move into the area if the land or building was previously affected by a terrorism event. In addition, the terrorism event could be costly for a resident or local business to make needed damage repairs.
	Natural, Historic, and Cultural Resources	Historic buildings or cultural resources could be impacted if there is lower visitation by locals or tourists. Local wildlife may migrate into a different area if there is significant activity in where they typically go.
	Critical Facilities and Infrastructure	Critical facilities and infrastructure would be affected by a targeted terrorism event. Essential employees may not be able to perform their

Hazard	Vulnerable Asset	Description of Vulnerability and Impacts
		job duties and water/power infrastructure could be shut down or damaged.
	Community Activities	Community activities could be affected by a terrorism event if the reputation of the area declines. If it is deemed unsafe or if there are multiple incidents in the same area, people won't want to recreate or attend events.

Hazards Not Profiled

Avalanche has been omitted from further discussion of hazard impacts and from mitigation actions. As shown in the description in Volume 1, avalanche risk is primarily in the Wasatch Mountains in SLCo. No previous occurrences of avalanche have impacted Copperton.

Jurisdiction-Specific Changes in Vulnerability

Hazard events can impact communities, infrastructures, and ecosystems. The severity of these impacts can be influenced by climate change, population patterns, and land use developments. Understanding these factors is crucial for the town of Copperton to develop a resilient community and minimize the impacts of hazards.

Table 8 displays the unique changes within the community and the related effects on each identified hazard affecting the town of Copperton.

Table 8: Jurisdiction-Specific Changes in Vulnerability in the Town of Copperton

Type of Hazard Event	Effects of Climate Change	Changes in Population Patterns	Changes in Land Use and Development	Overall Vulnerability
Avalanche	N/A	N/A	N/A	N/A
Drought	Extreme or unusual weather, lack of rainfall, decreased snowpack	An increased population has led to greater need for water resources, such as for cooling, landscape maintenance, commercial businesses, and emergency services. Population has increased since 2019.	Increased development in Rio Tinto may also increase its water needs.	Increased due to climate change and population growth
Earthquake	Extreme or unusual weather patterns, increased greenhouse gas emissions, and	Increased road use with an increased population.	Increased development at Rio Tinto could increase the risk of seismic events in Copperton.	Same

Type of Hazard Event	Effects of Climate Change	Changes in Population Patterns	Changes in Land Use and Development	Overall Vulnerability
	rising sea levels can trigger seismic activity.			
Extreme Heat	Extreme or unusual weather, drought, less local vegetation, wildlife, and snowpack Increases in extreme heat can be closely related to increased impacts of drought and wildfire.	An increased population requires more water use for essential services, local businesses, and landscaping. In addition, resources like cooling facilities for vulnerable populations are needed.	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Increased due to climate change and the increased population
Extreme Cold	Extreme or unusual weather, reduction in local vegetation and wildlife	The increased population may place a strain on local resources, such as power and water infrastructure to run essential services or the staffing needed at warming centers for vulnerable populations.	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Increased due to climate change and the increased population
Flooding	Extreme/ unusual weather (like heavy rain events, preventing the soil from absorbing moisture), excess debris, contamination and disease	Vulnerable populations (the elderly, young children, and unsheltered) may be impacted by flooding if they cannot seek shelter or get out of the flood zone in time. The increased population can also impact essential services, creating a medical surge if people are injured.	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Increased due to climate change and the increased population
Landslide/ Slope Failure	Drought, decreased snowpack, variable rain patterns can all contribute to changes in soil moisture and slope stability.	The number of workers at Rio Tinto could impact evacuation procedures and overwhelm Copperton if people are moving into the area. There could be a medical surge due to population growth in Copperton.	The increased development at the neighboring Rio Tinto site could impact Copperton through landslide and/or slope failure.	Increased due to climate change and population growth

Type of Hazard Event	Effects of Climate Change	Changes in Population Patterns	Changes in Land Use and Development	Overall Vulnerability
Radon	Greater exposure to radon if we continue to see higher temperatures (permafrost thawing allows radon to seep through).	The continued activity in Rio Tinto as well and the population growth in Copperton places mores people at risk.	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Same but population growth increases the number of people exposed to hazard
Heavy Rain	Extreme or unusual weather, flooding, landslides, soil or crop damage, water quality	Heavy rain could cause flooding which would impact residential areas and local businesses. It could also disrupt or prevent timely response from emergency vehicles if roadways are flooded or blocked by debris.	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Increased due to climate change and population growth.
High Wind	Extreme or unusual weather, air quality, water quality, soil erosion	Vulnerable populations (the elderly, young children, and unsheltered) would be impacted if they cannot seek shelter. They would also be the most affected by poor air or water quality.	Materials from increased development at Rio Tinto could be pushed into Copperton, affecting water, soil, and air quality.	Increased due to climate change
Lightning	Extreme or unusual weather, increased likelihood of fires, air pollution, greenhouse gas emissions	Vulnerable populations (the elderly, young children, and unsheltered) may not be able to find or take shelter.	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Increased due to climate change and population growth
Severe Winter Weather	Extreme or unusual weather, less outdoor recreation or investment in local economy (not going out to eat, attending community events, or commuting in/out of town)	The population growth places socially vulnerable groups at risk, especially if heavy snow is associated with a Code Blue alert where shelters must increase their capacity. Heavy snow can also place a strain on fire, police, and EMS if there are car accidents or falls.	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Increased due to climate change and population growth

Type of Hazard Event	Effects of Climate Change	Changes in Population Patterns	Changes in Land Use and Development	Overall Vulnerability
Tornado	Possible increase in severe thunderstorms; diminished quality of air, water, and soil	Vulnerable populations (the elderly, young children, and unsheltered) are most at risk of serious injury.	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Same
Wildfire	Extreme or unusual weather, soil erosion, landslides, drought, lack of vegetation, higher temperatures	Rebuilding is a concern for local homeowners if they do not have the funds or an insurance policy.	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Increased due to climate change and population growth
Dam Failure	Increased precipitation, soil erosion, air quality, water quality, reduction in local wildlife and vegetation	Dam failures could spill into surrounding jurisdictions, affecting access to and from Copperton. This can place a strain on emergency services (police, fire, and EMS)	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Same
Civil Disturbance	N/A	A civil disturbance can overwhelm emergency services (police, fire, and EMS), and affect road access to and from Copperton, especially if there is debris.	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Same
Cyberattack	N/A	In an increasingly digital world, Copperton is vulnerable to cyberattacks on critical infrastructure, which would impact water and power. In addition, police and fire systems could be disrupted. Payroll for local employees or businesses could be hacked into.	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Same
Hazardous Materials Incident (Transporta-	N/A	Increased activity on roads presents a greater risk to the population. If roads are	Increased development at Rio Tinto could expose Copperton to	Same

Type of Hazard Event	Effects of Climate Change	Changes in Population Patterns	Changes in Land Use and Development	Overall Vulnerability
tion & Fixed Facility)		inaccessible due to a hazmat incident, it prevents emergency vehicles from responding quickly.	hazardous materials, which would impact air, water, and soil quality.	
Public Health Epidemic/ Pandemic	N/A	Essential services could become overwhelmed, preventing timely medical response.	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Same
Terrorism	N/A	If roads are blocked or inaccessible, it prevents timely public safety response.	There have been minimal changes in land use and development in Copperton since the previous hazard mitigation plan update.	Same

Additional Public Involvement

The town of Copperton provided several opportunities for public participation. Figure 1 and Figure 2 present examples of public outreach.

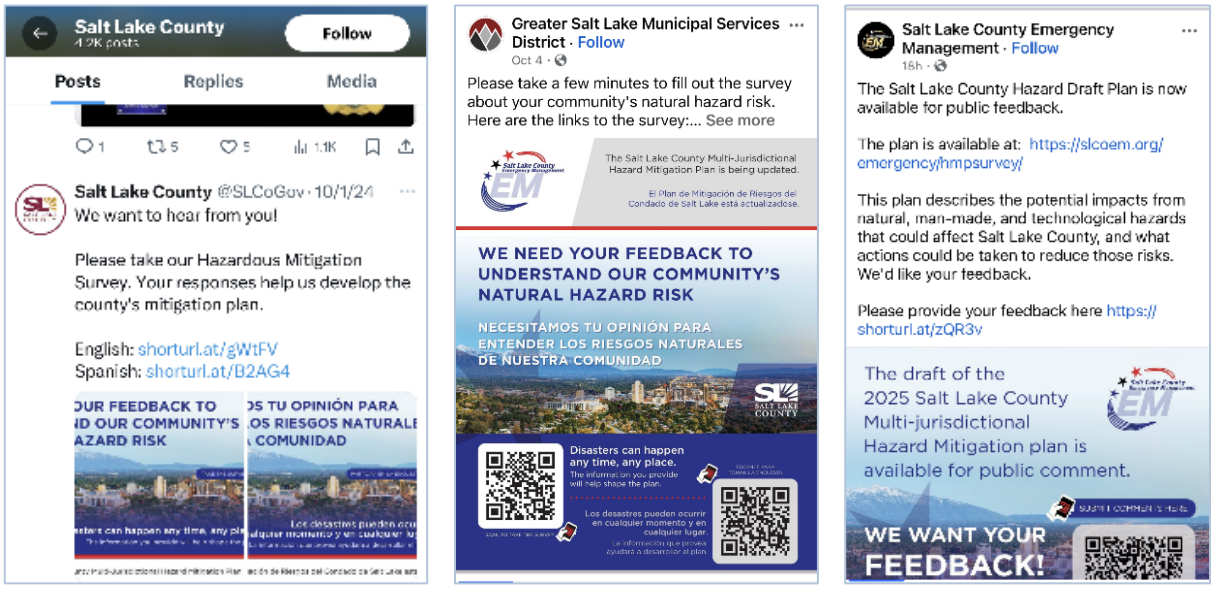

Figure 1: Social Media Posts for the Hazard Mitigation Survey (*left*), from the Municipal Services District (*middle*), and for the Draft Plan Review (*right*)

Figure 2: Mitigation Survey at Copperton Park Community Event

Plan Integration

Incorporating the underlying principles of the Hazard Mitigation Plan and its recommendations into other plans is a highly effective and low-cost way to expand their influence. All plan participants will use existing methods and programs to implement hazard mitigation actions where possible. As previously stated, mitigation is most successful when it is incorporated into the day-to-day functions and priorities of government and public service. This plan builds on the momentum developed through previous and related planning efforts and mitigation programs, and it recommends implementing actions where possible through these other program mechanisms. These existing mechanisms include the following:

- Regularity Capabilities
- Administrative Capabilities
- Fiscal Capabilities

Respective planning stakeholders will conduct implementation and incorporation into existing planning mechanisms and will be done through the routine actions of:

- Monitoring other planning/program agendas
- Attending other planning/program meetings
- Participating in other planning processes; and
- Monitoring community budget meetings for other community program opportunities.

The successful implementation of this plan will require constant and vigilant review of existing plans and programs for coordination and multi-objective opportunities that promote a safe, sustainable community. Regular efforts should be made to monitor the progress of mitigation actions implemented through other

planning mechanisms. Where appropriate, priority actions should be incorporated into planning updates. Table 9 lists existing planning mechanisms in which the Hazard Mitigation Plan has been integrated.

Table 10 lists the opportunities for integrating elements of this plan into other plans.

Table 9: Integration of Previous Plans by the Town of Copperton

Plan	Description
Community Wildfire Protection Plan	Addresses wildfire vulnerability and potential mitigation actions.

Table 10: Opportunities for Integration with Future Plans of the Town of Copperton

Plan	Description
CEMP – Comprehensive Emergency Management Plan	Framework to prepare for, mitigate, respond to, and recover from hazards
Copperton General Plan	This document guides future development for Copperton and sets goals for the community
Copperton Active Transportation Plan	Creating safe local and regional connections for people walking, biking, and rolling.

Capability Assessment

Local mitigation capabilities are existing authorities, policies, programs, and resources that reduce hazard impacts or could help carry out hazard mitigation activities.

Planning and Regulatory Capabilities

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards.

Table 11: Assessment of the Planning Capabilities of the Town of Copperton

Plan	Does it address hazards? (Y/N)	How can it be used to implement mitigation actions?	When was the last update? When is the next update?
General Plan	Y	Review the actions identified in the general plan and how they can be updated or incorporated into the hazard mitigation plan.	2020
Capital Improvement Plan	Y	Master storm drain plan study can inform hazards like flooding.	Updated in the MSD 2024 Strategic Plan
Climate Change Adaptation Plan	N	N/A	N/A

Plan	Does it address hazards? (Y/N)	How can it be used to implement mitigation actions?	When was the last update? When is the next update?
Community Wildfire Protection Plan	Y	Can inform wildfire mitigation actions.	2021
Economic Development Plan	N	N/A	N/A
Land Use Plan	Y	Provides an overview and historical context to inform future efforts and mitigation actions in the General Plan.	2020
Local Emergency Operations Plan	Y	The vulnerabilities and hazards identified can inform mitigation strategies.	Updated recently – Comprehensive Emergency Management Plan can be adopted
Stormwater Management Plan	Y	Can inform flooding-related mitigation actions.	2022
Transportation Plan	Y	Informs public safety.	2024
Substantial Damage Plan	N	N/A	N/A
Other? (Describe)			

Table 12: Assessment of the Regulations and Ordinances of the Town of Copperton

Regulation/ Ordinance	Does it effectively reduce hazard impacts?	Is it adequately administered and enforced?	When was the last update? When is the next update?
Building Code	Building codes ensure that structures are built to standard and brought up to code when remodeling occurs. Copperton has several commercial buildings. The town has adopted the International Building Code (IBC 2021) and International Residential Code (IRC 2021) as adopted by the state with amendments as well as Appendix C, Group U and Appendix K of the IBC.	Unknown	2023
Flood Insurance Rate Maps	Y	Yes	2022
Floodplain Ordinance	N	Yes	2023
Subdivision Ordinance	Varies	Yes	2024
Zoning Ordinance	Varies	Yes	2023

Regulation/ Ordinance	Does it effectively reduce hazard impacts?	Is it adequately administered and enforced?	When was the last update? When is the next update?
Natural Hazard-Specific Ordinance (Stormwater, Steep Slope, Wildfire)	Y – Wildfire & Stormwater No steep slopes in Copperton (outside copper mine)	Yes	Will be updated in 2025.
Acquisition of Land for Open Space and Public Recreation Use	Copperton is built out to its boundaries in all directions. New growth is only when land is rezoned or repurposed.	Yes	2023
Prohibition of Building in At-Risk Areas	Y	Yes	2023
Other? (Describe)			

Administrative and Technical Capabilities

Administrative and technical capabilities include staff and their skills. They also include tools that can help carry out mitigation actions.

Table 13: Assessment of the Administrative Capabilities of the Town of Copperton[3]

Administrative Capability	In Place? (Y/N)	Is staffing adequate?	Are staff trained on hazards and mitigation?	Is coordination between agencies and staff effective?
Chief Building Official	Y via MSD	Yes	Yes	Yes
Civil Engineer	Y (MSD)	Yes	Yes	Yes
Community Planner	Y(MSD)	Yes	Yes	Yes
Emergency Manager	Y, MSD-appointed	Yes; however, the appointee might have other job duties	Yes	Yes
Floodplain Administrator	Y, MSD	Yes	Yes	Yes
Geographic Information System (GIS) Coordinator	Y, MSD	Yes	Yes	Yes
Planning Commission	Y	Yes	Yes	Yes
Fire Safe Council	N – UFA is their fire department.	N/A	N/A	N/A

[3] LDS = Church of Jesus Christ of Latter-Day Saints, MSD = Municipal Services District, UFA = Unified Fire Authority.

Administrative Capability	In Place? (Y/N)	Is staffing adequate?	Are staff trained on hazards and mitigation?	Is coordination between agencies and staff effective?
CERT (Community Emergency Response Team)	N	N/A	N/A	N/A
Active VOAD (Voluntary Agencies Active in Disasters)	Y	No, more is needed. Work with LDS, Southern Baptist Disaster Relief, Salvation Army, and Habitat for Humanity.	Yes	Could be improved.
Other? (Please describe)				

Table 14: Assessment of the Technical Capabilities of the Town of Copperton[4]

Technical Capability	In Place? (Y/N)	How has it been used to assess/mitigate risk in the past?	How can it be used to assess/mitigate risk in the future?
Mitigation Grant Writing	Y, MSD	Copperton is part of the MSD. All services are currently contracted out – UFA, UPD, public works, or through the MSD.	Copperton can apply for hazard mitigation grant funding to complete projects or studies.
Hazard Data and Information	Y, MSD	Provide information for studies and inform Copperton, the MSD, and the general public of different hazards that affect the community to drive change.	Actions from the general plan that identified known hazards and issues can information mitigation actions in the hazard mitigation plan update.
GIS	Y, MSD	Maps were created to show different hazards in the General Plan and the stormwater master plan.	The maps and GIS data can inform mitigation actions for the hazard mitigation plan update to reduce risk.
Mutual Aid Agreements	Y, MSD and SLCo	Mutual aid agreements for police (UPD), fire (UFA), public works (SLCo PW)	Mutual aid agreements strengthen Copperton's resilience.
Other? (Please describe)			

Financial Capabilities

Financial capabilities are the resources to fund mitigation actions. Talking about funding and financial capabilities is important to determine what kinds of projects are feasible, given their cost. Mitigation

[4] MSD = Municipal Services District, SLCo PW = Salt Lake County Public Works, UFA = Unified Fire Authority, UPD = Unified Police Department.

actions like outreach programs are lower cost and often use staff time and existing budgets. Other actions, such as earthquake retrofits, could require substantial funding from local, state, and federal partners. Partnerships, including those willing to donate land, supplies, in-kind matches, and cash, can be included.

Table 15: Assessment of the Financial Capabilities of the Town of Copperton

Funding Resource	In Place? (Y/N)	Has it been used in the past and for what types of activities?	Could it be used to fund future mitigation actions?	Can it be used as the local cost match for a federal grant?
Capital Improvement Project Funding	Y	Yes, Master Storm Drain Plan	Yes	Unknown
General Funds	Y	Unknown	Unknown	Unknown
Hazard Mitigation Grant Program (HMGP/404)	N	Could apply for funding but have not in the past.	Yes	Unknown
Building Resilient Infrastructure & Communities (BRIC)	N	Could apply for funding but have not in the past.	Yes	Unknown
Flood Mitigation Assistance (FMA)	N	Could apply for funding but have not in the past.	Yes	Unknown
Public Assistance Mitigation (PA Mitigation/406)	N	Could apply for funding but have not in the past.	Unknown	Unknown
Community Development Block Grant (CDBG)	N	Could apply for funding but have not in the past.	Yes	Unknown
Natural Resources Conservation Services (NRCS) Programs	N	Could have done studies related to the Bingham Canyon Mine.	Unknown	Unknown
U.S. Army Corps (USACE) Programs	N	Unknown	Unknown	Unknown
Property, Sales, Income, or Special Purpose Taxes	Y	Unknown	Unknown	Unknown
Stormwater Utility Fee	Y	Copperton Improvement District manages.	Unknown	Unknown
Fees for Water, Sewer, Gas, or Electric Services	Y	Unknown	Unknown	Unknown
Impact Fees from New Development and Redevelopment	Y	Unknown	Unknown	Unknown

Funding Resource	In Place? (Y/N)	Has it been used in the past and for what types of activities?	Could it be used to fund future mitigation actions?	Can it be used as the local cost match for a federal grant?
General Obligation or Special Purpose Bonds	Unknown	Unknown	Unknown	Unknown
Federal-funded Programs (Please describe)	Unknown	Unknown	Unknown	Unknown
Private Sector or Nonprofit Programs	Wasatch Front Regional Council	Provided a $73,500 grant to fund an Active Transportation Plan and Connectivity Ordinance	Yes	Unknown
Other?				

Education and Outreach Capabilities

Education and outreach capabilities are programs and methods that could communicate about and encourage risk reduction. These programs may be run by a participant or a community-based partner. Partners, especially those who work with underserved communities, can help identify additional education and outreach capabilities.

Table 16: Assessment of the Education and Outreach Capabilities of the Town of Copperton[5]

Education and Outreach Capability	In Place? (Y/N)	Does it currently incorporate hazard mitigation?	Could it be used to support mitigation in the future?
Community Newsletter(s)	Y	Unknown	Yes
Hazard Awareness Campaigns (such as Firewise, Storm Ready, Severe Weather Awareness Week, School Programs)	Y	Yes	Yes
Public Meetings/Events (Please Describe)	Y	Yes	Yes
Emergency Management Listserv	Y, through MSD/UFA	Yes	Yes
Local News	Y	Yes	Yes
Distributing Hard Copies of Notices (e.g., public libraries, door-to-door outreach)	Y	Unknown	Yes

[5] IPAWS = Integrated Public Alert and Warning System, MSD = Municipal Services District, SLCo EM = Salt Lake County Emergency Management, UFA = Unified Fire Authority.

Education and Outreach Capability	In Place? (Y/N)	Does it currently incorporate hazard mitigation?	Could it be used to support mitigation in the future?
Insurance Disclosures/Outreach	N	N	N
Organizations that Represent, Advocate for, or Interact with Underserved and Vulnerable Communities (Please Describe)	Y	Yes	Yes
Social Media (Please Describe)	Y	Facebook and Instagram. Use Wireless Emergency Alert (WEA) for emergency alerts and coordinate with SLCo EM for an IPAWS.	Yes
Other? (Please Describe)			

Opportunities to Expand and/or Improve Capabilities

Actions that can expand and improve existing authorities, plans, policies, and resources for mitigation include budgeting for mitigation actions, passing policies and procedures for mitigation actions, adopting and implementing stricter mitigation regulations, approving mitigation updates, and making additions to existing plans as new needs are recognized. Table 17 lists the opportunities for the town of Copperton.

Table 17: Opportunities to Expand or Improve the Capabilities of the Town of Copperton[6]

Capability	Opportunity to Expand and/or Improve
Planning and Regulations	Copperton can adopt the CEMP created by the SLCo EM/MSD planners. In addition, the CEMP will have annexes added to it that address specific hazards. To address the unknowns in planning and regulatory capabilities, there are several opportunities for improvement and expansion. First, it is essential to conduct a detailed review of the General Plan, Capital Improvement Plan, Community Wildfire Protection Plan, and other relevant plans to update them. This will help in understanding how these plans can be better used to implement mitigation actions. For the Capital Improvement Plan, the integration of the master storm drain plan can be expanded to include broader flood hazard mitigation measures. This can help inform future infrastructure investments and improve overall community resilience to flooding. The Land Use Plan provides a historical context that can inform future efforts and mitigation actions. By updating the plan with recent data and trends, the community can better anticipate and manage future risks. Similarly, the CEMP should continue to be regularly updated, with the vulnerabilities and hazards identified being used to inform targeted mitigation strategies.

[6] CEMP = Comprehensive Emergency Management Plan, MSD = Municipal Services District, SLCo EM = Salt Lake County Emergency Management

Capability	Opportunity to Expand and/or Improve
	For the Stormwater Management Plan, which was last updated in 2022, regular reviews and updates are needed to ensure that it remains effective in addressing flooding-related hazards. The Transportation Plan, due for an update in 2024, should include considerations for public safety and mitigation actions related to transportation infrastructure. In terms of regulations and ordinances, assessing the Building Code's effectiveness in reducing hazard impacts and ensuring that it is adequately administered and enforced is crucial. This includes understanding the last update and planning for future updates. The same approach should be applied to the Flood Insurance Rate Maps, Floodplain Ordinance, Subdivision Ordinance, and Zoning Ordinance, with a focus on identifying and addressing any gaps in hazard mitigation.
Administrative and Technical	Many positions and technical capabilities that support effective mitigation action implementation are coordinated by the MSD on Copperton's behalf. One local opportunity to expand capabilities is through engaging community-based organizations, such as voluntary agencies active in disasters. By engaging the LDS, Southern Baptist Disaster Relief, Salvation Army, and Habitat for Humanity, Copperton can leverage volunteer resources to build safer homes, implement hazard awareness campaigns and increase community resilience.
Financial	To address the unknowns in financial capabilities, there are several opportunities for improvement and expansion. First, conducting a comprehensive assessment to identify existing funding resources and their past use is crucial. This will provide clarity regarding which resources have been used for specific activities and their potential to fund future mitigation actions. For instance, evaluating the use of Capital Improvement Project Funding and General Funds in past activities will help determine their effectiveness and how they can be leveraged for future mitigation efforts. Next, exploring opportunities to apply for various grant programs, such as the Hazard Mitigation Grant Program (HMGP/404), Building Resilient Infrastructure and Communities (BRIC), Flood Mitigation Assistance (FMA), Public Assistance Mitigation (PA Mitigation/406), and Community Development Block Grant (CDBG), can significantly enhance financial capabilities. These grants, although not previously used, can provide substantial funding for mitigation actions if successfully obtained. Engaging with state and federal partners, as well as private sector and nonprofit organizations, can open doors to additional funding resources. For example, partnerships with the Natural Resources Conservation Service (NRCS) and the U.S. Army Corps of Engineers (USACE) can be explored for studies and projects related to specific hazards, such as the Bingham Canyon Mine. Similarly, the Wasatch Front Regional Council's grant for the Active Transportation Plan and Connectivity Ordinance demonstrates the potential for securing funds from regional entities. For revenue-generating options, such as property, sales, income, or special purpose taxes, and fees for water, sewer, gas, or electric services, it is essential to evaluate their contribution to mitigation actions and their potential to serve as local cost matches for federal grants. Understanding the role of these resources in supporting mitigation efforts will help in planning and allocating budgets effectively. Regularly reviewing and updating the financial capability assessment will ensure that the community remains well-equipped to handle future challenges. By addressing these opportunities, the community can strengthen its financial capabilities, making it more feasible to implement a wide range of mitigation actions and enhance overall resilience to hazards.

Capability	Opportunity to Expand and/or Improve
Education and Outreach	Copperton can develop more hazard-specific public outreach and engagement programs. In addition, evaluating the effectiveness of methodologies of public outreach such as the distribution of hard copies of notices and exploring ways to enhance this method, such as increasing distribution points or collaborating with local organizations, can improve outreach efforts. Insurance disclosures and outreach are currently unknown, presenting an opportunity to collaborate with insurance companies to integrate hazard mitigation information into their communications with policyholders. This can help raise awareness and encourage proactive risk-reduction measures among residents. For social media, developing a comprehensive strategy that includes regular updates on hazard mitigation, interactive posts, and the use of analytics to measure effectiveness can enhance outreach capabilities. Expanding the use of social media platforms beyond Facebook and Instagram can also increase the reach and impact of mitigation messages.

Mitigation Strategy

Mitigation strategies provide proactive measures that are designed to minimize the impacts of hazards on the town of Copperton. Table 18 shows mitigation action alternatives, and

Table 19 shows the status of previous mitigation activities. Table 20 is the 2025 mitigation action plan for the town of Copperton.

Table 18: Mitigation Action Alternatives for the Town of Copperton

Action	Type of Action	Selected for inclusion in the plan?	If not selected, why not?
Continue social media engagement	Education and Awareness Programs		
Adopt new building codes as they are approved to bring some existing structures up to current codes	Structure and Infrastructure Projects		

Table 19: Status of Prior Mitigation Actions of the Town of Copperton

Action	Hazard(s)	Lead Agency	Support Agency(ies)	Status Update
Conduct seismic retrofitting and implement a program for residents similar to the "Fix the Bricks" initiative.	Earthquake	Copperton	Municipal Services District (MSD)	Ongoing, not yet completed
Provide additional education and materials to the public regarding the earthquake risk and potential mitigation actions that can be taken.	Earthquake	Copperton	MSD	Ongoing

Table 20: 2025 Mitigation Action Plan for the Town of Copperton[7]

#	Action	Hazard(s)	Lead Agency	Potential Partners	Benefits (Losses Avoided)	Cost Estimate	Funding Source(s)	Timeframe	Priority	Comments
1	Enhance security at critical infrastructure locations to prevent potential terrorist acts.	Terrorism	MSD	Copperton, SLCo EM, UPD, UFA, SLCo IT, SLCo PW, SLCo Clerk's Office, SLCo Sheriff's Office	Increases security protocols (both in technology and policy) for staff/first responders, clarifies expectations/understanding for local jurisdictions and the public.	High	MSD General Fund–Copperton, SLCo EM General Fund, UPD General Fund, SLCo Sheriff's Office General Fund, UFA General Fund, SHSP grant	Short term	Medium	
2	Develop and implement public education programs on disaster awareness and mitigation.	Civil Disturbance, Dam Failure, Drought, Wildfire, Earthquake, Extreme Heat, Flooding, Hazardous Materials Incident, Heavy Rain, High Wind, Landslide, Lightning, Public Health Epidemic, Radon, Severe Winter Weather, Terrorism, Tornado, Wildfire	Copperton	MSD, UFA, UPD, SLCo Sheriff's Office, SLCo PW, SLCo EM	Improves understanding of local resources and strengthens relationships with the public and stakeholders. Outlines plans/SOPs for programs. Shares information digitally and in person on topics such as how to complete non-structural retrofits on homes to reduce the risk of earthquakes and home weatherization for extreme cold/severe winter weather events.	Low	MSD General Fund–Copperton, SLCo EM General Fund	Short term	Medium	
3	Integrate WebEOC, Crisis Track, GIS, and other technological enhancements.	Civil Disturbance, Dam Failure, Drought, Wildfire, Earthquake, Extreme Heat, Flooding, Hazardous Materials Incident, Heavy Rain, High Wind, Landslide, Lightning, Public Health Epidemic, Radon, Severe Winter Weather, Terrorism, Tornado, Wildfire	Copperton	MSD, SLCo EM, UFA, UPD, SLCo PW, SLCo Health Department	Provides a common operating platform for stakeholders, increases situational awareness, and improves response time.	Low	MSD General Fund–Copperton, SLCo EM General Fund, UFA General Fund	Medium term	Medium	Copperton already has this software; need to improve training and documentation.
4	Enhance and continue to promote the implementation of CERT and SAFE Hubs.	Civil Disturbance, Dam Failure, Drought, Wildfire, Earthquake, Extreme Heat, Flooding, Hazardous Materials Incident, Heavy Rain, High Wind, Landslide, Lightning, Public Health Epidemic, Radon, Severe Winter Weather, Terrorism, Tornado, Wildfire	Copperton	MSD, SLCo EM	Improves awareness of local resources.	Low	MSD General Fund–Copperton, SLCo EM General Fund, State of Utah DEM General Fund	Short term	Medium	SAFE Hubs, previously S.A.F.E. Neighborhoods, is going through a rebrand with a new public awareness campaign and information for all partners.
5	Establish access and functional needs registry and improve incorporation of those with access and functional needs in plans.	Civil Disturbance, Dam Failure, Drought, Wildfire, Earthquake, Extreme Heat, Flooding, Hazardous Materials Incident, Heavy Rain, High Wind, Landslide, Lightning, Public Health Epidemic, Radon, Severe Winter	Copperton	SLCo EM, MSD, UFA, UPD, SLCo Sheriff's Office	Improves situational awareness for the public and stakeholders, provides greater understanding of resources available for those with access and functional needs.	Low	MSD General Fund–Copperton, SLCo EM General Fund, State of Utah DEM staff time	Short term	High	The state of Utah's Access and Functional Needs Registry is dissolving in 2025. The county needs a way to account for those with access and functional needs, including

[7] ATF = Bureau of Alcohol, Tobacco, Firearms and Explosives, BRIC = Building Resilient Infrastructure and Communities, CWDG = Community Wildfire Defense Grant, DEM = Department of Emergency Management, DHS = Department of Homeland Security, EMPG = Emergency Management Performance Grant, FBI = Federal Bureau of Investigation, FEMA = Federal Emergency Management Agency, FMA = Flood Mitigation Assistance, HHPD = High Hazard Potential Dam, HMA = Hazard Mitigation Assistance, HMGP = Hazard Mitigation Grant Program, LEPC = Local Emergency Planning Committee, MSD = Municipal Services District, NWS = National Weather Service, SIAC = Statewide Information and Analysis Center, SHSP = State Homeland Security Program, SLC = Salt Lake City, SLCo EM = Salt Lake County Emergency Management, SLCo IT = Salt Lake County Information Technology, SLCo PW = Salt Lake County Public Works, SOP = Standard Operating Procedure, UDOT = Utah Department of Transportation, UFA = Unified Fire Authority, UPD = Unified Police Department

#	Action	Hazard(s)	Lead Agency	Potential Partners	Benefits (Losses Avoided)	Cost Estimate	Funding Source(s)	Timeframe	Priority	Comments
		Weather, Terrorism, Tornado, Wildfire								incorporation into plans/SOPs.
6	Bring deficient high hazard dams up to current industry standards.	Dam Failure	Dam owners	Water companies, SLCo EM, MSD, Copperton	Preserves life and safety (personal injuries, safety of first responders), reduces damage to critical infrastructure.	High	MSD General Fund- PW Operations Copperton, MSD Capital Projects Fund, SLCo PW Operations Fund, dam owners, water districts, State of Utah DWR General Fund and staff time, HHPD grant	Long term	High	
7	Procure generators and transfer switches for critical facilities.	Extreme Heat	MSD	Copperton, SLCo EM, SLCo Facilities Management, local public utilities, Rio Tinto	Provides backup generators for cooling centers and Code Blue centers. Ensures accurate inventory of what the county has to provide to other agencies or jurisdictions as needed.	Medium	SLCo PW General Fund, MSD General Fund– Copperton, HMA grant	Long term	Medium	
8	Increase the size of culverts and bridges.	Flooding	MSD	SLCo EM, SLCo PW, Copperton	Allows for larger runoff during spring melt season, reduces the amount of debris buildup.	High	SLCo PW General Fund, UDOT Operational Fund, MSD Capital Projects– Copperton, HMGP, FMA grant	Long term	Medium	
9	Procure Flood Mitigation Assistance (FMA) grants.	Flooding	SLCo EM	Copperton, SLCo PW, MSD	Improves understanding of grants available and how money can be used for mitigation efforts.	Low	HMGP, FMA grant, SLCo EM General Fund, MSD General Fund–Copperton, State of Utah DEM staff time	Long term	Medium	
10	Develop an enhanced emergency notification communication system for Copperton.	Civil Disturbance, Dam Failure, Drought, Earthquake, Extreme Heat, Flooding, Hazardous Materials Incident, Heavy Rain, High Wind, Landslide, Lightning, Public Health Epidemic, Radon, Severe Winter Weather, Terrorism, Tornado, Wildfire	SLCo EM	MSD, UFA, UPD, UDOT	Provides early notification of impending wildfires to decrease loss of life. Improves relationships with the public and stakeholders. Ensures faster delivery of information with templates and plans ready to go.	Medium	MSD General Fund– Copperton, SLCo EM General Fund, Next Generation Warning System grant, EMPG	Short term	Medium	
11	Promote the Firewise Initiative and regularly review/ update the Community Wildfire Protection Plan (CWPP).	Wildfire	UFA	SLCo EM, MSD, Copperton, FFSL	Increases awareness of plans (for the public and stakeholders), improves eligibility for grants or other funding sources, ensures regular review of CWPP.	Low	MSD General Fund– Copperton, SLCo EM General Fund CWDG grant, UFA General Fund	Short term	Medium	
12	Conduct public awareness campaign on Tier 2 reporting software for chemical reporting.	Hazardous materials incident	SLCo EM	LEPC, UFA, UPD, Copperton, SLCo Sheriff's Office, Rio Tinto	Improves understanding of Tier 2 reporting and how Copperton can find and submit information. Provides a common operating platform for hazardous materials reporting.	Low	MSD General Fund– Copperton, SLCo EM General Fund, LEPC, State of Utah DEM staff time, UFA General Fund	Long term	Medium	

#	Action	Hazard(s)	Lead Agency	Potential Partners	Benefits (Losses Avoided)	Cost Estimate	Funding Source(s)	Timeframe	Priority	Comments
13	Enact local regulations and codes for development to reduce landslide and slope failure damage to critical infrastructure and buildings.	Landslide and slope failure	MSD	SLCo EM, UFA, Copperton	Reduces the likelihood of landslides and critical infrastructure/building damage. Ensures that future development is up to code and follows policy to avoid repetitive loss properties.	Low	SLCo General Fund, MSD General Fund – Code Enforcement, MSD General Fund-Copperton, State of Utah staff time, HMGP	Long term	Medium	
14	Leverage WebEOC and GIS to track the spread of contagious disease.	Public Health Epidemic/Pandemic	SLCo Health Department	SLCo EM, UFA, MSD, UPD, Sheriff's Office, Copperton	Uses GIS and WebEOC software to maintain situational awareness and tracks illnesses throughout the county.	Low	SLCo EM General Fund, MSD General Fund–Copperton, SLCo Health Department General Fund, State of Utah DEM staff time	Short term	Medium	Copperton already has this software through SLCo EM and the MSD; need to improve training and documentation.
15	Create public awareness campaigns and public education programs on radon risks and provide home testing for radon.	Radon	SLCo EM	SLCo Health Department, SLCo Aging and Adult Services, Copperton, MSD	Decreases radon-caused cancer deaths. Increases engagement/ understanding with the public on what SLCo can do or help with.	Low	SLCo General Fund–Health Department, SLCo General Fund–Aging and Adult Services, MSD General Fund–Copperton, Utah Department of Environmental Quality General Fund	Short term	Low	
16	Develop road resurfacing project including permeable pavement for areas with rain-based flooding.	Severe Weather – Heavy Rain	MSD	UDOT, SLCo PW, Copperton	Reduces pollutants discharged in runoff, reduced maintenance time/costs on roads, improved traction on roads.	High	MSD Capital Projects–Copperton, MSD General Fund–Copperton, SLCo PW General Fund, UDOT Operational or Capital Fund, HMA grant	Long term	Low	
17	Create a public education program for property owners to learn about tree maintenance and high-strength windows.	Severe Weather – High Wind	MSD	SLCo EM, SLCo Aging and Adult Services, NWS, SLCo PW, Copperton	Reduces damage during high wind event to critical infrastructure. Prevents personal injuries (people driving on roads or walking in neighborhoods). Improves relationships with stakeholders and the public.	Low	SLCo PW General Fund, MSD General Fund–Copperton, SLCo EM General Fund,	Short term	Low	
18	Develop a severe winter weather mitigation program to maintain access to primary roadways and evacuation routes.	Severe Winter Weather – Heavy Snow, Blizzard	SLCo PW and Municipal Services	MSD, SLCo EM, Copperton, UDOT, NWS	Ensures emergency services like police, fire, and EMS can use roads to provide their services.	Medium	MSD General Fund–Copperton, NWS Operational Fund, SLCo EM General Fund, UDOT Operational Fund	Short term	High	A severe winter storm with heavy snowfall requires our operators and equipment to be used to clear roads and streets for the public and emergency vehicles to use. The primary efforts will be to keep the roads open by clearing snow.
19	Conduct public awareness campaign about lightning safety.	Severe Weather – Lightning	Copperton	SLCo EM, NWS, UFA, SLCo PW	Increases lightning strike awareness for the public.	Low	SLCo EM General Fund, MSD General Fund–Copperton, NWS	Short term	Low	

#	Action	Hazard(s)	Lead Agency	Potential Partners	Benefits (Losses Avoided)	Cost Estimate	Funding Source(s)	Timeframe	Priority	Comments
							Operational Fund, UFA General Fund			
20	Improve outreach for "see something, say something" QR code to deter terrorist acts.	Terrorism (including cyberattacks)	SLCo EM	UPD, UFA, MSD, Copperton, SLCo IT, SLCo Sheriff's Office	Ensures that residents and local agencies/jurisdictions are aware of local intelligence resources and ways in which they can report suspicious activity. Encourages QR code use/outreach at special events throughout the county.	Low	SLCo EM General Fund, MSD General Fund–Copperton, UPD General Fund, SLCo Sheriff's Office General Fund, SHSP grant	Short term	Medium	
21	Be a part of the countywide intelligence group/ division to monitor and analyze threats before an incident occurs.	Terrorism (including cyberattacks)	SLCo EM	Copperton, SLCo Sheriff's Office, SIAC, DHS, ATF, FBI	Increases situational awareness.	Low	SHSP grant, SLCo EM General Fund, MSD General Fund–Copperton, SLCo Sheriff's Office General Fund, SIAC General Fund	Short term	Medium	This would be a core group of stakeholders that meet on a regular basis to share and collaborate on intelligence data.
22	Code Enforcement – Review critical infrastructure facilities to ensure that building materials are up to code and are tornado resistant.	Tornado	MSD	Copperton, SLCo PW, SLCo EM	Ensures that critical infrastructure facilities are operational/functional in the event of a disaster. Preserves life and safety.	Medium	SLCo EM General Fund, MSD General Fund–Copperton, UFA General Fund	Short term	Low	
23	Enhance interoperable radio communications systems throughout the county.	Civil Disturbance, Dam Failure, Drought, Earthquake, Extreme Heat, Flooding, Hazardous Materials Incident, Heavy Rain, High Wind, Landslide, Lightning, Public Health Epidemic, Radon, Severe Winter Weather, Terrorism, Tornado, Wildfire	Copperton	MSD, UFA, UPD, SLCo Sheriff's Office, SLCo EM	Improves communication between different agencies and provides a common operating platform.	Medium	SLCo EM General Fund, MSD General Fund–Copperton, SLCo Sheriff's Office General Fund	Short term	Medium	
24	Develop a countywide single source of information sharing/gathering for intelligence.	Civil Disturbance, Terrorism	SLCo EM	Copperton, SLCo Sheriff's Office, SIAC, MSD	Improves coordination between local agencies/jurisdictions.	Medium	SHSP Grants, SLCo General Fund, MSD General Fund–Copperton	Short term	Medium	Have one common operating platform to be used by all agencies in SLCo to collect suspicious activity reports. Develop a public awareness campaign to educate the public on how and what to report.
25	Install xeriscaping on government-owned buildings.	Drought	Copperton	SLCo Facilities, Water companies/ districts, Copperton, MSD, state of Utah, SLCO EM	Decreases the cost of landscape irrigation and decreases water use.	High	SLCo General Fund-Facilities, MSD General Fund–Copperton	Short term	Low	
26	Improve communication to the public and stakeholders on	Severe Winter Weather	SLCo EM	Copperton, SLCo Office of Homeless and Criminal Justice Reform,	Prevents further damage to critical infrastructure, ensures that homeless individuals have warming resources available,	Low	SLCo EM General Fund, SLCo General Fund-Health Department, State of Utah General Fund–	Short term	Low	

#	Action	Hazard(s)	Lead Agency	Potential Partners	Benefits (Losses Avoided)	Cost Estimate	Funding Source(s)	Timeframe	Priority	Comments
	resources available when Code Blue is in effect during severe winter weather.			NWS, SLCo Health Department, State of Utah	offloads some of the pressure on local homeless resource providers with standard protocols to follow with Code Blue.		Health and Human Services, NWS General Fund			
27	Install earthquake and ground sensors to help anticipate the likelihood of an earthquake in strategic locations.	Earthquake	SLCo EM	MSD, Copperton, NWS	Monitors high seismic areas more intimately to be able to alert the population of impending seismic activity.	Low	SLCo EM General Fund, MSD General Fund–Copperton, NWS General Fund	Short term	Low	
28	Construct extreme cold shelters to protect citizens from the adverse effects of cold weather.	Extreme Cold	SLCo EM	MSD, Copperton	Protects the population from extreme cold when they cannot find heat, or shelter.	High	SLCo EM General Fund, MSD General Fund–Copperton	Short term	High	
29	Conduct seismic retrofitting and implement a program for residents similar to the “Fix the Bricks” initiative.	Earthquake	Copperton	MSD, SLCo EM	Reduces potential damage to structures and improves safety for residents.	High	SLCo EM General Fund, MSD General Fund-Copperton, HMGP	Long term	Medium	
30	Provide additional education and materials to the public regarding the earthquake risk and potential mitigation actions that can be taken.	Earthquake	Copperton	MSD, SLCo Em	Increases public awareness and preparedness, potentially reducing damage and injuries.	Low	SLCo EM General Fund, MSD General Fund-Copperton, HMGP	Short term	Medium	

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