Colorado Centre Metropolitan District

RISK AND RESILIENCE ASSESSMENT

March 2026

Prepared By:

CCMD

5540 Tech Center Drive • COLORADO SPRINGS, CO • 80919 • (719) 227-0072 • FAX (719) 471-3401

RISK AND RESILIENCE ASSESSMENT

Introduction

In 2018, the EPA passed America's Water Infrastructure Act of 2018 (AWIA). This Act requires water systems serving greater than 3,300 people to perform a *risk and resilience assessment* (RRA). *Risk* is defined as a function of a likely threat, how vulnerable the asset is to this threat, and the consequence of such threat.

Colorado Centre Metropolitan District (CCMD, the District) currently serves approximately 3,600 people with water and wastewater and has commissioned JDS-Hydro Consultants to conduct their risk and resilience assessment. The engineers involved in the development of this evaluation are familiar with CCMD's water and wastewater systems. This RRA assesses the risk of each CCMD water and wastewater asset against *malevolent acts* (accidental or purposeful acts by a person or persons) and *natural hazards*, (such as fire, flood, tornado, etc.).

After initial certification of this RRA, review and recertification (as well as any necessary updates or changes) must be conducted every five (5) years by an employee of the Colorado Centre Metropolitan District. When certifying and recertifying, it is imperative that **only the certification form be submitted** to the Environmental Protection Agency (EPA), **not** the actual RRA document itself. EPA recommends the RRA be kept safe and at a facility of CCMD's choosing, with access limited only to relevant personnel.

Explanation of Risk Assessment Worksheet

Requisite to this report is the *Risk Assessment Worksheet* (the Worksheet), a spreadsheet containing information relevant to CCMD's system, throughout the planning, evaluation, and documentation processes involved in constructing the RRA. The Worksheet has been filled out by the engineers most familiar with CCMD and its infrastructure, and will be the main focus of this report.

The Worksheet focuses on specific assets/operations which could be at risk for various malevolent acts and natural hazards, to be collectively known simply as *hazards* herein. Assets provided by CCMD for this assessment are as follows:

- 3.0-MG portable water storage tank
- Chlorinator building
- Treatment facility
- Booster station/chlorine contact chamber
- Wells 206, 210, 211, 214, and 217

Potential hazards were determined based on knowledge of CCMD and the surrounding area, as well as through guidance and supplemental information from EPA and AWIA. Potential Hazards include the following:

- Blizzard
- Break-in/theft/vandalism*
- Contamination (accidental)
- Contamination (intentional)

- Cyberattack
- Earthquake
- Fire
- Flooding
- HAZMAT release
- Leaks/spills
- Power outage
- Equipment failure
- Telecom failure
- Tornado
- Vehicle collision

  * Break-in/theft/vandalism were grouped into one category as these hazards tend to be related (causation) and often occur in sequence.

These hazards were assessed with respect to each of the assets provided by CCMD, based on magnitude and mitigation measures in place. For simplicity, a scale of low, medium, or high was used for each rating. It should be noted that every potential hazard listed did not apply to every asset, and so the assessment for each asset will vary slightly.

For each asset's assessment, the probability of occurrence of a hazard was determined based on knowledge and experience of CCMD's system. In addition, the potential impact of a hazard for each asset was rated with respect to impact on people, physical property, operations, and reputation in the community. From these, an overall hazard rating was established by pairing the rating assigned to the likelihood of a hazard occurring with the highest (worst) rating among the potential impact categories (people, physical property, operations, and reputation). For example, a rating of LH would indicate a hazard would have a low (L) probability of occurring, with a high (H) potential impact in at least one of the impact categories (e.g., operations).

Overall hazard ratings are color-coded as shown below:

	L	M	H	N/A
L	LL	LM	LH	
M	ML	MM	MH	
H	HL	HM	HH	
N/A				N/A

This report will briefly summarize the results of this evaluation. For information regarding a specific asset or hazard, please refer to the Risk Assessment Worksheet attached herein.

Summary of Results

The majority of ratings throughout the Worksheet had a low (L) probability of occurrence regarding the hazards. Generally, potential hazards such as earthquake, fire, tornado, or contamination typically had a rating of LH, as each of these would have a high impact on some element (i.e., contamination would impact people greatly, and an earthquake or tornado could certainly impact property and operations). Some potential hazards resulted in a rating of LM; however, many of these potential hazards would result in more of a nuisance or temporary problem rather than have a lasting effect on the system. Many of the ratings were LL, meaning a hazard and its impact are low.

The majority of CCMD's assets were rated as ML for blizzards, meaning a medium (M) probability of occurrence, with a low (L) potential impact on the asset as it currently exists. The probability of a blizzard occurring was rated as medium due to the location of CCMD and its assets. Colorado is known for unpredictable and inclement weather, and the southeastern portion of El Paso County, where CCMD is located, is no exception. Due to the possibility of volatile weather, the probability of a blizzard cannot be overlooked. However, the impact of a blizzard on the assets was rated as low. Because the majority of assets are generally unmanned, physical property isn't likely to be damaged during a blizzard, and operations aren't likely to be impacted greatly. In each assets' current state, operators would likely be able to utilize SCADA control and monitoring if unable to physically conduct operations.

The highest impact rating documented in the Worksheet was MM. This rating is relative to assets that would be considered more 'attractive targets' for malevolent activity, and include the chlorinator building, treatment facility, and booster station. The reasoning behind this rating is due to these assets being of or within above-grade structures, which are more likely to be broken into or vandalized than other assets, simply because they are more visible and accessible. The impact rating of medium was given since the impact this potential hazard would have on these assets would depend on what was damaged, stolen, etc.

Additionally, a rating of MM was also assigned for the chlorinator building, treatment facility, and booster station regarding the potential of a power outage, telecommunications failure, and/or equipment failure, depending on the asset. Equipment or telecommunications failure in the chlorinator building would result in a system-wide magnitude; the District's ability to conduct daily operations would be greatly impacted if either of these failures occurred. A power outage at the treatment facility of booster station would have the same impact on the District's operations.

Regarding the ML ratings for the wells, the associated potential hazards were blizzard and power outage. The probability of either of these hazards was rated as medium (M), for reasons discussed previously. Unlike the items discussed above, the wells are not in locked settings. However, the impact of either hazard on the wells would be low with regard to people, property, daily operations, and community reputation; the District has the storage tank for supply and can utilize SCADA monitoring of wells should a blizzard occur.

Considerations

Since there were no ratings with a high probability, nor were there any ratings above MM established in this assessment, risks are relatively low. The existing buildings are all fenced and locked, so the addition of monitoring devices and/or alarms would realistically be the only way to enhance the security of these assets.

Relevant CCMD personnel should read through the Worksheet and decide what action, if any, should be taken to lessen and/or mitigate the impacts of potential hazards listed. The same should be done prior to recertification, again every five (5) years, to EPA.

RISK ASSESSMENT WORKSHEET

STREAMLINE

										Rate Potential Impacts Without Additional Mitigation (L,M,H)				
Asset or Operation at Risk	**Location**	**Potential Hazard**	**Check**	**Scenario Timing**	**Magnitude (System-wide, local, etc.)**	**Mitigation Measures in Place**	**Mitigation Opportunities**	**Probability of Occurrence (L,M,H)**	**People**	**Physical Property / Vehicles / Machinery**	**Operations / Ability to Conduct Business**	**Reputation in the Community**	**Overall Hazard Rating (rating from column E and highest rating from columns I - L)**
3.0-MG Potable Water Storage Tank	**Lot 7 Colorado Springs Airport Filing No. 1d except those parts described in Reception No.s 219009160, 219009162, & 219009164**	Blizzard	X	Winter months	Local	SCADA monitoring so operators don't have to physically check tank levels	Back-up power, back-up heat for temperature-sensitive items	M	L	L	L	L	ML
		Break-in/Theft/Vandalism	X	After dark, warmer months	Local	Site is fenced with locked gate, located away from nearby roads, buildings, etc., no easy access	Limit available access, visual/audio monitoring devices, fencing, gate(s), alarms, lock ladder on tank	L	L	L	L	L	LL
		Contamination - Accidental	X	Any time	System-wide	All access hatches are sealed and locked	Inspections, system monitoring and feedback	L	H	L	H	H	LH
		Contamination - Intentional	X	Any time	System-wide	Site is fenced with locked gate, access hatches are locked	Inspections, system monitoring and feedback, visual/audio monitoring devices	L	H	L	H	H	LH
		Cyberattack	N/A	Unpredictable	N/A	No computer systems present	N/A	N/A					
		Earthquake	X	Unpredictable	System-wide	None	Secure at-risk items	L	M	H	M	L	LH
		Fire	X	Hot/dry months, drought	System-wide	Site only has grass, no heavy fuels present, no flammable materials stored	Limit vegetation within perimeter, fire extinguishers/sprinklers	L	L	H	M	L	LH
		Flooding	X	Rainy season	Local	Site is located at a high point and very unlikely to experience flooding	Pre-emergency planning, flood loss prevention plan	L	L	L	L	L	LL
		HAZMAT Release	N/A	Any time	N/A	No hazardous materials stored on site	HAZMAT incident plans/training/drills, evacuation procedures	N/A					
		Leaks/spills	X	Any time	Local	SCADA monitoring so operators could see tank levels drop in the event of a significant leak	Inspections, system monitoring and feedback	L	L	L	L	M	LM
		Power Outage	N/A	Peak operating hours, storm	Local	SCADA monitoring, daily inspections	Back-up power	L	L	L	L	L	LL
		Equipment Failure	N/A	Any time, peak operating hours	System-wide	No equipment within tank	N/A	N/A					
		Telecom Failure	X	Any time	Local	SCADA monitoring will reveal non-communication	Radios/walkies, cordless communication, back-up power	L	L	L	L	L	LL
		Tornado	X	Any time	System-wide	None	Drills/outreach activities, safe room/shelter	L	L	M	L	L	LM
		Vehicle Collision	X	Any time	System-wide	Highly unlikely as tank site is located away from any paved roads. Site is also fenced	Additional physical barriers	L	L	M	L	L	LM

RISK ASSESSMENT WORKSHEET

STREAMLINE

									Rate Potential Impacts Without Additional Mitigation (L,M,H)				
Asset or Operation at Risk	Location	Potential Hazard	Check	Scenario Timing	Magnitude (System-wide, local, etc.)	Mitigation Measures in Place	Mitigation Opportunities	Probability of Occurrence (L,M,H)	People	Physical Property / Vehicles / Machinery	Operations / Ability to Conduct Business	Reputation in the Community	Overall Hazard Rating (rating from column E and highest rating from columns I - L)
Chlorinator Building	Lot 7 Colorado Springs Airport Filing No. 1d except those parts described in Reception No.s 219009160, 219009162 & 219009164	Blizzard	X	Winter months	System-wide	SCADA monitoring, daily checks	Back-up power, back-up heat for temperature-sensitive items	M	L	L	L	L	ML
		Break-in/Theft/Vandalism	X	After dark, warmer months	System-wide	Locked facility	Audio monitoring devices, alarms	M	L	M	M	L	MM
		Contamination - Accidental	X	Any time	System-wide	Locked facility	Inspections, system monitoring and feedback	L	H	L	H	H	LH
		Contamination - Intentional	X	Any time	System-wide	Locked facility	Inspections, system monitoring and feedback, visual/audio monitoring devices	L	H	L	H	M	LH
		Cyberattack	X	Unpredictable	System-wide	No computer systems present	Digital security systems, virus protection, IT protection	L	L	L	L	M	LM
		Earthquake	X	Unpredictable	System-wide	None	Secure at-risk items	L	L	H	M	L	LH
		Fire	X	Hot/dry months, drought	System-wide	Site only has grass, no heavy fuels present, no flammable materials stored	Limit vegetation within perimeter, fire extinguishers/sprinklers	L	L	H	H	L	LH
		Flooding	X	Rainy season	Local	Site is located at a high point and very unlikely to experience flooding	Pre-emergency planning, flood loss prevention plan	L	L	L	L	L	LL
		HAZMAT Release	X	Any time	System-wide	Facility has secondary containment	HAZMAT incident plans/training/drills, evacuation procedures	L	L	L	L	L	LL
		Leaks/spills	X	Any time	Local	Facility has secondary containment	Inspections, system monitoring and feedback	L	L	M	L	L	LM
		Power Outage	X	Peak operating hours, storm	System-wide	Rent generator if needed	Back-up power, failsafes, system monitoring and feedback capabilities	M	L	L	L	L	ML
		Equipment Failure	X	Any time, peak operating hours	System-wide	SCADA monitoring and daily checks	System restoration plan/system, monitoring and feedback	M	L	L	M	L	MM
		Telecom Failure	X	Any time	System-wide	SCADA monitoring will reveal non-communication	Radios/walkies, cordless communication, back-up power	M	L	L	M	L	MM
		Tornado	X	Any time	System-wide	None	Drills/outreach activities, safe room/shelter	L	L	H	M	L	LH
		Vehicle Collision	X	Any time	System-wide	Highly unlikely as facility is located away from any paved roads, site is fenced	Bollards, signs, lights	L	L	M	L	L	LM

RISK ASSESSMENT WORKSHEET

									Rate Potential Impacts Without Additional Mitigation (L,M,H)				
Asset or Operation at Risk	Location	Potential Hazard	Check	Scenario Timing	Magnitude (System-wide, local, etc.)	Mitigation Measures in Place	Mitigation Opportunities	Probability of Occurrence (L,M,H)	People	Physical Property / Vehicles / Machinery	Operations / Ability to Conduct Business	Reputation in the Community	Overall Hazard Rating (rating from column E and highest rating from columns I - L)
Treatment Facility	9696 Flagstone Street EPC Reception No. 5503400003	Blizzard	X	Winter months	System-wide	SCADA monitoring/control if operators can't make it to plant	Back-up power, back-up heat for temperature-sensitive items	M	L	L	L	L	ML
		Break-in/Theft/Vandalism	X	After dark, warmer months	System-wide	Site is fenced, building is locked outside of business hours	Limit available access, visual/audio monitoring devices, alarms	M	L	M	M	L	MM
		Contamination - Accidental	X	Any time	System-wide	Chemicals are stored in secondary containment and are signed appropriately, no open flow in water treatment facility	Visual/audio monitoring devices	L	H	L	H	H	LH
		Contamination - Intentional	X	Any time	System-wide	Site is fenced, building is locked outside of business hours	Visual/audio monitoring devices	L	H	L	H	H	LH
		Cyberattack	X	Unpredictable	System-wide	Firewall in place	Digital security systems, virus protection, IT protection	L	L	L	M	L	LM
		Earthquake	X	Unpredictable	System-wide	SCADA monitoring, daily inspections	Secure at-risk items	L	L	H	H	L	LH
		Fire	X	Hot/dry months, drought	System-wide	Only grass in the vicinity, no heavy fuels, no flammable materials stored onsite.	Limit vegetation within perimeter, fire extinguishers/sprinklers	L	M	H	H	L	LH
		Flooding	X	Rainy season	Local	Building appears to be appropriately elevated above existing grade so unlikely to flood	Pre-emergency planning, flood loss prevention plan	L	L	L	L	L	LL
		HAZMAT Release	X	Any time	System-wide	Chemicals are stored in secondary containment and are signed appropriately	HAZMAT incident plans/training/drills, evacuation procedures	L	L	L	L	L	LL
		Leaks/spills	X	Any time	Local	SCADA monitoring, daily inspections	Visual/audio monitoring devices	L	L	L	L	L	LL
		Power Outage	X	Peak operating hours, storm	System-wide	SCADA monitoring, daily inspections	Back-up power, failsafes	M	L	L	M	L	MM
		Equipment Failure	X	Any time, peak operating hours	System-wide	SCADA monitoring, daily inspections	System restoration plan/system, monitoring and feedback	L	L	L	L	L	LL
		Telecom Failure	X	Any time	System-wide	SCADA monitoring, daily inspections	Radios/walkies, cordless communication, back-up power	L	L	L	M	L	LM
		Tornado	X	Any time	System-wide	SCADA monitoring, daily inspections	Drills/outreach activities, safe room/shelter	L	M	H	H	L	LH
		Vehicle Collision	X	Any time	System-wide	Site is fenced	Barriers (bollards or similar)	L	L	M	L	L	LM

RISK ASSESSMENT WORKSHEET

									Rate Potential Impacts Without Additional Mitigation (L,M,H)				
Asset or Operation at Risk	Location	Potential Hazard	Check	Scenario Timing	Magnitude (System-wide, local, etc.)	Mitigation Measures in Place	Mitigation Opportunities	Probability of Occurrence (L,M,H)	People	Physical Property / Vehicles / Machinery	Operations / Ability to Conduct Business	Reputation in the Community	Overall Hazard Rating (rating from column E and highest rating from columns I - L)
Booster Station/Chlorine Contact Chamber	South and adjacent to filter plant	Blizzard	X	Winter months	System-wide	SCADA monitoring/control if operators can't make it to plant	Back-up power, back-up heat for temperature-sensitive items	M	L	L	L	L	ML
		Break-in/Theft/Vandalism	X	After dark, warmer months	System-wide	Site is fenced, building is locked outside of business hours	Limit available access, visual/audio monitoring devices, alarms	M	L	M	M	L	MM
		Contamination - Accidental	X	Any time	System-wide	Chemicals are stored in secondary containment and are signed appropriately, no open flow in water treatment facility	Visual/audio monitoring devices	L	H	L	H	H	LH
		Contamination - Intentional	X	Any time	System-wide	Site is fenced, building is locked outside of business hours	Visual/audio monitoring devices	L	H	L	H	H	LH
		Cyberattack	X	Unpredictable	System-wide	Firewall in place	Digital security systems, virus protection, IT protection	L	L	L	M	L	LM
		Earthquake	X	Unpredictable	System-wide	SCADA monitoring, daily inspections	Secure at-risk items	L	L	H	H	L	LH
		Fire	X	Hot/dry months, drought	System-wide	Only grass in the vicinity, no heavy fuels, no flammable materials stored onsite.	Limit vegetation within perimeter, fire extinguishers/sprinklers	L	M	H	H	L	LH
		Flooding	X	Rainy season	Local	Building appears to be appropriately elevated above existing grade so unlikely to flood	Pre-emergency planning, flood loss prevention plan	L	L	L	L	L	LL
		HAZMAT Release	X	Any time	System-wide	Chemicals are stored in secondary containment and are signed appropriately	HAZMAT incident plans/training/drills, evacuation procedures	L	L	L	L	L	LL
		Leaks/spills	X	Any time	Local	SCADA monitoring, daily inspections	Visual/audio monitoring devices	L	L	L	L	L	LL
		Power Outage	X	Peak operating hours, storm	System-wide	SCADA monitoring, daily inspections	Back-up power, failsafes	M	L	L	M	L	MM
		Equipment Failure	X	Any time	System-wide	SCADA monitoring, daily inspections	System restoration plan/system, monitoring and feedback	L	L	L	L	L	LL
		Telecom Failure	X	Any time	System-wide	SCADA monitoring, daily inspections	Radios/walkies, cordless communication, back-up power	L	L	L	M	L	LM
		Tornado	X	Any time	System-wide	SCADA monitoring, daily inspections	Drills/outreach activities, safe room/shelter	L	M	H	H	L	LH
		Vehicle Collision	X	Any time	System-wide	Site is fenced	Barriers (bollards or similar)	L	L	M	L	L	LM

RISK ASSESSMENT WORKSHEET

STREAMLINE

									Rate Potential Impacts Without Additional Mitigation (L,M,H)				
Asset or Operation at Risk	Location	Potential Hazard	Check	Scenario Timing	Magnitude (System-wide, local, etc.)	Mitigation Measures in Place	Mitigation Opportunities	Probability of Occurrence (L,M,H)	People	Physical Property / Vehicles / Machinery	Operations / Ability to Conduct Business	Reputation in the Community	Overall Hazard Rating (rating from column E and highest rating from columns I - L)
Well 206	E Anvil Drive EPC Reception No. 5503417026 (East corner of E. Anvil Drive and Prairie Fox Lane)	Blizzard	X	Winter months	Local	SCADA monitoring, well vents 18 inches above grade	Back-up power, back-up heat for temperature-sensitive items	M	L	L	L	L	ML
		Break-in/Theft/Vandalism	X	After dark, warmer months	Local	Well head is contained within locked security box.	Limit available access, visual/audio monitoring devices, fencing, gate(s), alarms	L	L	M	L	L	LM
		Contamination - Accidental	X	Any time	System-wide	No hazardous materials stored on site	Inspections, system monitoring and feedback, visual/audio monitoring devices	L	H	L	M	H	LH
		Contamination - Intentional	X	Any time	System-wide	Well head is contained within locked security box.	Inspections, system monitoring and feedback, visual/audio monitoring devices	L	H	L	M	H	LH
		Cyberattack	X	Unpredictable	Local	No computer software at well.	None	L	L	L	L	L	LL
		Earthquake	X	Unpredictable	Local	None	Secure at-risk items	L	L	H	L	L	LH
		Fire	X	Hot/dry months, drought	Local	No flammable materials stored on site	Limit vegetation within perimeter, fire extinguishers/sprinklers	L	L	H	L	L	LH
		Flooding	X	Rainy season	Local	Site is outside of floodplain, positive grading away from wells	Pre-emergency planning, flood loss prevention plan	L	L	L	L	L	LL
		HAZMAT Release	N/A	Any time	N/A	N/A	HAZMAT incident plans/training/drills, evacuation procedures	N/A					
		Leaks/spills	X	Any time	Local	None	Routine inspections	L	L	L	L	L	LL
		Power Outage	X	Peak operating hours, storm	Local	None	Back-up power	M	L	L	L	L	ML
		Equipment Failure	X	Any time	Local	SCADA monitoring, routine checks	System restoration plan/system, monitoring and feedback	L	L	L	L	L	LL
		Telecom Failure	X	Any time	Local	SCADA monitoring, routine checks	Radios/walkies, cordless communication, back-up power	L	L	L	L	L	LL
		Tornado	X	Any time	Local	Well head is contained within locked security box.	Drills/outreach activities, safe room/shelter	L	L	L	L	L	LL
		Vehicle Collision	X	Any time	Local	Well head is contained within locked security box.	Barriers (bollards or similar)	L	L	M	L	L	LM

RISK ASSESSMENT WORKSHEET

										Rate Potential Impacts Without Additional Mitigation (L,M,H)				
Asset or Operation at Risk	**Location**	**Potential Hazard**	**Check**	**Scenario Timing**	**Magnitude (System-wide, local, etc.)**	**Mitigation Measures in Place**	**Mitigation Opportunities**	**Probability of Occurrence (L,M,H)**	**People**	**Physical Property / Vehicles / Machinery**	**Operations / Ability to Conduct Business**	**Reputation in the Community**	**Overall Hazard Rating (rating from column E and highest rating from columns I - L)**
Well 210	**Horizonview Drive EPC Reception No. 5503400001 (South of water treatment plant)**	Blizzard	X	Winter months	Local	SCADA monitoring, well vents 18 inches above grade	Back-up power, back-up heat for temperature-sensitive items	M	L	L	L	L	ML
		Break-in/Theft/Vandalism	X	After dark, warmer months	Local	Well head is contained within locked security box.	Limit available access, visual/audio monitoring devices, fencing, gate(s), alarms	L	L	M	L	L	LM
		Contamination - Accidental	X	Any time	System-wide	No hazardous materials stored on site	Inspections, system monitoring and feedback, visual/audio monitoring devices	L	H	L	M	H	LH
		Contamination - Intentional	X	Any time	System-wide	Well head is contained within locked security box.	Inspections, system monitoring and feedback, visual/audio monitoring devices	L	H	L	M	H	LH
		Cyberattack	X	Unpredictable	Local	No computer software at well.	None	L	L	L	L	L	LL
		Earthquake	X	Unpredictable	Local	None	Secure at-risk items	L	L	H	L	L	LH
		Fire	X	Hot/dry months, drought	Local	No flammable materials stored on site	Limit vegetation within perimeter, fire extinguishers/sprinklers	L	L	H	L	L	LH
		Flooding	X	Rainy season	Local	Site is outside of floodplain, positive grading away from wells	Pre-emergency planning, flood loss prevention plan	L	L	L	L	L	LL
		HAZMAT Release	N/A	Any time	N/A	N/A	HAZMAT incident plans/training/drills, evacuation procedures	N/A					
		Leaks/spills	X	Any time	Local	None	Routine inspections	L	L	L	L	L	LL
		Power Outage	X	Peak operating hours, storm	Local	None	Back-up power	M	L	L	L	L	ML
		Equipment Failure	X	Any time	Local	SCADA monitoring, routine checks	System restoration plan/system, monitoring and feedback	L	L	L	L	L	LL
		Telecom Failure	X	Any time	Local	SCADA monitoring, routine checks	Radios/walkies, cordless communication, back-up power	L	L	L	L	L	LL
		Tornado	X	Any time	Local	Well head is contained within locked security box.	Drills/outreach activities, safe room/shelter	L	L	L	L	L	LL
		Vehicle Collision	X	Any time	Local	Well head is contained within locked security box.	Barriers (bollards or similar)	L	L	M	L	L	LM

RISK ASSESSMENT WORKSHEET

STREAMLINE

									Rate Potential Impacts Without Additional Mitigation (L,M,H)				
Asset or Operation at Risk	Location	Potential Hazard	Check	Scenario Timing	Magnitude (System-wide, local, etc.)	Mitigation Measures in Place	Mitigation Opportunities	Probability of Occurrence (L,M,H)	People	Physical Property / Vehicles / Machinery	Operations / Ability to Conduct Business	Reputation in the Community	Overall Hazard Rating (rating from column E and highest rating from columns I - L)
Well 211	Horizonview Drive EPC Reception No. 5503400001 (West of water treatment plant)	Blizzard	X	Winter months	Local	SCADA monitoring, well vents 18 inches above grade	Back-up power, back-up heat for temperature-sensitive items	M	L	L	L	L	ML
		Break-in/Theft/Vandalism	X	After dark, warmer months	Local	Well head is contained within locked security box.	Limit available access, visual/audio monitoring devices, fencing, gate(s), alarms	L	L	M	L	L	LM
		Contamination - Accidental	X	Any time	System-wide	No hazardous materials stored on site	Inspections, system monitoring and feedback, visual/audio monitoring devices	L	H	L	M	H	LH
		Contamination - Intentional	X	Any time	System-wide	Well head is contained within locked security box.	Inspections, system monitoring and feedback, visual/audio monitoring devices	L	H	L	M	H	LH
		Cyberattack	X	Unpredictable	Local	No computer software at well.	None	L	L	L	L	L	LL
		Earthquake	X	Unpredictable	Local	None	Secure at-risk items	L	L	H	L	L	LH
		Fire	X	Hot/dry months, drought	Local	No flammable materials stored on site	Limit vegetation within perimeter, fire extinguishers/sprinklers	L	L	H	L	L	LH
		Flooding	X	Rainy season	Local	Site is outside of floodplain, positive grading away from wells	Pre-emergency planning, flood loss prevention plan	L	L	L	L	L	LL
		HAZMAT Release	N/A	Any time	N/A	N/A	HAZMAT incident plans/training/drills, evacuation procedures	N/A					
		Leaks/spills	X	Any time	Local	None	Routine inspections	L	L	L	L	L	LL
		Power Outage	X	Peak operating hours, storm	Local	None	Back-up power	M	L	L	L	L	ML
		Equipment Failure	X	Any time	Local	SCADA monitoring, routine checks	System restoration plan/system, monitoring and feedback	L	L	L	L	L	LL
		Telecom Failure	X	Any time	Local	SCADA monitoring, routine checks	Radios/walkies, cordless communication, back-up power	L	L	L	L	L	LL
		Tornado	X	Any time	Local	Well head is contained within locked security box.	Drills/outreach activities, safe room/shelter	L	L	L	L	L	LL
		Vehicle Collision	X	Any time	Local	Well head is contained within locked security box.	Barriers (bollards or similar)	L	L	M	L	L	LM

RISK ASSESSMENT WORKSHEET

STREAMLINE

									Rate Potential Impacts Without Additional Mitigation (L,M,H)				
Asset or Operation at Risk	Location	Potential Hazard	Check	Scenario Timing	Magnitude (System-wide, local, etc.)	Mitigation Measures in Place	Mitigation Opportunities	Probability of Occurrence (L,M,H)	People	Physical Property / Vehicles / Machinery	Operations / Ability to Conduct Business	Reputation in the Community	Overall Hazard Rating (rating from column E and highest rating from columns I - L)
Well 214	Horizonview Drive EPC Reception No. 5503400005 (West of water treatment plant)	Blizzard	X	Winter months	Local	SCADA monitoring, well vents 18 inches above grade	Back-up power, back-up heat for temperature-sensitive items	M	L	L	L	L	ML
		Break-in/Theft/Vandalism	X	After dark, warmer months	Local	Well head is contained within locked security box.	Limit available access, visual/audio monitoring devices, fencing, gate(s), alarms	L	L	M	L	L	LM
		Contamination - Accidental	X	Any time	System-wide	No hazardous materials stored on site	Inspections, system monitoring and feedback, visual/audio monitoring devices	L	H	L	M	H	LH
		Contamination - Intentional	X	Any time	System-wide	Well head is contained within locked security box.	Inspections, system monitoring and feedback, visual/audio monitoring devices	L	H	L	M	H	LH
		Cyberattack	X	Unpredictable	Local	No computer software at well.	None	L	L	L	L	L	LL
		Earthquake	X	Unpredictable	Local	None	Secure at-risk items	L	L	H	L	L	LH
		Fire	X	Hot/dry months, drought	Local	No flammable materials stored on site	Limit vegetation within perimeter, fire extinguishers/sprinklers	L	L	H	L	L	LH
		Flooding	X	Rainy season	Local	Site is outside of floodplain, positive grading away from wells	Pre-emergency planning, flood loss prevention plan	L	L	L	L	L	LL
		HAZMAT Release	N/A	Any time	N/A	N/A	HAZMAT incident plans/training/drills, evacuation procedures	N/A					
		Leaks/spills	X	Any time	Local	None	Routine inspections	L	L	L	L	L	LL
		Power Outage	X	Peak operating hours, storm	Local	None	Back-up power	M	L	L	L	L	ML
		Equipment Failure	X	Any time	Local	SCADA monitoring, routine checks	System restoration plan/system, monitoring and feedback	L	L	L	L	L	LL
		Telecom Failure	X	Any time	Local	SCADA monitoring, routine checks	Radios/walkies, cordless communication, back-up power	L	L	L	L	L	LL
		Tornado	X	Any time	Local	Well head is contained within locked security box.	Drills/outreach activities, safe room/shelter	L	L	L	L	L	LL
		Vehicle Collision	X	Any time	Local	Well head is contained within locked security box.	Barriers (bollards or similar)	L	L	M	L	L	LM

RISK ASSESSMENT WORKSHEET

									Rate Potential Impacts Without Additional Mitigation (L,M,H)				
Asset or Operation at Risk	Location	Potential Hazard	Check	Scenario Timing	Magnitude (System-wide, local, etc.)	Mitigation Measures in Place	Mitigation Opportunities	Probability of Occurrence (L,M,H)	People	Physical Property / Vehicles / Machinery	Operations / Ability to Conduct Business	Reputation in the Community	Overall Hazard Rating (rating from column E and highest rating from columns I - L)
Well 217	E Anvil Drive EPC Reception No. 5503417025 (West of water treatment plant)	Blizzard	X	Winter months	Local	SCADA monitoring, well vents 18 inches above grade	Back-up power, back-up heat for temperature-sensitive items	M	L	L	L	L	ML
		Break-in/Theft/Vandalism	X	After dark, warmer months	Local	Well head is contained within locked security box.	Limit available access, visual/audio monitoring devices, fencing, gate(s), alarms	L	L	M	L	L	LM
		Contamination - Accidental	X	Any time	System-wide	No hazardous materials stored on site	Inspections, system monitoring and feedback, visual/audio monitoring devices	L	H	L	M	H	LH
		Contamination - Intentional	X	Any time	System-wide	Well head is contained within locked security box.	Inspections, system monitoring and feedback, visual/audio monitoring devices	L	H	L	M	H	LH
		Cyberattack	X	Unpredictable	Local	No computer software at well.	None	L	L	L	L	L	LL
		Earthquake	X	Unpredictable	Local	None	Secure at-risk items	L	L	H	L	L	LH
		Fire	X	Hot/dry months, drought	Local	No flammable materials stored on site	Limit vegetation within perimeter, fire extinguishers/sprinklers	L	L	H	L	L	LH
		Flooding	X	Rainy season	Local	Site is outside of floodplain, positive grading away from wells	Pre-emergency planning, flood loss prevention plan	L	L	L	L	L	LL
		HAZMAT Release	N/A	Any time	N/A	N/A	HAZMAT incident plans/training/drills, evacuation procedures	N/A					
		Leaks/spills	X	Any time	Local	None	Routine inspections	L	L	L	L	L	LL
		Power Outage	X	Peak operating hours, storm	Local	None	Back-up power	M	L	L	L	L	ML
		Equipment Failure	X	Any time	Local	SCADA monitoring, routine checks	System restoration plan/system, monitoring and feedback	L	L	L	L	L	LL
		Telecom Failure	X	Any time	Local	SCADA monitoring, routine checks	Radios/walkies, cordless communication, back-up power	L	L	L	L	L	LL
		Tornado	X	Any time	Local	Well head is contained within locked security box.	Drills/outreach activities, safe room/shelter	L	L	L	L	L	LL
		Vehicle Collision	X	Any time	Local	Well head is contained within locked security box.	Barriers (bollards or similar)	L	L	M	L	L	LM