

Section 5

Mitigation Strategy Requirements

Mitigation Strategy---Requirement §201.6(c)(3):

The plan **shall** include a strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools.

Local Hazard Mitigation Goals---Requirement §201.6(c)(3)(i):

[The hazard mitigation strategy **shall** include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

- Does the new or updated plan include a description of mitigation **goals** to reduce or avoid long-term vulnerabilities to the identified hazards?

Identification and Analysis of Mitigation Actions---Requirement §201.6(c)(3) (ii):

[The mitigation strategy **shall** include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

Identification and Analysis of Mitigation Actions: National Flood Insurance Program (NFIP) Compliance--Requirement §201.6(c)(3)(ii):

[The mitigation strategy] must also address the jurisdiction's participation in the National Flood Insurance Program (NFIP), and continued compliance with NFIP requirements, as appropriate.

- Does the new or updated plan identify and analyze a **comprehensive range** of specific mitigation actions and projects for each hazard?
- Do the identified actions and projects address reducing the effects of hazards on **new** buildings and infrastructure?
- Do the identified actions and projects address reducing the effects of hazards on **existing** buildings and infrastructure?
- Does the new or updated plan describe the jurisdiction(s) participation in the NFIP?
- Does the mitigation strategy identify, analyze and prioritize actions related to continued compliance with the NFIP?

Implementation of Mitigation Actions---Requirement: §201.6(c)(3) (iii):

[The mitigation strategy section **shall** include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization **shall** include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

- Does the new or updated mitigation strategy include how the actions are **prioritized**? (For example, is there a discussion of the process and criteria used?)
- Does the new or updated mitigation strategy address how the actions will be **implemented and administered**, including the responsible department, existing and potential resources and the timeframe to complete each action?
- Does the new or updated prioritization process include an emphasis on the use of **cost-benefit review** to maximize benefits?
- Does the updated plan identify the completed, deleted or deferred mitigation actions as a benchmark for progress, and if activities are unchanged (i.e., deferred), does the updated plan describe why no changes occurred?

SECTION 5

REGION 5 ALL HAZARD MITIGATION PLAN 2020-2025 EDITION MT. VIEW-EDGEWOOD WATER COMPANY MITIGATION STRATEGY SECTION

Table of Contents

MITIGATION STRATEGY REQUIREMENTS 1

TABLE OF CONTENTS 2

STARTUP MITIGATION MEASURES 4

EXISTING MITIGATION ACTIONS	4
PLAN MAINTENANCE	4

HAZARD MITIGATION FORUM 5

PIERCE COUNTY HAZARD MITIGATION FORUM.....	5
--	---

WATER COMPANY MEASURES 6

CAPABILITY IDENTIFICATION AND EVALUATION.....	6
SEISMIC RETROFIT OF SOUTH RESERVOIRS	7
PURCHASE OF EMERGENCY GENERATORS.....	7
STORAGE AND TRANSPORT OF EMERGENCY FUEL.....	8
PURCHASE AND INSTALL RADIO TELEMETRY.....	9
EMERGENCY SUPPLY KITS FOR EMPLOYEES (EOC).....	9
HYDRANT DRINKING MANIFOLD.....	10
PURCHASE HYDRO-EXCAVATOR	10
PERIMETER SECURITY WITH CARD ENTRY	11
PURCHASE VIDEO SURVEILLANCE SYSTEM	12
PURCHASE OF LAPTOPS WITH AIR CARDS FOR TELEMETRY.....	12
PURCHASE PROGRAMMABLE MESSAGE BOARDS	13
DEVELOP AND DOCUMENT EMERGENCY PROCEDURES	14
REPLACE 5" STOVEPIPE MAINS AND ASBESTOS MAINS.....	14
PREMISES ISOLATION PROGRAM (DOUBLE CHECK VALVES)	15
REPLACE WATER MAINS	15
NEGOTIATE AND IMPLEMENT INTERTIE WITH PUYALLUP	16
UPGRADE WELL 1R + 8 TO MITIGATION LANDSLIDE HAZARD	17

MITIGATION MEASURE MONITORING 18

ENDNOTES 21

Table 5-1 Mt. View-Edgewood Water Company Mitigation Strategy Matrix

Implementation Mechanism	Mitigation Measure (Hazard(s)) ¹	Lead Jurisdiction(s) / Department(s)	Timeline (years)	Plan Goals					
				Life and Property	Operations	Partnerships	Natural Resources	Preparedness	Sustainable Economy
Startup	1. Existing Mitigation Actions (E,L,V,D,F,SW,WUI,MM)	Mt. View-Edgewood Water	Ongoing	✓	✓	✓	✓	✓	✓
	2. Plan Maintenance (E,L,V,D,F,SW,WUI,MM)	Mt. View-Edgewood Water	Ongoing	✓	✓	✓	✓	✓	✓
HMF	1. Pierce County Hazard Mitigation Forum (E,L,V,D,F,SW,WUI,MM)	PCDEM; Mt. View-Edgewood Water	Ongoing	✓	✓	✓	✓	✓	✓
Water Company	1. Capability Identification and Evaluation (E,L,V,D,F,SW,WUI,MM)	Mt. View-Edgewood Water	Ongoing	N/A					
	2. Seismic Retrofit of South Reservoirs (E,SW)	Mt. View-Edgewood Water	Complete	✓	✓	✓			✓
	3. Purchase of Emergency Generators (E,L,V,D,F,SW,WUI)	Mt. View-Edgewood Water	Ongoing	✓	✓				✓
	4. Storage and Transport of Emergency Fuel (E,L,V,D,F,SW,WUI)	Mt. View-Edgewood Water	Complete	✓	✓	✓			✓
	5. Purchase and Install Radio Telemetry (E,L,V,D,F,SW,WUI)	Mt. View-Edgewood Water	Complete	✓	✓				
	6. Emergency Supply Kits for Employees (EOC) (E,L,V,D,F,SW,WUI,MM)	Mt. View-Edgewood Water	1-2	✓	✓			✓	
	7. Hydrant Drinking Manifold (E,L,V,D,F,SW,WUI)	Mt. View-Edgewood Water	5	✓	✓				✓
	8. Purchase Hydro-Excavator (E,L,V,F,SW,WUI)	Mt. View-Edgewood Water	5	✓	✓				
	9. Perimeter Security with Card Entry (E,L,V,F,SW,WUI,MM)	Mt. View-Edgewood Water	Complete	✓	✓	✓			
	10. Purchase Video Surveillance System (E,L,V,D,F,SW,WUI)	Mt. View-Edgewood Water	Complete	✓	✓				
	11. Purchase of Laptops with Air Cards for Telemetry (E,L,V,D,F,SW,WUI)	Mt. View-Edgewood Water	Complete	✓	✓				
	12. Purchase Programmable Message Boards (E,L,V,D,F,SW,WUI)	Mt. View-Edgewood Water	5			✓		✓	✓
	13. Develop and Document Emergency Procedures (E,L,V,D,F,SW,WUI,MM)	Mt. View-Edgewood Water	Ongoing	✓	✓				
	14. Replace Asbestos Mains (E,L,V,D,F,SW,WUI)	Mt. View-Edgewood Water	5	✓	✓				✓
	15. Premises Isolation Program (Double Check Valves) (E,L,V,D,F,SW,WUI)	Mt. View-Edgewood Water	Complete	✓	✓				
	16. Replace Water Mains (E,L,V,D,F,SW,WUI)	Mt. View-Edgewood Water	5	✓	✓				
	17. Negotiate and Implement Intertie with Puyallup (E,L,V,D,F,SW,WUI,MM)	Mt. View-Edgewood Water	5-10	✓	✓				✓
	18. Upgrade Well 1R + 8 to Mitigate Landslide Hazard? (E,L,F,SW)	Mt. View-Edgewood Water	5-10	✓	✓	✓			

Startup Mitigation Measures

Existing Mitigation Actions

Hazards: E, L, V, D, F, SW, WUI¹, MM²

Mt. View-Edgewood Water Company will integrate the hazard mitigation plan into existing plans, ordinances, and programs to dictate land uses within the jurisdiction. Further, Mt. View-Edgewood Water will continue to implement existing programs, policies, and regulations as identified in the Capability Identification Section of this Plan. This includes continuing those programs that are identified as technical and fiscal capabilities.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Increase Public Preparedness for Disasters; Preserve or Restore Natural Resources; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be accomplished with local budgets or grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company
5. **Timeline** = Ongoing
6. **Benefit** = Area-Wide
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			

Origin

Previous Plan	Current Plan
X	

Plan Maintenance

Hazards: E, L, V, D, F, SW, WUI¹, MM²

Mt. View-Edgewood Water will adopt those processes outlined in the Plan Maintenance Section of this Plan.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Increase Public Preparedness for Disasters; Preserve or Restore Natural Resources; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company
5. **Timeline** = Ongoing
6. **Benefit** = Area-Wide
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			

Origin

Previous Plan	Current Plan
X	

Hazard Mitigation Forum

Pierce County Hazard Mitigation Forum

Hazards: E, L, V, D, F, SW, WUI¹, MM²

Mt. View-Edgewood Water will work in conjunction with the County through the Pierce County Hazard Mitigation Forum (HMF). The Forum will continue as a means of coordinating mitigation planning efforts among all jurisdictions within the County that have completed a mitigation plan. This ensures efficient use of resources and a more cooperative approach to making a disaster resistant county. The HMF meets annually; every October. This is addressed in the Plan Maintenance Section of this Plan.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Increase Public Preparedness for Disasters; Preserve or Restore Natural Resources; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = Minor
3. **Funding Source and Situation** = Funding could be obtained through local budget.
4. **Lead Jurisdiction(s)** = PC DEM; Mt. View-Edgewood Water Company
5. **Timeline** = Ongoing
6. **Benefit** = Regional
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			

Origin

Previous Plan	Current Plan
X	

Water Company Measures

Capability Identification and Evaluation

Hazards: E, L, V, D, F, SW, WUI¹, MM²

Mt. View-Edgewood Water will develop a consistent and replicable system for evaluating capabilities. A comprehensive evaluation will lead to specific policy recommendations to more effectively achieve disaster resistant communities. Further, a capability evaluation involves measurable variables so that capabilities may eventually be tracked in conjunction with the implementation of all mitigation measures. This is a key component in evaluating the success of the overall mitigation strategy.

1. **Goal(s) Addressed** = N/A. Goals addressed are contingent upon the mitigation measures resulting from this priority.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company
5. **Timeline** = Short-term
6. **Benefit** = Area-Wide
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
X			
Comments			
Water Company identified capabilities in previous plan and has been working since then to improve resilience of water system.			

Origin

Previous Plan	Current Plan
X	

Seismic Retrofit of South Reservoirs

Hazards: E, SW¹

The measure will involve a seismic retrofit of the two south reservoirs (1 site) as well as seismic analysis of two reservoirs. Following the analysis, a retrofit will occur based on the results of the analysis.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation; Promote A Sustainable Economy.
2. **Cost of Measure** = \$500,000 (2007 dollars)
3. **Funding Source and Situation** = Funding could be obtained through local budget and grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Long-term
6. **Benefit** = Two Reservoirs (2900 connections), City of Milton and Regional Partners
7. **Life of Measure** = 50 years
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
2013			
Comments			
Received FEMA grant for project. Overall cost of project \$1,100,000.			

Origin

Previous Plan	Current Plan
X	

Purchase of Emergency Generators

Hazards: E, L, V, D, F, SW, WUI¹

The measure is to purchase and install emergency generators for critical facilities in order to maintain water supply in times of power failure.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Promote A Sustainable Economy.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget and grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Long-Term
6. **Benefit** = Water Company and customers, City of Edgewood and Regional Partners
7. **Life of Measure** = 25 years
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X	Generators at reservoirs and 4 wells.	
Comments			
2020-2021 improvement project consists of new generator for Well 9 and Well 7.			

Origin

Previous Plan	Current Plan
X	

Storage and Transport of Emergency Fuel

Hazards: E, L, V, D, F, SW, WUI¹

During times of power outage, it is extremely difficult to obtain fuel for trucks and generators and hard to have it delivered. This measure will set up a way to obtain and store adequate fuel throughout the storm season.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation; Promote a Sustainable Economy.
2. **Cost of Measure** = Cost of storage tank and contract as necessary
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Long-term
6. **Benefit** = Water Company and customers, City of Edgewood and Regional Partners
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
2011			
Comments			
1,000 gallon fuel tank was installed at shop location.			

Origin

Previous Plan	Current Plan
X	

Purchase and Install Radio Telemetry

Hazards: E, L, V, D, F, SW, WUI¹

Purchase radio telemetry system to assist with monitoring and performing field functions via radio transmission.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations.
2. **Cost of Measure** = Cost of equipment plus any installation
3. **Funding Source and Situation** = Funding could be obtained through local budgets or grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Long-Term
6. **Benefit** = Water Company and customers, City of Edgewood and Regional Partners
7. **Life of Measure** = 5-10 years
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
X			
Comments			
Water system SCADA system includes remote monitoring and operations from office and laptops.			

Origin

Previous Plan	Current Plan
X	

Emergency Supply Kits for Employees (EOC)

Hazards: E, L, V, D, F, SW, WUI¹, MM²

Purchase supplies and put together emergency kits for employees to include food, water, first aid kits and emergency communications. These items would be kept at the EOC for use during disaster response.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Increase Public Preparedness for Disasters.
2. **Cost of Measure** = Cost of supplies and storage units
3. **Funding Source and Situation** = Funding could be obtained through local budget and grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Short-term
6. **Benefit** = Water Company and employees, Customers, City of Edgewood and Regional Partners
7. **Life of Measure** = 5-7 years

8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
Comments			

Origin

Previous Plan	Current Plan
X	

Hydrant Drinking Manifold

Hazards: E, L, V, D, F, SW, WUI¹

This measure provides emergency water supply through a special manifold system that can be set up on short notice.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Promote A Sustainable Economy.
2. **Cost of Measure** = Cost of equipment
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Long-term
6. **Benefit** = Water Company and customers, City of Edgewood, First Responders and Regional Partners
7. **Life of Measure** = 5-10 years
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
			X
Comments			

Origin

Previous Plan	Current Plan
X	

Purchase Hydro-Excavator

Hazards: E, L, V, F, SW, WUI¹

Purchase Hydro-Excavator and train on its use.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations.
2. **Cost of Measure** = Cost of equipment and training
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Long-term
6. **Benefit** = Water Company and customers, First responders, City of Edgewood, Regional Partners
7. **Life of Measure** = 25 years for equipment
8. **Community Reaction** = the proposal would benefit those affected with no adverse reaction from others.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
			X
Comments			

Origin

Previous Plan	Current Plan
X	

Perimeter Security with Card Entry

Hazards: E, L, V, F, SW, WUI¹, MM²

Purchase and install perimeter security system that allows card entry through gates and doors.

1. **Goal(s) Addressed** = Protect life and property; Ensure continuity of operations, Establish and strengthen partnerships for implementation.
2. **Cost of Measure** = Cost of equipment, installation and training
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Long-term
6. **Benefit** = Water Company and customers, First Responders, City of Edgewood and Regional Partners
7. **Life of Measure** = 5-10 years on equipment
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
X			
Comments			
Reservoir sites and office/shop requires security fobs. Wells require cyberlocks for entrance.			

Origin

Previous Plan	Current Plan
X	

Purchase Video Surveillance System

Hazards: E, L, V, D, F, SW, WUI¹

In an effort to increase security of water systems and ensure safety of water supply, purchase video surveillance equipment and install at primary critical locations to monitor at will for specific incidents. This equipment will also be used to determine damages or problems during and after an emergency or disaster situation.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations.
2. **Cost of Measure** = Price of equipment and installation
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Long-term
6. **Benefit** = Water customers and employees, First Responders, City of Edgewood, Regional Partners
7. **Life of Measure** = 5-10 years on equipment
8. **Community Reaction** = the proposal would be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
X			
Comments			
Video surveillance at reservoir sites and shop/office.			

Origin

Previous Plan	Current Plan
X	

Purchase of Laptops with Air Cards for Telemetry

Hazards: E, L, V, D, F, SW, WUI¹

In conjunction with the purchase of telemetry equipment, laptops would be an additional purchase to enable truck drivers to monitor and control from service trucks.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations.
2. **Cost of Measure** = Cost of laptops and air cards for each truck
3. **Funding Source and Situation** = Funding could be obtained through local budgets or grants.

4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Long-term
6. **Benefit** = Water Company and customers, City of Edgewood and Regional Partners
7. **Life of Measure** = 5-10 years
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
X			
Comments			
Staff have Surface tablets that can access and operate all pumps, mixers, and reservoirs remotely.			

Origin

Previous Plan	Current Plan
X	

Purchase Programmable Message Boards

Hazards: E, L, V, D, F, SW, WUI¹

The Water Company would like to purchase some portable message boards that are programmable to use by the roadside in the event of emergencies so that citizens can be informed. These would be a positive addition to the entire community and could be used for many different types of events.

1. **Goal(s) Addressed** = Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters; Promote a Sustainable Economy.
2. **Cost of Measure** = Cost of Equipment
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Long-term
6. **Benefit** = Water Company and citizens, City of Edgewood and Regional Partners
7. **Life of Measure** = 20-25 years
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
			X
Comments			

Origin

Previous Plan	Current Plan
X	

Develop and Document Emergency Procedures

Hazards: E, L, V, D, F, SW, WUI¹, MM²

Develop and document emergency procedures for the Water Company.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations.
2. **Cost of Measure** = Cost of consultant and staff time for development
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Short-term
6. **Benefit** = Water Company and customers, City of Edgewood, Regional partners
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
Water Company has an emergency plan and procedures in place that are updated periodically.			

Origin

Previous Plan	Current Plan
X	

Replace Asbestos Mains

Hazards: E, L, V, D, F, SW, WUI¹

The Water Company plans to develop a program for replacing existing asbestos mains that pose a risk with potential contamination if broken. All 5” stovepipe mains have been replaced.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Promote A Sustainable Economy.
2. **Cost of Measure** = Labor and Materials
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Long-term
6. **Benefit** = Water Company and customers, City of Edgewood, Regional Partners
7. **Life of Measure** = 50 years
8. **Community Reaction** = the proposal would benefit those affected with no adverse reaction from others.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
Water Company no longer has stovepipe mains. There are still asbestos mains being used in the system.			

Origin

Previous Plan	Current Plan
X	

Premises Isolation Program (Double Check Valves)

Hazards: E, L, V, D, F, SW, WUI¹

To insure the ability to isolate particular locations if there are problems with the lines or the water supply.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budgets or grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Short-term
6. **Benefit** = Water Company and customers, City of Edgewood and Regional Partners
7. **Life of Measure** = Varies
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
2017			
Comments			
All customers have backflow prevention at the meters. Residential DCVA's are tested and maintained by the Water Company.			

Origin

Previous Plan	Current Plan
X	

Replace Water Mains

Hazards: E, L, V, D, F, SW, WUI¹

This is a project for under water, bell and spigot replacement of mains.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations.
2. **Cost of Measure** = Cost of Equipment and installation
3. **Funding Source and Situation** = Funding could be obtained through local budget and grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Long-term
6. **Benefit** = Water Company and customers, City of Edgewood Residents and Regional Partners
7. **Life of Measure** = 50 years
8. **Community Reaction** = the proposal would benefit those affected with no adverse reaction from others.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
	X		
Comments			
Replacement of undersized and old water mains are on a prioritized list of projects that the Water Company completes as budgets allow.			

Origin

Previous Plan	Current Plan
X	

Negotiate and Implement Intertie with Puyallup

Hazards: E, L, V, D, F, SW, WUI¹, MM²

The Water Company desires to negotiate and implement an intertie agreement with the City of Puyallup and their water district. This will lend reliability and emergency water supply in times of need.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Promote a Sustainable Economy.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget and grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Short-term
6. **Benefit** = Water Company and customers, City of Edgewood, and Regional Partners
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
			X

Comments

Origin

Previous Plan	Current Plan
X	

Upgrade Well 1R + 8 to Mitigation Landslide Hazard

Hazards: E, L, F, SW¹

Well 1R + 8 is in a noted landslide hazard area and would benefit from these mitigation measures prior to an event.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = Labor and materials
3. **Funding Source and Situation** = Funding could be obtained through local budget and grants.
4. **Lead Jurisdiction(s)** = Mt. View-Edgewood Water Company - General Manager
5. **Timeline** = Short-term
6. **Benefit** = Water Company and customers, City of Edgewood residents and Regional Partners
7. **Life of Measure** = 25 years
8. **Community Reaction** = the proposal would benefit those affected with no adverse reaction from others.

Status Update: 2020 – 2025 Edition

Complete	Ongoing	Partially Complete	Deferred
			X
Comments			

Origin

Previous Plan	Current Plan

Mitigation Measure Monitoring

In comparison to the last update, Mt. View-Edgewood Water Company (MTVE) has no new projects and is continuing the mitigation strategies as seen in the table below.

Since the last update, MTVE completed 7 of the mitigation measures listed in the previous update. The largest capital cost project was a seismic retrofit of two existing steel water reservoirs. 6 of the mitigation measures are ongoing measures that will never be completed and done.

During the annual budgeting process, MTVE reviews this mitigation list to determine if any of the projects should be completed the following year. Mitigation projects are prioritized with other potential capital projects to determine which ones should be completed. Projects are selected if they are high enough on the priority list and MTVE has the finances available to complete the project. MTVE also creates a financial forecaster that identifies capital projects over the next 10 years. Current mitigation projects on the forecaster are a generator for Well 9, replacement of asbestos mains, and other water main upgrade projects.

In 2020 MTVE one mitigation project that will be completed is the purchase and installation of a new generator for Well 9 and the relocation of the current Well 9 generator to Well 7. We will also be completing some water main upgrades in 2020.

2 of the continuing measures (Puyallup Intertie and Wells 1R & 8 site mitigation) from the previous update are projects that are not scheduled for completion and may be removed from the list in the next update. The Puyallup intertie was based on the City of Puyallup constructing a reservoir on property the City owned within our service area. While the City of Puyallup still owns the property, the plans to construct a reservoir on it have been put on hold. Without the reservoir an intertie is not financially feasible or beneficial to MTVE. For the Wells 1R & 8 site mitigation project, the City installed some ecology blocks on the hillside that has helped stabilize the slope. More expensive, permanent methods are not needed at this time.

Mitigation Strategy	New	Continuing	Accomplished	Removed from update (if applicable)
Existing Mitigation Actions <i>(All)</i>		X		
Plan Maintenance <i>(All)</i>		X		
Pierce County Hazard Mitigation Forum <i>(E,L,V,D,F,WUI,SW,MM)</i>		X		
Capability Identification and Evaluation <i>(E,L,V,D,F,WUI,SW,MM)</i>		X		
Seismic Retrofit of South			X	

Reservoirs (<i>E,SW</i>)				
Purchase of Emergency Generators (<i>E,L,V,D,F,SW,WUI</i>)		X		
Storage and Transport of Emergency Fuel (<i>E,L,V,D,F,SW,WUI</i>)			X	
Purchase and Install Radio Telemetry (<i>E,L,V,D,F,SW,WUI</i>)			X	
Emergency Supply Kits for Employees (EOC) (<i>E,L,V,D,F,SW,WUI,MM</i>)		X		
Hydrant Drinking Manifold (<i>E,L,V,D,F,SW,WUI</i>)		X		
Purchase Hydro-Excavator (<i>E,L,V,F,SW,WUI</i>)		X		
Perimeter Security with Card Entry (<i>E,L,V,F,SW,WUI,MM</i>)			X	
Purchase Video Surveillance System (<i>E,L,V,D,F,SW,WUI</i>)			X	
Purchase of Laptops with Air Cards for Telemetry (<i>E,L,V,D,F,SW,WUI</i>)			X	
Purchase Programmable Message Boards (<i>E,L,V,D,F,SW,WUI</i>)		X		
Develop and Document Emergency Procedures (<i>E,L,V,D,F,SW,WUI,MM</i>)		X		
Replace 5" Stovepipe Mains and Asbestos Mains (<i>E,L,V,D,F,SW,WUI</i>)		X		
Premises Isolation Program (Double Check Valves) (<i>E,L,V,D,F,SW,WUI</i>)			X	
Replace Water Mains (<i>E,L,V,D,F,SW,WUI</i>)		X		
Negotiate and Implement Intertie with Puyallup		X		

<i>(E,L,V,D,F,SW,WUI,MM)</i>				
Pre-load Company Boundaries into Intellicast System <i>(E,L,V,D,F,SW,WUI,MM)</i>				X
Upgrade Well 1R + 8 to Mitigation Landslide Hazard <i>(E,L,F,SW)</i>		X		

Endnotes

¹ Hazard Codes:

Where necessary, the specific hazards addressed are noted as follows:

A:	Avalanche
E:	Earthquake
F:	Flood
D:	Drought
T:	Tsunami
V (L OR T):	Volcanic (lahar or tephra-specific)
SW:	Severe Storm (wind-specific)
L:	Landslide
WUI:	Wildland/Urban Interface Fire
MM:	Manmade to include terrorism
ALL:	All hazards, including some man made. Where only natural hazards are addressed, it is noted.

² While this Plan is strictly a *Natural* hazard mitigation plan, where a measure stems from a facility recommendation (Infrastructure Section) that deals specifically with terrorism, the mitigation strategy will use that analysis. Other measures, such as those that deal with multi-hazard community preparedness or recovery planning, mitigate man-made hazards and are noted as such. It is not the intent of this notation to imply that all measures were analyzed with regards to man-made hazards or that measures were identified with that in mind. Rather, the notation merely illustrates the potential on this template for the inclusion of man-made hazard analysis.