

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

Identification and Analysis of Mitigation Measures---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.

- Does the plan identify a **comprehensive range** of specific mitigation actions and projects for each hazard?
- Do the identified range of mitigation actions and projects address reducing the effects of hazards on **new** buildings and infrastructure?
- Do the identified range of mitigation actions and projects address reducing the effects of hazards on **existing** buildings and infrastructure?

Implementation of Mitigation Measures---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 mitigation strategy include how the actions are **prioritized**?
- Does the mitigation strategy address how the actions will be **implemented and administered**?
- Does the prioritization process include an emphasis on the use of **cost-benefit review**?

SECTION 5

REGION 5 HAZARD MITIGATION PLAN TOWN OF SOUTH PRAIRIE MITIGATION STRATEGY SECTION

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Table 5-1 Town of South Prairie Mitigation Strategy Matrix

Implementation Mechanism	Mitigation Measure (<i>Hazard(s)</i>) ¹	Lead Jurisdiction(s) / Department(s)	Timeline (years)	Plan Goals					
				Life and Property	Operations Continuity	Partnerships	Natural Resources	Preparedness	Sustainable Economy
Startup	1. Existing Mitigation Actions (<i>E,L,V,D,F,WUI,SW,MM</i>)	South Prairie – Administration	Ongoing	✓	✓	✓	✓	✓	✓
	2. Plan Maintenance (<i>E,L,V,D,F,WUI,SW,MM</i>)	South Prairie – Administration	Ongoing	✓	✓	✓	✓	✓	✓
HMF	1. Pierce County Hazard Mitigation Forum (<i>E,L,V,D,F,WUI,SW,MM</i>)	PC DEM; South Prairie-Administration	Ongoing	✓	✓	✓	✓	✓	✓
Town Government	1. Capability Identification and Evaluation (<i>E,L,V,D,F,WUI,SW,MM</i>)	South Prairie	1-2	N/A					
	2. Replace Old Water Reservoir with a New Reservoir (<i>E,L,SW</i>)	South Prairie - Utility Dept	5	✓	✓		✓		✓
	3. Reservoir Tie Down (<i>E,SW</i>)	South Prairie - Utility Dept	5	✓	✓		✓		✓
	4. Water Pipe Upgrade (<i>E,L,SW</i>)	South Prairie - Utility Dept	5	✓	✓		✓		✓
	5. Complete Water Looping System (<i>E,L,V,D,F,SW,WUI,MM</i>)	South Prairie - Utility Dept	5	✓	✓				✓
	6. Evaluate Tank Automatic Shutoff Valves (<i>E,L,SW,MM</i>)	South Prairie - Utility Dept	5	✓	✓		✓		✓
	7. Transfer to Local Control the Fire Station Siren for Major Emergency Alarm (<i>E,L,V,D,F,SW,WUI,MM</i>)	South Prairie - Mayor’s Office	1-2	✓					
	8. Obtain NOAA Radios for Mayor, Utility Director and PCNET Block Leaders (<i>V,D,F,SW,WUI,MM</i>)	South Prairie - Mayor’s Office	1-2	✓	✓	✓		✓	
	9. Obtain Communications Equipment for Mayor, Utility Director and PCNET Block Leaders (<i>E,L,V,D,F,SW,WUI,MM</i>)	South Prairie - Mayor’s Office	1-2	✓	✓	✓		✓	
	10. Non-Structural Retrofit of Town Offices (<i>E,L,V,D,F,SW,WUI,MM</i>)	South Prairie - Mayor’s Office	1-2	✓	✓			✓	
	11. Flood Insurance Support (<i>F,SW</i>)	Pierce County Water Programs	1-2	✓		✓		✓	✓
	12. “Auto-Start” and Electrical Wiring to Auto-Start Generator (<i>E,L,V,D,F,SW,WUI,MM</i>)	South Prairie	1-2		✓				✓
	13. South Prairie-Carbon River Rd Connector to State Route 162 (<i>E,L,V,D,F,SW,WUI,MM</i>)	WSDOT and South Prairie	1-2	✓		✓		✓	
	14. Purchase Ham Radio Equipment (<i>E,L,V,D,F,SW,WUI,MM</i>)	South Prairie	1-2	✓	✓	✓		✓	
Public Education	15. Develop a Local PCNET Program (<i>E,L,V,D,F,SW,WUI,MM</i>)	PCDEM and South Prairie	1-2	✓		✓		✓	
	16. Home Seismic Structural Retrofit (<i>E,SW</i>)	South Prairie - Mayor’s Office/Building Dept	1-2	✓		✓		✓	✓

Startup Mitigation Measures

Existing Mitigation Actions

Hazards: E, L, V, D, F, WUI, SW¹, MM²

South Prairie will continue to implement existing programs, policies, and regulations as identified in the Capability Identification Section of this Plan. This includes such actions as updating the Critical Area Regulations and any ensuing land use policies with best available science. It also includes continuing those programs that are identified as technical 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)** = Town of South Prairie - Administration
5. **Timeline** = Ongoing
6. **Benefit** = Town-Wide
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Plan Maintenance

Hazards: E, L, V, D, F, WUI, SW¹, MM²

South Prairie 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)** = Town of South Prairie - Administration
5. **Timeline** = Ongoing
6. **Benefit** = Town-Wide
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Hazard Mitigation Forum

Pierce County Hazard Mitigation Forum

Hazards: E, L, V, D, F, WUI, SW¹, MM²

South Prairie 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; Town of South Prairie
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.

Town Government Mitigation Measures

Capability Identification and Evaluation

Hazards: E, L, V, D, F, WUI, SW¹, MM²

South Prairie will develop a consistent and replicable system for evaluating the Town's 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 Town's 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)** = Town of South Prairie
5. **Timeline** = Short-term
6. **Benefit** = Town-Wide
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Replace Old Water Reservoir with a New Reservoir

Hazards: E, L, SW¹

The South Prairie water reservoir tank #1 will be replaced with a new, larger tank.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Preserve or Restore Natural Resources.
2. **Cost of Measure** = \$361,000
3. **Funding Source and Situation** = Funding could be obtained through state or federal grants.
4. **Lead Jurisdiction(s)** = Town of South Prairie - Utility Department
5. **Timeline** = Long-term
6. **Benefit** = Citizens of South Prairie, Town of South Prairie, South Prairie businesses
7. **Life of Measure** = 25 years
8. **Community Reaction** = the proposal would be somewhat controversial.

Reservoir Tie Down

Hazards: E, SW¹

Reservoir #2 is not tied down to its base. This will be done to prevent movement during an earthquake.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Preserve or Restore Natural Resources.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through state or federal grants.
4. **Lead Jurisdiction(s)** = Town of South Prairie – Utility Department
5. **Timeline** = Long-Term
6. **Benefit** = Citizens, Town of South Prairie, Businesses, first responders and neighboring jurisdictions.
7. **Life of Measure** = 30 years
8. **Community Reaction** = The proposal is likely to be endorsed by the entire community.

Water Pipe Upgrade

Hazards: E, L, SW¹

Replace old water pipes throughout the town. The old pipes from the reservoir need to be replaced to ensure continuous water flow.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Preserve or Restore Natural Resources.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through state or federal grants.
4. **Lead Jurisdiction(s)** = Town of South Prairie – Utility Department
5. **Timeline** = Long-term
6. **Benefit** = Citizens, Town of South Prairie, businesses, Fire District
7. **Life of Measure** = 30 years
8. **Community Reaction** = the proposal would be somewhat controversial.

Complete Water Looping System

Hazards: E, L, V, D, F, SW, WUI¹, MM²

Connecting the various portions of the water system to allow looping around areas that are broken or disrupted in some way will allow continuous water flow to residences, businesses and maintain fire flow during and after emergencies or disasters.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through state or federal grants.
4. **Lead Jurisdiction(s)** = Town of South Prairie - Utility Department
5. **Timeline** = Long-Term
6. **Benefit** = Citizens, Town of South Prairie, businesses, Fire District
7. **Life of Measure** = 30 years
8. **Community Reaction** = the proposal would be somewhat controversial.

Evaluate Tank Automatic Shutoff Valves

Hazards: E, L, SW¹, MM²

Research the cost and usefulness of automatic shutoff valves for the reservoirs. At this time the tanks do not have automatic shutoff valves.

1. **Goal(s) Addressed** = Protect Life and Property; Promote A Sustainable Economy; Ensure Continuity of Operations; Preserve or Restore Natural Resources.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Town of South Prairie - Utility Department
5. **Timeline** = Long-term
6. **Benefit** = Citizens, Town of South Prairie and others down stream
7. **Life of Measure** = TBD
8. **Community Reaction** = The proposal is likely to be endorsed by the entire community.

Transfer to Local Control the fire Station Siren for Major Emergency Alarm

Hazards: E, L, V, D, F, SW, WUI¹, MM²

Transfer of the Fire Station siren control to the Town for multiple hazard warning.

1. **Goal(s) Addressed** = Protect Life and Property.
2. **Cost of Measure** = Minor
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Town of South Prairie - Mayor's Office
5. **Timeline** = Short-term
6. **Benefit** = Town of South Prairie, its citizens and visitors.
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal would benefit those affected, with no adverse reaction from others.

Obtain NOAA Radios for Mayor, Utility Director and PCNET Block Leaders

Hazards: V, D, F, SW, WUI¹, MM²

The purchase of NOAA all hazard radios for critical staff and PCNET block leaders will allow rapid dissemination of emergency information/warnings to the Town and its neighboring jurisdictions.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters.
2. **Cost of Measure** = \$200
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Town of South Prairie - Mayor's Office
5. **Timeline** = Short-term
6. **Benefit** = Town Administrators, citizens and Town of South Prairie
7. **Life of Measure** = 10 years
8. **Community Reaction** = the proposal would benefit those affected, with no adverse reaction from others.

Obtain Communications Equipment for Mayor, Utility Director and PCNET Block Leaders

Hazards: E, L, V, D, F, SW, WUI¹, MM²

Obtain radio communication equipment for Town Administrators and PCNET leads to allow continued communication during emergencies.

1. **Goal(s) Addressed** = Protect life and property; Ensure continuity of operations; Establish and strengthen partnerships for implementation; Increase Public Preparedness for Disasters.
2. **Cost of Measure** = TBD
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants and state or federal grants.
4. **Lead Jurisdiction(s)** = Town of South Prairie - Mayor's Office
5. **Timeline** = Short-term
6. **Benefit** = Town Administrators, PCNET Leads and citizens of South Prairie
7. **Life of Measure** = 20 years
8. **Community Reaction** = the proposal would benefit those affected, with no adverse reaction from others.

Non-Structural Retrofit of Town Offices

Hazards: E, L, V, D, F, SW, WUI¹, MM²

Develop a program of non-structural mitigation for the town's offices and infrastructure, including the sewer plant office and the water plant. This will involve the physical attachment of hazardous furniture to the buildings structure, reducing the number of threatening items that could fall on people, etc. In addition to the physical attachments there will be an off-site storage for copies of the computer files.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Increase Public Preparedness for Disasters.
2. **Cost of Measure** = \$500
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants and state or federal grants.
4. **Lead Jurisdiction(s)** = Town of South Prairie - Mayor's Office
5. **Timeline** = Short-term
6. **Benefit** = Town and employees, citizens
7. **Life of Measure** = 10 years
8. **Community Reaction** = the proposal would benefit those affected, with no adverse reaction from others.

Flood Insurance Support

Hazards: F, SW¹

Work with Pierce County Water Programs to promote flood insurance for vulnerable homes. This will be done through notifying those in the flood plain of the benefits of flood insurance, informing them of the low insurance rates available.

1. **Goal(s) Addressed** = Protect Life and Property; Increase Public Preparedness for Disasters; Promote A Sustainable Economy; Establish and Strengthen Partnerships for Implementation.
2. **Cost of Measure** = Minimal
3. **Funding Source and Situation** = Funding could be obtained through local budgets or grants.
4. **Lead Jurisdiction(s)** = Pierce County Water Programs
5. **Timeline** = Short-term
6. **Benefit** = Property owners in the flood plain, Town of South Prairie and first responders
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal would benefit those affected, with no adverse reaction from others.

“Auto-Start” and Electrical Wiring to Auto-Start Generator

Hazards: E, L, V, D, F, SW, WUI¹ MM²

The sewer plant has an adequate generator, but currently must be started by hand if it is needed. Town of South Prairie would like to have the generator wired for an auto-start so it will come on automatically if the power fails.

1. **Goal(s) Addressed** = Ensure Continuity of Operations; Promote A Sustainable Economy.
2. **Cost of Measure** = TBD – cost of wiring, switch and labor
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants and state or federal grants.
4. **Lead Jurisdiction(s)** = Town of South Prairie
5. **Timeline** = Short-term
6. **Benefit** = Town employees, citizens, community and regional partners
7. **Life of Measure** = 20 years
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

South Prairie-Carbon River Road Connector to State Route 162

Hazards: E, L, V, D, F, SW, WUI¹, MM²

There is a short distance to another road that will move people to higher ground in the event of lahar, flood or other event where they may need to get out of the valley. This road is just past the current intersection and would give access to many more people to get to higher ground. This would also afford the City of Orting an alternative route to those they have now.

1. **Goal(s) Addressed** = Protect Life and Property; Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters.
2. **Cost of Measure** = TBD - permits, materials and labor
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants and state or federal grants.
4. **Lead Jurisdiction(s)** = WSDOT and Town of South Prairie
5. **Timeline** = Short-term
6. **Benefit** = Town, Citizens, first responders, Town of Orting and regional partners
7. **Life of Measure** = 50 years
8. **Community Reaction** = the proposal would be somewhat controversial.

Purchase Ham Radio Equipment

Hazards: E, L, V, D, F, SW, WUI¹, MM²

Purchase appropriate equipment to keep Town in communications internally and externally during disasters. Train appropriate personnel on use of equipment.

1. **Goal(s) Addressed** = Protect Life and Property; Ensure Continuity of Operations; Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters.
2. **Cost of Measure** = \$1,500 for equipment, \$500 for training
3. **Funding Source and Situation** = Funding could be obtained through local budgets or grants and state or federal grants.
4. **Lead Jurisdiction(s)** = Town of South Prairie
5. **Timeline** = Short-term
6. **Benefit** = Community, citizens, first responders and regional partners
7. **Life of Measure** = 10 years
8. **Community Reaction** = the proposal would be endorsed by the entire community.

Public Education Mitigation Measures

Develop a Local PCNET Program

Hazards: E, L, V, D, F, SW, WUI¹, MM²

With the County's help, organize and train a local PCNET group to be better prepared for disasters.

1. **Goal(s) Addressed** = Protect Life and Property; Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters.
2. **Cost of Measure** = Time, materials and equipment
3. **Funding Source and Situation** = Funding could be obtained through local budgets or grants and state or federal grants.
4. **Lead Jurisdiction(s)** = PCDEM and Town of South Prairie
5. **Timeline** = Short-term
6. **Benefit** = Citizens, first responders, regional partners and surrounding areas
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal is likely to be endorsed by the entire community.

Home Seismic Structural Retrofit

Hazards: E, SW¹

Introduce and support the seismic tying of older homes and buildings to their foundations.

1. **Goal(s) Addressed** = Protect Life and Property; Establish and Strengthen Partnerships for Implementation; Increase Public Preparedness for Disasters; Promote a Sustainable Economy.
2. **Cost of Measure** = Minimal to Town
3. **Funding Source and Situation** = Funding could be obtained through local budget or grants.
4. **Lead Jurisdiction(s)** = Town of South Prairie - Mayor's Office/Building Department
5. **Timeline** = Short-term
6. **Benefit** = Property owners, Town and first responders
7. **Life of Measure** = Perpetual
8. **Community Reaction** = the proposal would benefit those affected, with no adverse reaction from others.

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.