

CRS Activity 510
Progress Report

Date this Report was Prepared: October 11, 2022

Name of Community: City of Snoqualmie

Name of Plan: King County Regional Hazard Mitigation Plan

Date of Adoption: November 2014

5 year CRS Expiration Date:

1. How can a copy of the original plan area analysis report be obtained:
The Hazard Mitigation Plan can be found on the City of Snoqualmie Website at <http://www.ci.snoqualmie.wa.us/665/Hazard-Mitigation-Plan>
2. Describe how this evaluation report was prepared and how it was submitted to the governing body, released to the media, and made available to the public:

Progress report was emailed to the governing body and made available on the City's website.

3. Provide a review of each recommendation or action item in the action plan or area analysis report, including a statement on how much was accomplished during the previous year:

S-1- Develop a post- disaster action plan for all hazards of concern that address: debris management, historical data gathering, substantial damage assessment, and grants management. This plan would be a appendix to the City's Emergency Management Plan.

The City has partnered with King County on their Alert King County system. The City is getting ongoing education on the Alert System and self-preparedness.

S-2 -Incorporate and adopt by reference the updated City of Snoqualmie Hazard Mitigation Plan as an element of the City Comprehensive plan to assure linkage between the 2 documents.

This action has been completed.

S-3- Continue to acquire FEMA elevation certificates for all structures within the mapped floodplain for which the city does not currently have one.

This is an ongoing action. The City continues to collect elevation certificates.

S-4-Continue to pursue feasible, cost effective, home elevation projects, targeting identified repetitive loss or frequently flooded properties within the Snoqualmie floodplain.

This is an ongoing effort. The City just received funding to elevate 5 additional homes and partners with King County to target elevations in Snoqualmie.

S-5- Consider the adoption of a “split-flow” floodway as an alternative to the regulatory floodway in effect for the City.

The City began to identify high impacting and lesser impacting “Split Flow” environments within the floodway. Work will be ongoing. The City’s 5-year goal is to either remove the split flow cause or adapt to split flow floodway realities.

S-6- Re-map the City of Snoqualmie floodplain utilizing best available data and generating a mapped based product that will actively support hazard mitigation and land use decision making within the City

The City is in the process of studying the downtown and could submit a LOMA request to FEMA based on mapped knowledge.

S-7- Consider amending the City’s flood damage prevention ordinance to add language that will track substantial improvements and damages cumulatively, to leverage Increased Cost of Compliance (ICC) opportunities for flood insurance policy holders.

This is an ongoing effort that was rolled back into our Hazard Mitigation Plan. There has been no time to look into doing this.

S-8- Considered adopting a higher regulatory freeboard standard above the current 1-foot standard.

This is an ongoing effort that was rolled back into our Hazard Mitigation Plan. There has been no time to look into doing this.

S-9- Maintain Snoqualmie’s compliance and good standing under the National Flood Insurance program (NFIP)

This is an ongoing effort. The City’s participation the CRS program ensures our good standing under the NFIP regulations.

S-10- Continue to maintain or enhance the City’s classification under the Community Rating System (CRS)

The City hopes to get credit in Activity 610 and raise our freeboard ordinance so that all mechanical equipment as well as freeboard are elevated to 3 feet above the BFE.

S-11- Adopt the City of Snoqualmie Stormwater Management plan.

The City adopted a Stormwater Management Plan March of 2019.

S-13- Consider an increase in the building setback/spacing requirement for new construction in areas deemed susceptible to wildfire exposure

The Fire Department will work with the Urban Forester and Public Works to evaluate wildfire hazards with the City, its boundaries and within wildland urban interface area and develop strategies to mitigate these hazards. If grants funds are available, forest mitigation will occur. This action will be led by the Public Works Department.

S-14- Join Firewise program by adopting Firewise programs and policies in the management of the urban/wildland interface areas within Snoqualmie.

While the Fire Department implements to Firewise standards, it is not yet a member. It is the departments 2 -year objective to being recruit neighborhoods to join the Firewise program and encourage them to create defensible spaces around their homes.

S-15- Consider planting standards in Wildland buffer areas to use only loose branching habits, non-resinous woody material, high moisture content leaves and limited seasonal dead debris and other varieties that possess fire resistive traits.

This is an ongoing effort. The City Arborist has the existing trees on a maintenance schedule. Beginning in 2020, the Arborist will engage partners to develop a unified strategy for fire fuel reduction that include mapping priority areas for treatment and development of treatment prescriptions.

S-16- Develop a public outreach program teaming with home improvement vendors educating the public on ways to protect their property from the potential impacts of all hazards of concern.

Effective outreach efforts are a key piece of communication. Letters sent annually, outreach events, project-specific meetings, and providing technical assistance are all components of effective outreach. Repetition of messages and continued outreach activities are also important to ensuring that messages are delivered. Engaging as many types of communication mediums as possible will also ensure that outreach efforts are effective.

S-17- Conduct seismic vulnerability study of critical facilities identified by City emergency managers.

This action has not been taken due to lack of funding and staff time.

S-18- Promote the structural seismic retrofit of structures built before 1974 by a targeted outreach to the property owners of these structures.

The following activities should be conducted on an annual basis to make the public more aware of seismic hazards and risks:

1. Seismic brochure – sent to every property owner with structures built prior to 1974.
2. Realtor, insurance agent, and other stakeholder outreach – workshops, meetings, or other outreach to professionals who need seismic risk information.
3. News media outreach – coordinated effort to share stories about seismic risk with the news media.
4. Annual event – separate or coordinated event every year that focuses on seismic risk.

The City had two public meetings on the Snoqualmie Hazard Mitigation Plan.

S-19- Continue and/or enhance where feasible, the city's ongoing drainage system maintenance program to reduce or minimize the impacts from stormwater flooding within the City.

The City continues to seek grant funding to help with ongoing drainage system maintenance.

S-20- The City of Snoqualmie's North Well Field well # 6, 7 and 8 currently lack permanent back-up generation. A permanent standby generator needs to be installed to provide continuous service at this critical water service delivery facility

Permanent standby generators have been purchased for the North Well Fields #6, 7 & 8.

S-21- The Fisher Creek Booster Station currently lacks back up generation. A permanent standby generator needs to be installed to provide continuous service at this critical water service delivery facility. This site has space inside the building designed for a Generator.

There is a temporary generator at this Booster Station but a permanent one has not been put in due to staffing changes.

S-22- To alleviate stormwater flooding problems along Railroad Avenue SE between SE Fir Street and SE King Street:

- Install new 12-inch diameter pipeline along Railroad Avenue SE from SE King Street to SE Fir Street. Connect to existing outfall to Snoqualmie River. Install new 12-inch diameter pipeline between Railroad Avenue SE and the Snoqualmie River.

The downtown Phase II design funding is secured for this project. Construction has been should be finished in early 2020.

S-23- Address stormwater flooding problems due to undersized storm drain system in vicinity of Doone Avenue SE and SE Newton Street.

- Replace existing storm drain pipeline on Doone Avenue SE with new 12- and 24-inch diameter pipeline. Connect to existing ditch at south end of Doone Avenue SE.
- Install new 12-inch diameter pipeline along SE Newton from Olmstead Place SE to Doone Avenue SE.

The storm drainage will be addressed with the design of Newton Street. The storm drainage will also tie into Doone Ave.

S-24- Address stormwater flooding problems due to lack of storm drain system on Railroad Avenue SE between SE Delta Street and SE 90th.

- Install new 18-inch diameter storm drain pipeline along Railroad Avenue SE from SE Delta Street to SE

Funding for this project in the CIP budget was pulled after the last plan update.

S-25- Address stormwater flooding problems due to lack of storm drain system on SE Northern Street and Railroad Place SE. Ponding on east side of Railroad Avenue SE for extended periods during heavy rain events. The existing storm drain system on west side of Railroad Place SE is blocked due to a pipe failure or and obstruction in the pipeline.

Funding for this is included in the CIP budget.

S-26- Address stormwater flooding problems due to lack of storm drain system on SE Alder Street, SE Hemlock Street, SE Spruce Street, SE Walnut Street, Mountain Ave SE and Meadowbrook Way SE.

- Install new 12-inch diameter pipeline along SE Alder Street. Connect to existing storm drain at Meadowbrook Way SE.
- Install new 12-inch diameter pipeline along SE Hemlock Street. Connect to existing storm drain at Meadowbrook Way SE.
- Install new 12-inch diameter pipeline along SE Spruce Street. Connect to existing storm drain at Meadowbrook Way SE.
- Install new 12-inch diameter pipeline along SE Walnut Street. Connect to existing storm drain at Meadowbrook Way SE.
- Install new 12-inch diameter pipeline along Mountain Ave SE. Connect to existing storm drain at Meadowbrook Way SE.
- Install new 12-inch diameter pipeline along Meadowbrook Way SE.

Funding for this is included in the CIP budget.

S-27- Address stormwater flood problems due to lack of drainage conveyance system on SE Maple Street and Maple Avenue SE.

- Install new 18-inch diameter pipeline along SE Maple Street from Maple Avenue SE to Johnson Slough. Install new water quality treatment facility.
- Install new 18-inch diameter pipeline along Maple Avenue SE from 7900 block to SE Maple Street. Connect to new pipeline at SE Maple Street.

Funding for this is included in the CIP budget.

S-28—Address stormwater flood problems due to lack of drainage conveyance system on SE Beta Street, SE Delta Street, SE Epsilon Street, and Falls Avenue SE.

- Install new 12-inch diameter pipeline along SE Delta Street from Falls Avenue SE to Schusman Avenue SE. Connect to existing storm drain at SE Schuman Avenue Street

New pipeline has been installed along Bet, Epsilon and Falls. Delta has been completed.

S-29- Address stormwater flood problems due to lack of drainage conveyance system in vicinity of SE Fir Street, SE 80th St and Pine Avenue SE.

- Install new 12-diameter pipeline at Pine Avenue SE. Connect to new storm drain at Pickering Court SE.
- Install new 12-diameter pipeline at SE 80th Street. Connect to new storm drain at Pickering Court SE.
- Install new 12-diameter pipeline at SE Fir Street. Connect to new storm drain at Pickering Court SE.
- Install new 18-diameter pipeline at Pickering Court SE. Outfall to wetland area.

New pipeline has been installed at SE Cedar Sgt. Funding will be provided through the utility bill fee fund this mitigation initiative.

S-30- Develop a public outreach strategy that maximizes the City's capabilities through its ongoing programs that provide multiple messages that support all phases of emergency management.

The City tests the emergency notification systems annually with published results. The City employs the Emergency Alert system and AM radio broadcast system, with signal notification for the public. In 2013, the Emergency management department entered into an agreement with Everbridge Community Alert company to replace the R911 system that had become unreliable and antiquated. This system can be used to issue any type of message to any group of people needed.

S-31- Conduct a vulnerability assessment of water and wastewater utilities for exposure to all identified hazards of concern.

Currently there is no staff time to look into this initiative.

S-32- Review utility designs and standards for safety and competence under natural and human caused disasters.

Currently there is no staff time to look into this initiative.

S-33- Participate in the Basin Technical Committee process of the King County Flood Control District to leverage resources for flood hazard mitigation.

Currently there is no staff time to look into this initiative.

S-34—Continue to participate/support the King County Public Outreach Strategy developed to coordinate countywide outreach programs credited under the CRS program.

Planning department staff and PIO to continue to participate and support King County's Public Outreach Strategy.

S-35- Implement design and construction for bank stabilization for the King Street lot, immediately adjacent to Sandy Cove Park.

City staff hired a consultant to assess the site and identify possible preliminary bank stabilization alternatives. The study is complete. City staff continues to seek funding for design.

S-36- Seek funding for the placement of a new stream flow gauge at the City of Snoqualmie above the falls that will accurately depict in channel flows at the City during high water events.

Staff has not dedicated time to research grant funding for this initiative. Staff uses the stream gauges that King County has already.

S-37 Replace two small bridges that have rotting wood pilings and abutments along Meadowbrook Way SE. These facilities were damaged by the Nisqually earthquake that required repair by King County bridge crews. Recent bridge inspection records indicate repair would be as costly as complete reconstruction.

The design work is complete, and staff is continuing to seek funding for the construction.

S-38 — Replace Kimball Creek bridge on SR202 that is functionally obsolete with virtually no shoulders on either side and has an inadequate hydraulic opening. The concrete rigid frame structure does not meet current seismic design and detailing standards.

Staff is still seeking funding for this project.

S-39— Address stormwater flood problems due to lack of drainage conveyance system on SE Northern Street and Harding Place SE.
Install large diameter storm drain pipe along SE Northern Street, including Harding Place SE, between 380th Ave SE and SR202.

Staff is still seeking funding for this project.

S-40— Address stormwater flood problems due to lack of drainage conveyance system on SE Cedar Street.
Install 15 to 18-inch diameter storm drain pipeline along SE Cedar Street from 380th Ave SE to Pine Ave SE.

Staff is still seeking funding for this project.

S-41 To alleviate stormwater flood problems within the vicinity of SE Newton Street.

- Install new 12-inch diameter storm drain pipeline along SE Newton Street from Falls Ave to Park Ave SE. Connect to existing outfall to Snoqualmie River.
- Install new 12-inch diameter storm drain pipeline along SE Newton Street from Maple Ave SE to Falls Ave SE. Connect to existing storm drain at Falls Ave SE.
- Install new 12-inch diameter storm drain pipeline along Maple Ave SE north of SE Newton St. Connect to existing storm drain at SE Newton St.
- Install new 18-inch diameter storm drain pipeline along Falls Ave SE from SE Beta St. to SE Newton St. Connection to existing storm drain at SE Newton St.
- Install new 12-inch diameter storm drain pipeline along SE Beta St. from east of Railroad Place SE to Falls Ave SE. Connect to new pipeline at Falls Ave SE.
- Install new 12-inch diameter storm drain pipeline along Railroad Place SE. Connect to new pipeline at SE Beta St.

- Install new 12-inch diameter storm drain pipeline along SE Alpha St. Connect to new pipeline on Falls Ave SE.
- Install new 12-inch diameter along Railroad Ave SE. Connect to existing pipeline at Falls Ave SE.

This project is complete

S-42— Address stormwater flood problems due to lack of drainage conveyance system on Railroad Ave between SE King Street and SE River Street.

Install 12-inch diameter storm drain pipeline along Railroad Ave SE at SE King St to SE River St. Connect to existing pipeline at SE River St

This project is complete.

S-43— Address stormwater flood problems due to lack of drainage conveyance system on Maple Avenue and Olmstead Avenue

- Install 18-inch diameter storm drain pipeline along Maple Ave SE and SE King St to SE River St. Connect to existing pipeline at SE River St.
- Install 18-inch diameter storm drain pipeline along Olmstead Ave SE from SE King St. to SE River St. Connect to existing pipeline at SE River St

This project is in the CIP budget.

S-44— Stabilize approximately 200 feet of undermined riverbank at the intersection of Park Ave SE and SE River St.

This project is in the CIP budget.

S-45— Address stormwater flood problems due to lack of drainage conveyance system on Northern Street between 380th and Pickering Court.
Install bio-retention cells, a pervious concrete sidewalk on one side of the street, street trees to aid in canopy interception of rainfall, and a box culvert or pipe feature at the east end of the project to reconnect wetland hydrology.

Funding for design has been secured. Staff is continuing to look for funding for construction.

4. Discuss why any objectives were not reached or why implementation is behind schedule:
The main source of why objectives were not reached were either/or the lack of staff and funding.
5. What are the recommendations for new projects or revised recommendations?

STRATEGY	LEAD AGENCY/POC	TIMELINE	PRIORITY
S-1 Back-up Power at all facilities	Public Works	As soon as possible	High

S-2 Ensure Community Resilience	Department of Emergency Management	EMPG Grant funds will be used for this in 2021	High
S-3 Enhance cyber security	Information Technology	Seeking funding options	High
S-4 Wildland Urban Interface / Forest Management	Public Works	Pre-application for grant funds submitted	High
S-5 Improved shelter facilities	Office of the Mayor	Council is deliberating on this topic	Moderate
S-6 Water system Resilience	Public Works	As soon as possible	High
S-7 Develop a post-disaster plan for all hazards of concern that address: debris management, historical data gathering, substantial damage assessment, and grants management.	Community Development Department and Fire Department	Short-term, depends on funding	High
S-8 Enhance the long-term goal of flood mitigation efforts in the downtown corridor of City of Snoqualmie.	Community Development Department	Long-term, ongoing	Medium
S-9 Consider the adoption of the “split-flow” floodway as an alternative to the regulatory floodway in effect for the City.	Planning, Public Works and City Council	Short-term, depending on funding	Medium
S-10 Continue and/or enhance where feasible, the city’s ongoing drainage system maintenance program to reduce or minimize the impacts from stormwater flooding within the City	Public Works	Long-term	Medium/high
S-11 Evaluate wildfire hazards within the City and its boundaries and develop strategies to mitigate.	Fire, Planning, Public Works	Long-term	Medium/high
S-12 River Bank Stabilization and home acquisitions	Planning, Public Works	Long-term	Medium/High
S-13 Develop a public outreach program teaming with home improvement vendors educating the public on ways to protect their property from the potential	Fire Department, vendors, Planning Department	Short-term	High

impacts of all hazards of concern.			
S-14 Participate in the Basin Technical Committee process of the King County Flood Control District to leverage resources for flood hazard mitigation.	Planning Department, Public Works	Ongoing	High
S-15 Develop a public outreach strategy that maximizes the City's capabilities through its ongoing programs that provide multiple messages that support all phases of emergency management	Communications	Short-term, ongoing	High
S-16 Continue to participate/support the King County Public Outreach Strategy developed to coordinate countywide outreach programs credited under the CRS program.	Planning Department, King County Flood Control District, Communications Department	Ongoing	High
S-17 Replace two small bridges that have rotting wood pilings and abutments along Meadowbrook Way SE. These facilities were damaged by the Nisqually earthquake that required repair by King County bridge crews. Recent bridge inspection records indicate repair would be as costly as complete reconstruction.	Community Development Department, Fire Department	Short-term	High
S-18 Promote the structural seismic retrofit of structures built before 1974 by a targeted outreach to the property owners of these structures.	Community Development, Fire Department	Ongoing	Medium