

Mann Rd & Ben Howard Rd FAQ

October 20, 2020

Snohomish County Public Works solicited questions from the public when the virtual public meeting for road improvement projects on Mann Rd and Ben Howard Rd was announced at the end of September 2020. This FAQ was developed based on those questions. Additional questions can be submitted to: road@snoco.org or 425-388-ROAD (7623).

1. What is the Mann Rd & Ben Howard Rd project?

Due to flooding on Mann Rd and Ben Howard Rd, south of Sultan, Snohomish County Public Works is proposing to raise the road elevation at two locations on Ben Howard Rd and one on Mann Rd, identified as Locations A, B, & C. New and larger culverts will be installed under the road as well. To learn more, visit the project webpage: <https://snohomishcountywa.gov/3759>

2. What is the Haystack Creek Project?

Haystack Creek flows from the hills south of Mann Road and crosses the roadway in three locations. The easternmost crossing consists of two corrugated metal culverts that are undersized causing debris blockages. Although Snohomish County Road Maintenance removes the debris on a routine basis, the blockages tend to cause road flooding during storm events several times a year. These culverts are also partially crushed and deteriorating. Haystack Creek is a fish bearing stream that drains to a slough of the Skykomish River.

To limit ongoing maintenance, reduce road flooding, and prevent road damage and possible traffic impacts due to culvert failure, the culverts must be replaced. The twin culverts will be replaced with a 20-foot-wide by 6-foot-tall concrete box culvert and the road elevation will be raised by ~3 feet for ~1,400 feet. To learn more, visit the project webpage: <https://www.snohomishcountywa.gov/3855>

3. What is the construction timeline for these projects and traffic impacts during construction?

Anticipated Construction Timeline:

- Haystack Creek: Summer 2021 (3-4 months)
- Locations A, B & C: Spring to Fall 2023 (6+ months)

Anticipated Traffic Control:

- Locations A & B: full road closure, detour via Hwy 2 for a few months
- Location C: single-lane closure controlled by a temporary traffic signal for a few months
- Haystack Creek: single-lane bypass road controlled by a temporary traffic signal for 3-4 months

Construction sequencing for locations A, B & C have not yet been determined. The county will do its best to reduce impacts to residents as much as possible. During construction, county staff will work with the local school districts to accommodate school bus service and minimize potential impacts. County staff will also work with residents to reduce disruptions to agricultural activities during construction.

4. Why has the Mann Rd & Ben Howard Rd project (Locations A, B, & C) been delayed?

Construction on the Mann Rd and Ben Howard Rd project (Locations A, B & C) is being moved to 2023 for several reasons. During the geotechnical investigations it was found that the material under the road at two of the locations needs to be removed and replaced before the culverts can be installed and new road can be built. This requires additional design work. In addition, it can take up to 18 months to receive some of the permits required for this project. Furthermore, the increased cost also resulted in a review and delay in the grant funding for this project.

5. Why is Haystack Creek being constructed in 2021?

This project has been in the design and planning phases for several years. It is ready for construction and has all the needed permits for the project. To minimize impacts to residents, this project is being constructed before Locations A, B & C.

6. What other options were considered for the Mann Rd & Ben Howard Rd project (Locations A, B, & C) to minimize road flooding?

Snohomish County Surface Water Management used a hydraulic model to identify the road locations that are first to flood. The [hydraulic analysis](#) correlated the flows of the river to the depth of flooding. A cost-benefit analysis was performed to determine the elevation increase that would reduce the average time the road is closed due to river flooding before becoming cost prohibitive. While other options of raising the roads even higher at these locations was considered, these other options would have extended the length of road needing to be raised and were therefore cost prohibitive.

7. What is the life expectancy of the culverts and road? Will the county continue to maintain it and what are the on-going costs associated with maintenance?

The life expectancy of culverts is 30 to 50 years. Pavement is maintained on a regular basis by the county. The county doesn't expect maintenance costs or needs after construction to be higher than they are currently.

8. Will these projects keep the roads from flooding?

Currently the road closes at locations A, B & C on Mann Rd and Ben Howard Rd due to flooding when the Gold Bar gauge shows the river flowing around 40,000 cubic feet per second (cfs). On average, the road is closed for 28.8 hours per year, over the course of multiple events. With the proposed road improvements, the road is expected, on average, to be closed 7.2 hours a year. This is a significant increase in level of service.

The failing culverts at Haystack Creek on Mann Rd, currently flood several times a year during storm events due to debris blocking them. It is expected that the new, larger box culvert will allow debris from the hillside to pass through the culvert significantly reducing any potential flooding caused by the blocked culvert.

9. Why can't the county raise the roads so they never close due to flooding?

Mann Rd and Ben Howard Rd are in the floodplain so it would be impossible to prevent the roads from ever flooding without building large trestles or bridges, which would be cost prohibitive.

10. The river has changed so much in the last 5 years, how can you be certain that the modeling you're using is accurate? There is no longer a consistent pattern to the flooding, how does the project plan address this variability?

Snohomish County Surface Water Management used a hydraulic model to identify the road locations that are first to flood. Regardless of whether the region has higher or more floods in the future, the proposed improvements at these locations will allow the road to remain open to the designed water surface levels.

11. What is being done about the sinking road and sliding hillside just several yards up the hill at Location C?

There are several areas along Ben Howard and Mann Road that the County Geotechnical Group monitors on a regular basis. Near Location C, there are a series of cracks mainly in the westbound lane near the top of the hill and bend that have been stable for the last several years (this is evident by the amount of soil and vegetation within the cracks). In the next few weeks, weather permitting, Snohomish County Road Maintenance will be clearing these cracks and sealing them with liquid asphalt. This will keep water from infiltrating into the cracks and further potentially destabilizing the road/slope. This will also allow the county to more easily determine if any movement takes place in the future.

The sets of newer cracks that are closer to the proposed location of the new culvert at Location C are within the limits of the project. The stability of those areas is being addressed as part of the design for the proposed project. A geogrid reinforced earth wall will be installed along the north side of Mann Road that will repair the areas of the westbound lane that are currently failing.

12. What software was used to develop the hydraulic model?

The software used is called HEC-RAS version 5.0. You can learn more about the study scope and methodology here: https://snohomishcountywa.gov/DocumentCenter/View/40587/Mann-Road-Analysis-Summary-and-Recommendations_041216?bidId=#page=4.

13. Will additional flood gauges be installed?

Snohomish County Surface Water Management just installed a gauge under the South Slough Bridge #148 on 311th Ave SE. This will give us new data points to look at moving forward.

14. What environmental impact studies have been done for the Mann Rd & Ben Howard Rd project (Locations A, B, & C)? Are there other impact studies required?

Public Works completed a State Environmental Policy Act (SEPA) Checklist on January 29, 2019 and offered a 21-day public comment process. The SEPA Checklist helped determine if environmental impacts of the proposal are significant and if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts. The following studies were completed: Skykomish River Sloughs Hydraulic Modeling (12/7/2015), Mann Road Hydraulic Analysis (4/12/2016), Engineering Soils Analysis (10/29/2018) and Cultural Resources Survey (12/28/2018). Public Works has recently completed a Critical Areas Study (October 2020) that identifies the designated critical areas within the project area, including wetlands, fish and wildlife habitat and geographically hazardous areas as well as their buffers. A Biological Assessment study (February 2020) has also been completed

and reviews potential impacts to Endangered Species Act-listed species. Both studies are required for the Army Corp of Engineers' permit that is needed for this project.

Some projects require air pollution or noise studies depending on the types of permits needed or the type of project. Since this project does not increase traffic on the roads, these studies are not anticipated.

15. What kind of fish are in the Skykomish River and its tributaries?

Chinook, Coho, Pink Salmon, Steelhead, Bull Trout, Cutthroat Trout and other smaller non-salmonid fish.

16. What will be done to address the impacts of the Skykomish River flooding on private property? Are there projects to address non-road flooding issues as a community or the county versus as individual property owners?

Snohomish County launched the [Community Floodplain Solutions](#) program in July 2020. It is a collaborative effort to reduce flood impacts for residents, keep local farms viable, and restore habitat for endangered salmon in the Sky Valley. CFS is a partnership between Snohomish County Public Works Surface Water Management (SWM), the Sustainable Lands Strategy (SLS), the Snohomish Conservation District, and others. Largely funded by a \$4.8 million grant from the Department of Ecology's Floodplains by Design Program, Community Floodplain Solutions is designing resilient solutions to protect and preserve land options that help farmers, fish and those living in areas with flood risk. From culvert replacements to land use agreements, efforts require the participation of willing landowners and mutually agreeable, long-term solutions. If you are interested in learning more or participate, reach out to the project team at CFS.info@snoco.org or 425-262-2443. Learn more on the [project webpage](#) and [sign up to receive email or text updates](#).

17. Has opening old channels of the Skykomish River been considered?

This is an example of a projects that Community Floodplain Solutions could consider and would potentially like to partner with property owners on.

18. What is the impact of the flooding and ground water saturation on the quality of well water near the project sites and will testing occur?

For the Mann Rd & Ben Howard Rd project (Locations A, B, & C), Public Works will be testing the wells near the project locations before and after construction to ensure there is no measurable impact to the well water. You can learn more about how to prevent flooded wells on the [Snohomish Health District website](#).

19. What is the county council's role in this project versus staff's role?

The council's duties include identifying and articulating the needs of the citizens of Snohomish County, and providing a framework for county administration to carry out its work efficiently, ensuring that county government responds effectively to the community's needs. Learn more here: <https://snohomishcountywa.gov/172>.

Public Works staff implement projects based on the county's [Comprehensive Plan](#), that guides county decisions and services on a wide range of topics, including: land use, transportation,

parks, housing, capital facilities and the natural environment. Within the plan is a [Transportation Element](#). Furthermore, county council also approves a six-year [Transportation Improvement Program \(TIP\)](#) that identifies road projects to be completed by Public Works.

20. Is the county buying property for these projects? Will the county need to access anyone's property to complete these projects?

No property acquisitions are needed for the Haystack Creek Culvert Replacement project. However, some temporary construction easements are needed.

The right-of-way plan for Locations A, B & C should be completed by the end of 2020. The county needs to buy small strips of land from a few property owners as well as secure temporary easements for construction to do things like reconnect driveways to the road after construction and allow a temporary work area during construction. Right-of-Way Coordinators will be in touch with the relevant property owners. More information about this process is available here: <https://www.snohomishcountywa.gov/DocumentCenter/View/2905/Before-We-Build?bidId=>.

21. Who is the point of contact for these projects?

- For questions or comments about these projects, reach out to Road@snoco.org or 425-388-ROAD (7623) and you will be routed to the appropriate person.
- For questions or comments about Community Floodplain Solutions, reach out to CFS.info@snoco.org or (425) 262-2443.

22. How will the county keep residents up to date as the project progresses?

Sign up to receive project updates via email or text. You can sign up from the links below or on the right column of the project webpage.

Mann Rd & Ben Howard Rd (Locations A, B & C):

- Project webpage: <https://snohomishcountywa.gov/3759>
- Sign up to receive email or text updates: https://public.govdelivery.com/accounts/WASNOHOMISHCO/subscriber/new?topic_id=WASNOHOMISHCO_66

Haystack Creek Culvert Replacement:

- Project webpage: <https://www.snohomishcountywa.gov/3855>
- Sign up to receive email or text updates: https://public.govdelivery.com/accounts/WASNOHOMISHCO/subscriber/new?topic_id=WASNOHOMISHCO_67

You can expect to receive 1-2 updates per year or as new information is available, and more as the projects get closer to their construction schedules. If residents have question, they are welcome to submit them at any time.