1.4.11 Transportation Corridors and Bridges

Current Condition

Figure 27. Ames Lake Trestle Bridge No. 1320A

There are about 30 King County roads and 29 bridges maintained by King County in the SVAPD (see Map 16). Roads and bridges provide critical transportation corridors for the 214 commercial farms and the greater agriculture sector that sources products from and provides services to these commercial farms. The quality, reliable traffic flow, and routine maintenance of these roads and bridges, providing year-round access to heavy farm vehicles and their suppliers is critically important to maintain operations and food and farm supply chains. Keeping transportation corridors open to commercial farms by managing traffic flow, repairs and flooding is extremely important.

However, "King County continues to experience a roads funding crisis….Conditions on the road system will continue to deteriorate, and Roads must focus resources on critical safety needs. Reduced service levels result in a growing backlog of infrastructure maintenance, preservation, and replacement needs. Some examples are weight restricted bridges, failing or undersized road drainage systems, roads in need of reconstruction, and other deteriorating road conditions that impact local and regional mobility".[1]

Since October 2017, 2 bridges in the SVAPD have been posted with weight restrictions which can negatively impact farming operations using heavy vehicles for day-to-day operations. Horseshoe Lake Creek Bridge has a 4 axle single unit weight limit of 24 tons up to a 7 axle weight limit of 33 tons.[2] Ames Lake Trestle Bridge has a 4 axle single unit weight limit of 19 tons up to a 7 axle weight limit of 28 tons. Ames Lake Trestle Bridge is currently ranked #4[3] in the highest priority list, and is slated for construction in 2023.[4] See Figure 27. On that same list, Horseshoe Lake Creek Bridge ranks 23 out of 30 and was targeted for a load upgrade project in 2022.[5]

Because the SVAPD agriculture sector requires operational roads and bridges that can bear higher gross vehicle weights (GVW), this is a major concern and growing problem requiring funding solutions for Roads that enable more maintenance beyond critical safety needs and that serve the agriculture economy. Beyond bridges and roads, drainage and vegetation management along roadways as well as flooding mitigation are also key areas of need for the agriculture sector.

As part of the 2018 "Snoqualmie River Hydrologic Study," road closures were reported as caused by severe flooding. Figure 28 shows the roads closed during the highest floods to date in the Snoqualmie

Desired Condition by 2048

Transportation infrastructure including roads and bridges is fully functioning to support the movement of agricultural products while managing traffic to increase safety for all and prioritize routine operation of farms every day.

Timeline

2024

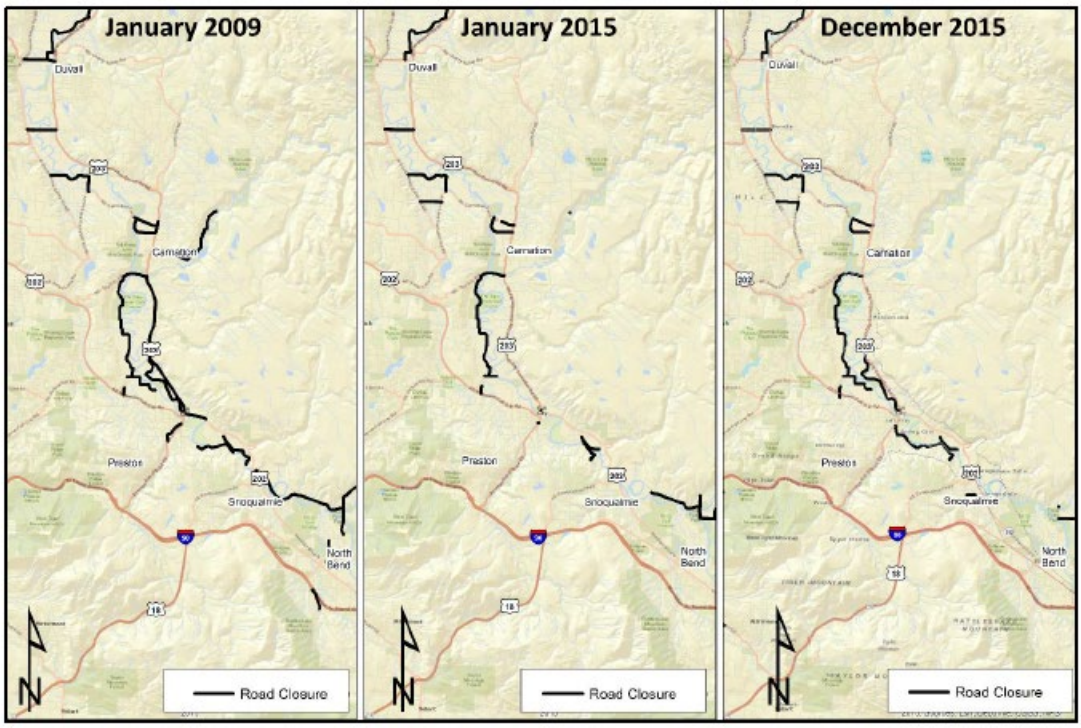
- Post new and more road signage for farm traffic safety and APD boundaries and use digital signage to highlight farm activities/events

2025

- SVAPD Bridges repaired/replaced and functioning without weight restrictions
- Implement ditch and culvert maintenance/ replacement to increase fish passage and keep waterways open for agricultural drainage
- Prioritize capital and maintenance improvements to roads and bridges along agricultural corridors and manage traffic to increase safety for all and allow routine operation of farms
- Increase roadside maintenance
- Strategically capture and share surveying monuments and benchmarks to support efforts regarding road flooding, home and barn elevations and Floodzilla monitoring system.

Valley. While "road closures totaled 37.5 miles of roads in the lower valley in January 2009 (82,900 cfs, the largest flood in record[6]), 21 miles in January 2015 (53,900 cfs[7]), and 24.6 miles in December 2015" (56,200 cfs[8]) stretching from North Bend to the County Line north of Duvall, most road closures occurred within the SVAPD.[9] The report also states that "the average road closure lasted approximately 4.6 days in January 2009, 1.8 days in January 2015, and 4.4 days in December 2015."[10] Other road closures occur for road, bridge, and revetment maintenance. While many of these closures are temporarily inconvenient, they are often long-term investments in the transportation corridors needed for the agriculture sector.

Figure 28. Snoqualmie River Flood Event Comparison Road Closures[11]



In addition to maintenance, traffic volumes, competing with cars and trucks that pass too closely/dangerously, and people recreating on roads within the SVAPD are the other largest problems. Of the other components of the roads and bridges network managed by King County including "sidewalks and pathways, bike lanes, guardrails, drainage and water quality facilities, traffic control equipment, and traffic cameras",[12] bike lanes, drainage and water quality facilities, and traffic control equipment are topics of strategies below. See the Population Growth issue paper for more details on the problems of traffic safety, stormwater and recreation.

- 2026
  - Evaluate the King County Capital Improvement Program (CIP) to recommend projects that may provide strategic transportation relief
  - Include and seek to solve increased traffic and visitation impacts that affect agriculture in local transportation plans
  - Planning review of over-tourism/over-visitation impacts
  - Increase roadside maintenance for mowing and tree trimming
- 2027
  - Study and capture pollutants from road run-off before reaching agricultural fields and waterways
  - Continue increased roadside maintenance and multi-benefit approach

2030
- Periodically review transportation corridors in relation to agricultural needs
- Implement all transportation strategies from planning review and strategies
- Continue increased roadside maintenance and multi-benefit approach
- Update and replace APD and safety signage as needed

2040-2048
- Periodically review transportation corridors in relation to agricultural needs
- Implement all

	transportation strategies from planning review and strategies ○ Continue increased roadside maintenance and multi-benefit approach ○ Update and replace APD and safety signage as needed

Background	Service Providers	Priority
King County has laid out its plans for roads and bridges in the 2014 Strategic Plan for Road Services[13] Declining roads funding "due to municipal annexations, the 2008 recession, declines in gas tax revenues, the effects of voter initiatives, and an aging bridge and road system"[14] is now below half of what is needed annually. Without "$6 million from REET for the CIP" projects "and a commitment for REET to hold and pay debt service on approximately $28 million of general obligation bonds to fund the 2018-2019 Bridge Safety Program"[15], reduced bridge safety and maintenance would have resulted. Roads also leverages Surface Water Management fees for drainage preservation work that protects roads and culverts from failure, promotes improved water quality and fish passage.[16] In 2018, Puget Sound Regional Council's (PSRC) Regional Transportation Plan stated the hazards of not being able to maintain the region's existing transportation infrastructure would have " serious economic, environmental, performance, safety, and financial consequences down the line."[17]	Lead ○ King County Department of Local Services Partners ○ Pedestrian and/or Bicycle Safety groups (Cascade Bicycle Club) ○ Duvall Days ○ King County Parks ○ SVWID	Medium

Strategies

- Prioritize capital and maintenance improvements to roads and bridges along agricultural corridors and manage traffic to increase safety for all and allow routine operation of farms. Periodically review transportation corridors in relation to agricultural needs.
- Include and seek to solve increased traffic and visitation impacts that affect agriculture in local transportation plans, such as adding bike lanes on rural routes, permits for bike events, responding to parking on the side of roads with law enforcement, particularly illegal parking around float and jet ski areas, the SnoValley trail, and by bird watchers and photographers.
- Post new standard signage to delineate the APD at every street, trail and river entrance to the APD, traffic safety signage for tractors/farm vehicles at entrances to APD and throughout the APD (see Figures 29-31 below).
- Increase farm/tractor safety signage on APD entrances and roads, including bicycle warnings to stay to the right side of the road at all times, and maintain speed limits. Consider striping roads with bike lanes to increase safety.
- Evaluate the King County Capital Improvement Program (CIP) to recommend projects that may provide strategic transportation relief, such as added bike lanes or trail enhancements to keep cyclists safe from passing farm machinery; on Hwy 203 prohibit bicycles, add passing lanes for slow traffic such as tractors, and wildlife viewing turnouts.
- Manage traffic along 203 and in the APDs regarding tourism and recreation events, including parking, that interfere with farm vehicles. Consider re-routing bicycle races and other events in busiest times of the farm season.
- Setup roadworks digital signage to encourage safer driving and highlight farm season, wildlife, etc.
- Study and capture pollutants from road run-off before reaching agricultural fields and waterways.
- With two Roads service centers in SVAPD primarily for snow and ice,
    - Increase roadside maintenance in SVAPD for mowing to keep spread of weeds down, and vegetation back from guardrails and bike lanes to prevent accidents.
    - Increase tree maintenance over key SVAPD roadways to ensure commerce is not impacted.
- Pursue FCD revenue and use SWM revenue systematically in APDs to prioritize and couple ditch and culvert

maintenance/replacement to increase fish passage and keep waterways open for agricultural drainage.

- Pursue multi-benefit projects when re-surfacing roads in the SVAPD such as flood mitigation, elevating roadways that benefit agriculture.
- Strategically capture and share surveying monuments and benchmarks to support efforts regarding road flooding, home and barn elevations and Floodzilla monitoring system.
- Better collaboration among recreational groups with the agriculture sector to minimize conflicts.
- See additional, related strategies in **Population Growth** Issue Paper.

Figure 29. New Caution Farm Area signage

Figure 30. New APD signage

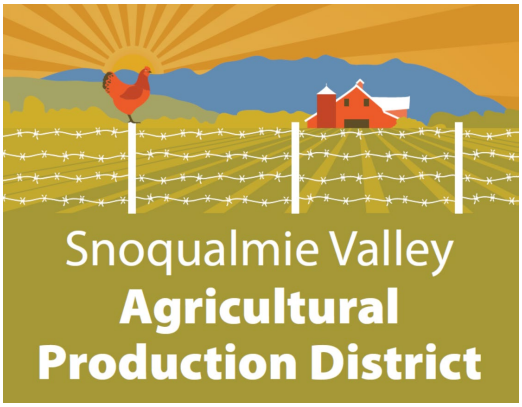
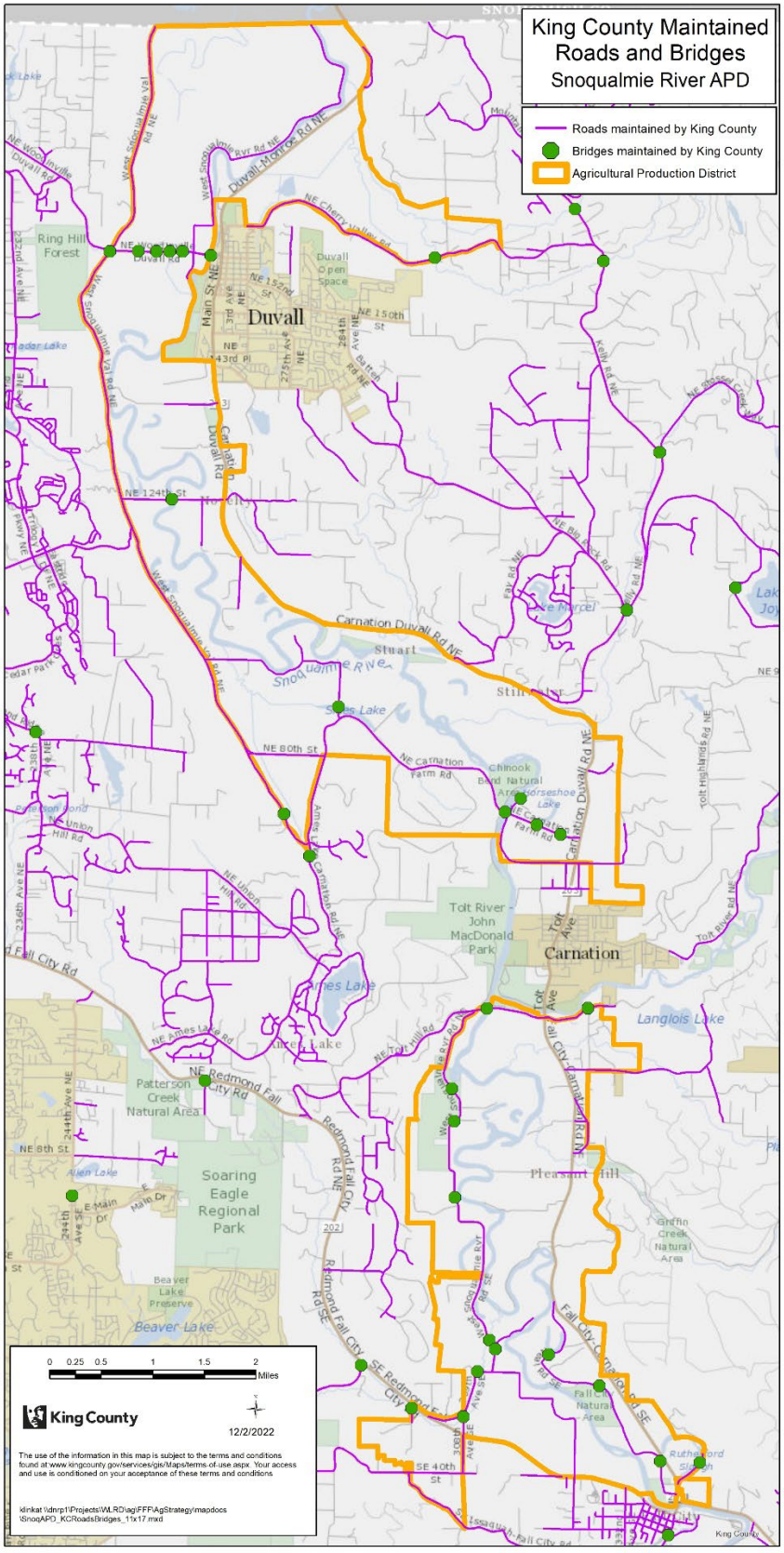


Figure 31. Drive Carefully signage

Map 16. King County Maintained Roads and Bridges Snoqualmie River APD



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[7] King County, "Snoqualmie River Flooding Information: Recent High Flow Data" [LINK]. Accessed 12/2/22.
[8] Ibid.
[9]King County, "Road Services Division 2021-2022 Business Plan", April 2020. [LINK]. Accessed 11/28/22. Page 75 [97].
[10] Ibid.
[11] King County, "Snoqualmie River Hydrologic Study: Evaluation of Flooding Trends and Current Conditions," July 13, 2018. [LINK]. Accessed 11/22/22. Page 76 [98]. Prepared for King County Department of Natural Resources and Parks, Water and Land Resources Division by Watershed Science & Engineering and Herrera Environmental Consultants.
[12] King County Department of Transportation, "Strategic Plan for Road Services," July 2014 Update. [LINK]. Accessed 11/28/22. Page 9 [15].
[13] Ibid.
[14] King County, "Road Services Division 2021-2022 Business Plan", April 2020. [LINK]. Accessed 11/28/22. Page 4 [7].
[15] King County, "Road Services Division 2021-2022 Business Plan", April 2020. [LINK]. Accessed 11/28/22. Page 7 [10].
[16] Ibid, 8 [11].
[17] Puget Sound Regional Council, "The Regional Transportation Plan -2018" [LINK]. Accessed 11/28/22. Page 26 [38].