

MT. BAKER HIGHWAY SCENIC BYWAY MANAGEMENT PLAN

TRAFFIC AND OPERATIONS PLAN

1. Background
2. Signs
3. Vehicle parking
4. Pavement marking
5. Chain up area
6. Access control
7. Special events

Traffic and operations plan

Operational considerations along the roadway are important to support safety and traffic flow along this corridor. Seasonal variations, events, and the increased use of facilities require ongoing coordination and the consideration of additional safety measures. Traffic operational considerations include the evaluation and placement of signs, chain up areas, viewpoint pullout locations, parking, pavement marking, access control and the coordination of special events. These all impact the operation of the roadway and require review to enhance the safety of the roadway. The following details these issues along the SR 542 corridor.

Background

WSDOT follows the “Manual on Uniform Traffic Control Devices” (MUTCD) when making traffic control decisions. The MUTCD contains the standards for traffic control devices that regulate, warn, and guide road users along highways, county roads, and city streets. The MUTCD functions as both a legal and an engineering document. The Revised Code of Washington (RCW) 47.36, Traffic Control Devices, requires WSDOT to adopt uniform standards for traffic control devices installed along state highways. The law also requires that traffic control devices along other roadway that connect to our system fully conform to these adopted standards to the extent possible.

Traffic control devices are defined as all signs, signals, markings, and other devices used to regulate, warn, or guide traffic placed on, over or adjacent to a street, highway, pedestrian facility or bikeway by authority of a public agency having jurisdiction. The MUTCD is the national standard for all traffic control devices in accordance with 23 U.S.C. 109(d) and 402(a). The MUTCD will provide the standard used to determine sign placement along the SR 542 corridor.

To be effective, a traffic control device should meet five basic requirements:

1. Fulfill a need;
2. Command attention;
3. Convey a clear and simple meaning;
4. Command respect from road users; and
5. Give adequate time for proper response.

Design, placement, operation, maintenance, and uniformity are aspects that should be carefully considered in order to maximize the ability of a traffic control device to meet the five requirements listed above.



Signs

Signs along the SR 542 corridor are important for safety and to support the visitor experience. These guidelines provide an operational tool to assist in the implementation of appropriate signing along this corridor. These guidelines interpret existing WSDOT sign policy pertinent to scenic byway signing, incorporate a Memorandum of understanding regarding signs, and interpret the Whatcom Council of Government's recording of the community's vision and goals in the Mt. Baker Highway corridor management plan. Further, we hope to clarify technical information and operational guidance needed to ensure that scenic byway signs meet traffic safety requirements and serve as an effective identification tool. We seek to balance traffic requirements for uniformity with flexibility to guide travelers to interesting sites along this scenic corridor.



The SR 542 corridor was incorporated into the State of Washington's Scenic and Recreational Highways Act in 1967. As a state-designated Scenic Highway, Mt. Baker Highway is covered by signage regulations specific to the Act.

Four authorities govern signing regulations:

- State Scenic Vistas Act 1971
- USDA Forest Service (USFS)
- Washington state
- Whatcom County

Developing a coordinated approach to sign placement is one of the most important elements in creating a unique identity for the highway. Signs are the most visible and important man-made structures that visitors see from the highway. The signs need to be easy to read and clearly convey orientation and traffic safety information. They must also be carefully designed and located to avoid creating hazards to drivers while allowing convenient maintenance.

The examples given in this document provide guidance in the placement of signs along the corridor. For the highways to be recognized as a unique entity, we have worked with the various managing agencies to develop a unified approach that addresses the many legitimate technical and maintenance concerns along the corridor.

The visitor experience is enhanced by providing consistent signage along the corridor that does not distract from the visual quality of the byway.

Signs are installed and maintained by WSDOT maintenance. Road sign placement is the responsibility of the Mt. Baker Area WSDOT traffic division. This group reviews safety needs and identifies sign needs in the areas. WSDOT follows the MUTCD and finds that less is more in terms of sign placement - they like to keep drivers focused on the roadway. This roadway has many scenic vistas, but also requires a driver's full attention to navigate the curves along the steep slopes leading to Artist Point. Safety is the primary concern for the traffic division. They also want to provide good information so drivers can safely navigate sites and vistas along this corridor. WSDOT will work cooperatively with the Forest Service and our partners to process additional signing requests or signing changes on the highway within the easement.



SR 542 signage types:

Warning signs (Maintained by WSDOT)



Warning signs call attention to unexpected conditions on or adjacent to a highway and to situations that might not be readily apparent to road users. Warning signs alert road users to conditions that might call for a reduction of speed or an action in the interest of safety and efficient traffic operations.



Recreational, cultural interest and educational plaques (maintained by WSDOT)



Specific Service signs shall be defined as guide signs that provide road users with site information and directional information for services and eligible attractions.

Guide signs (maintained by WSDOT)/ national forest road sign



Reference

Location signs (maintained by WSDOT)



Milepost markers are used throughout the length of the highway. Marking will be based on WSDOT milepost marking system and maintained by WSDOT. This system will help facilitate the development of an integrated interpretative plan and informational brochures as proposed by the Whatcom Council of Governments. Areas of interest can easily be identified and referenced in the publications and readily located on the ground by visitors. This system will work equally well regardless of the direction the visitor is traveling.



Regulatory signs (maintained by WSDOT)



Regulatory signs shall be used to inform road users of selected traffic laws or regulations and indicate the applicability of legal requirements. Regulatory signs shall be installed at or near where the regulations apply. The signs shall clearly indicate the requirements imposed and shall be designed and installed to provide adequate visibility and legibility in order to obtain compliance.

The Adopt-a-Highway sign



Adopt-a-highway litter control program is a statewide program where volunteer organizations remove litter along identified sections of the corridor. Since this effort provides beautification to the corridor, it is encouraged at the locations currently selected and promoted at new locations as needed.

Scenic Byway sign



Scenic byway signing provides an identity and guide to travelers along designated scenic byways. The Scenic Byway designation is part of a larger initiative for corridor planning and stewardship established by RCW 47.39 to preserve the unique scenic character along Washington’s transportation corridors. The Mt. Baker Scenic Byway emblem symbolizes the “essence” of this particular route, and was designed locally for this corridor. These signs are located strategically along the corridor to provide an association between the route and marketing publications that promote the scenic byway and the special characteristics of the area, and scenic byway identity. These signs were developed and are funded by the scenic byway committee.

Scenic Byway sign at MP 34.28

Prominent features signs

In the 1989, USFS Mt. Baker Scenic Byway Implementation Plan, the following prominent feature signs were identified as needing to be funded and installed to help the traveling public know more about the corridor. At this time the funding has not been secured for these yet. (Page 25 of the Whatcom County Council of Government, Whatcom Corridor Management Plan, December 22, 1997)

The Whatcom Council of Government has recommended additional signs be installed at the following locations:

MP 34.4 Mt. Baker National Forest Scenic Byway “Gateway Sign”

MP 35.4 Horseshoe Bend Trail

MP 35.5 West Church Mountain. Goat Observation interpretive sign and site development plan

MP 46.85 Silver Fir Marsh interpretative sign and site development plan

Emergency signage:

During fire suppression emergencies that impact the highway, USFS and WSDOT maintenance personnel will coordinate to identify signing requirements and install signs and devices as soon as possible after an emergency occurs. The WSDOT maintenance representative supervisor will work with the logistics chief and finance chief assigned to the fire to obtain reimbursement. The signs and devices are chargeable to the fire suppression activity.

Signing standards agreed to within the National Forest

The state of Washington and the Forest Service have agreed to the following regarding signs in the National Forest: ([MOU- NFS 00-MU-11060000-040](#))

1. WSDOT has authority and responsibility to furnish, install, and maintain all standard (MUTCD) signs within the easement on the State Highways System.
2. All such signing will be in accordance with the MUTCD and the WSDOT Traffic manual.
3. WSDOT will furnish, install, and maintain guide signs within the easement, consistent with the MUTCD, as requested by USFS including the following (See the attached Appendix for sign layouts.)
 - a. The WSDOT National Forest Boundary sign; a highway sign that includes script for National Forest and white on brown colors. This sign will be used on highways where there is no acceptable location for the USFS National Forest standard boundary sign.
 - b. Approach signs for National Forest facilities.
 - c. Directional signs to important destinations within the National Forest.
 - d. Junction signs for National Forest primary routes.
4. Other USFS informational signs (such as the standard National Forest Entrance sign, recreation site sign, headquarters sign and special interpretive signs) will be provided, installed and maintained by the USFS. A permit will be obtained from WSDOT for each installation that must be within the easement. Installations will meet the requirements of the current highway safety standards and the MUTCD.
5. Northwest Forest Pass logo signs will be provided by USFS. WSDOT will install the logo signs on existing directional guide signs that direct motorists to National Forest facilities.
6. Signs installed outside of the easement and visible to highway travelers shall comply with the United States Code, Title 23, Section 131; revised Code of Washington (RCW) 47.42, Scenic Vistas Act of 1971; Washington Administrative Code (WAC) 468-66; and WSDOT Traffic Manual. These are considered Type 1(a) signs.

7. Where USFS work activities (emergency, construction, or maintenance) require the use of temporary traffic control devices, USFS will furnish, install, and maintain all traffic control devices that are needed in the easement to warn and control traffic.

This work will be done under the direction of WSDOT. All such traffic control devices and their application conform to the MUTCD.

Informational and interpretive signs

Informational and interpretive signs can enhance the byway travelers' experience by providing information on recreational opportunities, rules and regulations, and/or describing the natural, cultural, historic or physical aspects of the area. These signs help to provide the flavor and character that can make the forest visit informative, safe and fun. These signs are not for regulatory, traffic safety or directional purposes for highway needs.



Entrance signs (maintained by USFS)

This sign is the Gateway Entrance to the National forest at MP 35; similarly styled signs are located at the public service center and campgrounds.

Interpretive displays and trailhead boards (maintained by USFS or concessionaire.)



The Forest Service is responsible for locating National Forest and other Department of Agricultural information signs on the portions of the right of way outside of construction clearing limits. The placement of signs shall be in conformance with WSDOT specifications and standards.



Interpretive signs such as the one above provide a historical context and add information not otherwise available that augments the traveler's understanding of the area.

Sign inventory:

A list of all existing signs along the corridor is included in Appendix 12. This list includes location, sign message, and size. Currently there are 195 eastbound signs located between MP 33.557 to 55.387, and 164 westbound signs from MP 57.198 to 33.670.

SR 542 scenic byway signs: goals and strategies

Goal: To preserve the scenic character along the corridor by providing travelers with guide signs to safely direct them to significant vistas and heritage sites so they can appreciate and learn about the unique natural, cultural, and historic heritage and recreational opportunities.

Strategy: Conform to Scenic Byway logo signing guidelines and WSDOT standards.

Goal: Provide direction on how to manage the sign placement along this Scenic Highway by limiting the number of signs in the scenic highway corridor to the minimum required to give clear direction to motorists.

Strategy: Conform to Manual of Uniform Traffic Control Devices and WSDOT standards.

Vehicle parking

Recreation and viewing opportunities abound along this corridor. Appropriate parking facilities are needed to accommodate visitors wishing to stop and enjoy the surroundings. Many vista points and trailheads have established parking and access points that are managed by the USFS. In other locations along the corridor, the roadside is used for visitor parking. The roadside is the area outside the traveled way. Some areas have widened shoulders to accommodate parking, while other areas do not. Roadside parking needs to be managed by WSDOT so it does not affect roadway operations.



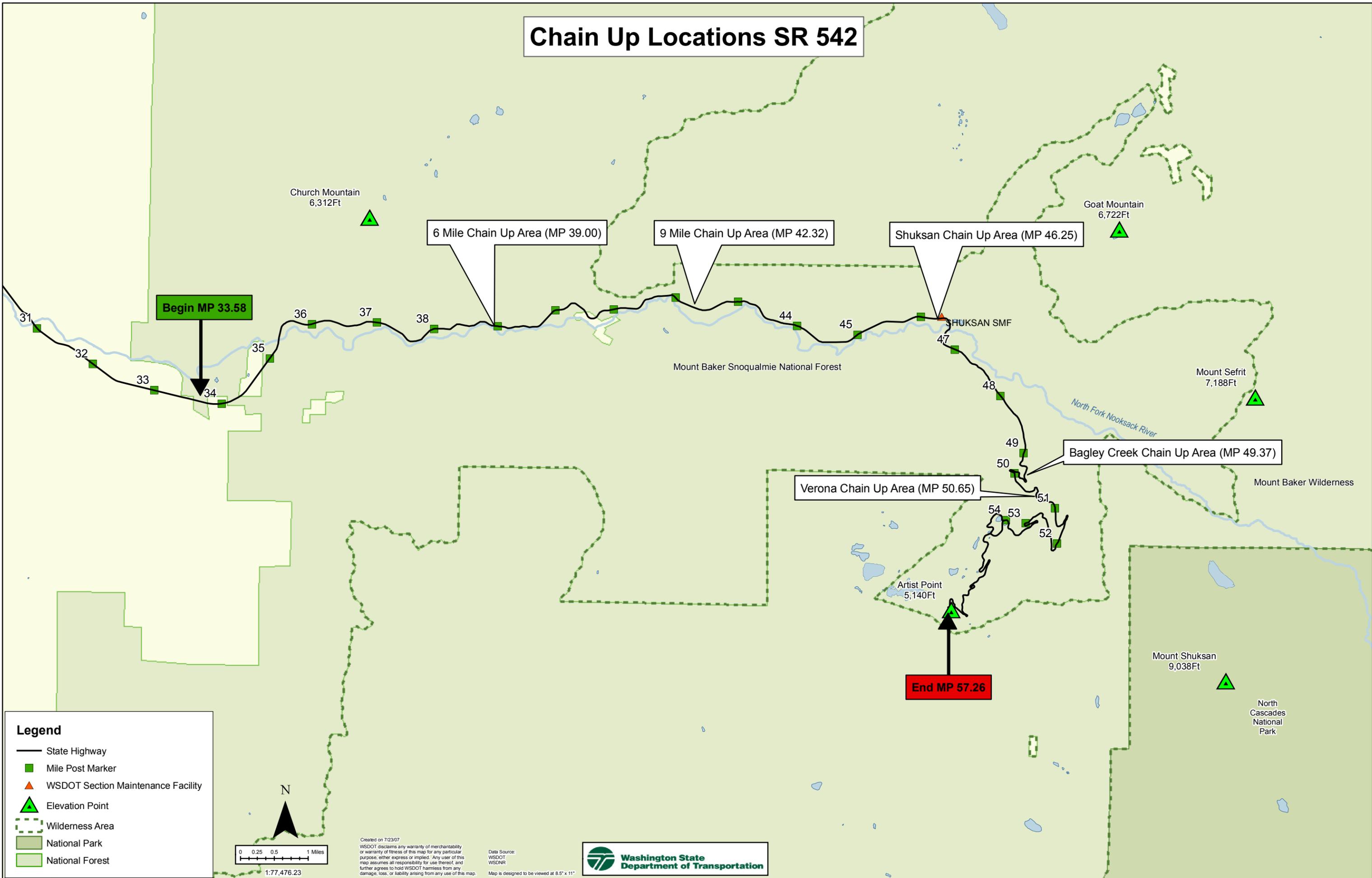
Pavement marking

Pavement marking will be performed by WSDOT per the MUTCD Part 3. Markings on highways have important functions in providing guidance and information for the road user. These include pavement and curb markings, object markers, delineators, colored pavement, barricades, channelizing devices and islands. These are used to supplement other traffic control devices such as signs, signals and other markings. In some instances, pavement markings are used alone to effectively convey regulations, guidance or warnings. The responsibility for determining appropriate markings, application of appropriate marking, and maintenance is the responsibility of WSDOT when on the SR 542 roadway.

Chain-up areas

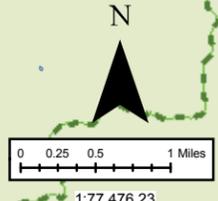
Chain-up areas allow motorists a widened shoulder located outside the highway mainline for putting on or taking off chains. SR 542 has five designated chain-up areas as shown on the map below. WSDOT and the USFS will coordinate future chain up areas for location and size.

Chain Up Locations SR 542



Legend

- State Highway
- Mile Post Marker
- ▲ WSDOT Section Maintenance Facility
- ▲ Elevation Point
- Wilderness Area
- National Park
- National Forest



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Map 8: SR 542 Chain-Up locations



Access control

Safety is the No. 1 concern when providing access to SR 542 from side roads, roadside pullouts and recreation areas. Under the Revised Code of Washington (RCW) 47.50, SR 542 is designated an access-controlled facility. The goal of this law is to preserve the safety and operational characteristics of the highway by managing access. Access control manages traffic movements onto and off of state highways to improve system performance, minimize conflicts and increase traffic flow. Access control preserves highway safety and capacity, reducing accidents. SR 542 within the National Forest is classified as a class two managed access highway, meaning mobility is favored over access, speeds of 35 to 55 are allowed and minimum access spacing is 660 feet. Managed access was established to clarify that access rights are subordinate to the public's right and interest in a safe and efficient highway system. Direct access to a state highway may be restricted if reasonable access can be provided to another public road. WSDOT has developed access design standards and adopted permitting procedures to manage this system.

The USFS currently has Forest Service roads that have access off of SR 542. These locations have access permits for the existing uses. Most of these lead to Forest Service roads and provide access to trailheads within the forest. Given the function and nature of this study area, it is unlikely that development will occur. Access impacts to the highway could require additional evaluation if the use and impact to the highway change. If areas require a change in access, the USFS and its permittees will need to obtain an access permit when approaches connect to state highways. WSDOT and USFS will determine an access arrangement where highway safety will not be jeopardized. New approaches will be at the expense of USFS or its permittee. Future maintenance of approaches will be covered in the approach and use permit.

Temporary approaches required by USFS during fire fighting or other emergencies may be constructed as necessary without formal WSDOT approval. WSDOT will be notified as soon as practical. Removal and restoration measures will be determined by WSDOT but conducted at the expense of USFS. USFS will take precautions during such emergencies to safeguard the highway users by coordinating with WSDOT on needed signs and/or traffic control.

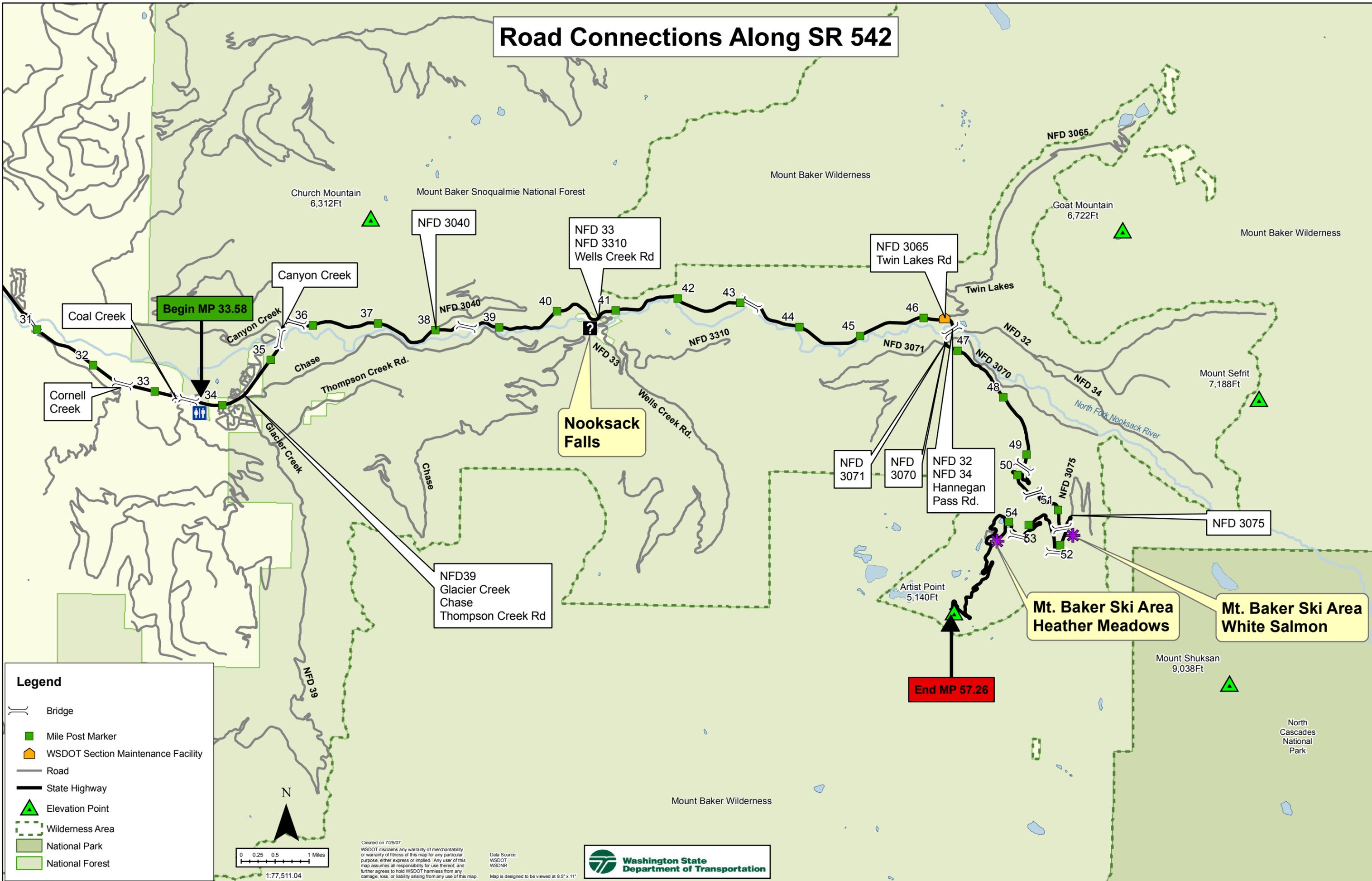
SR 542 scenic byway access: goals, and strategy:

Our focus is on providing a safe scenic corridor.

Goal: *Provide an approach to safely and efficiently move people and goods while enhancing and conserving the aesthetic qualities of the SR 542 corridor by identifying areas that draw interest to focus on how to accommodate access needs.*

Strategy: *Cooperatively work to achieve enhancements along the corridor that benefit the traveling public and provide access to visually stimulating and unique attributes within the National Forest.*

Road Connections Along SR 542



Legend

- Bridge
- Mile Post Marker
- WSDOT Section Maintenance Facility
- Road
- State Highway
- Elevation Point
- Wilderness Area
- National Park
- National Forest



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Map 9: Road connections along SR 542



Special Events



Special events conducted on state highways may include filming, organized bicycle or pedestrian events, or other types of activities that may impact highway operations. Conducting special events safely on state highways is enhanced by cooperation between the event organizer, WSDOT, the Washington State Patrol and the USFS. Requests for such events will be coordinated among these agencies before any permits are issued. WSDOT will be the lead agency, but will consult with the USFS prior to issuing any permits. The WSDOT NW Region contact is at (206) 440-4474, Construction Traffic Office.