Chapter Four Mitigation and Enhancement

This chapter discusses proposed mitigation and possible enhancements. Because this project includes so many design solutions that may be considered both mitigation and enhancement, the lead agencies determined that individual discussions of mitigation by resource within the *Affected Environment* and *Environmental Consequences* sections would not adequately capture the breadth and scale of the Washington State Department of Transportation's (WSDOT's) and Federal Highway Administration's (FHWA's) investments.

Two types of mitigation and enhancement measures for the proposed alternative alignments are being pursued. The first type includes "mitigation by design" and mitigation required by regulatory requirements. The second includes mitigation for significant adverse impacts. The first types of measures, which precluded significant impacts to most of the resource areas and were incorporated in the design of each proposed alternative, are primarily discussed in Chapter 3. Also discussed in Chapter 3 are mitigation measures required by regulation or agency guidance (even though impacts may not be significant). These include permit requirements, Best Management Practices (BMPs), Washington regulatory requirements for fugitive dust and noise, burn permits, and Memorandum of Understanding between agencies.

For some resource areas that were not resolved by project design alone, mitigation and enhancement measures in addition to those incorporated into the design of the alignment alternatives are proposed and are discussed in this section. These are proposed because impacts occur to resource areas that were not addressed by project design. Archaeological monitoring of areas with high archaeological sensitivity during construction is an example of this type of mitigation.

Each of the following resource subsections include a description of possible measures to mitigate significant adverse impacts.

4.1 What is a "Mitigation Measure"?

The National Environmental Policy Act (NEPA) requires the identification of all reasonable mitigation measures that could alleviate the environmental effects of a proposed action. Mitigation measures must be discussed for all significant impacts of the proposed action. Mitigation measures that are experimental in nature should be identified as such. Once environmental consequences are described and mitigation measures are presented, those effects that would still occur should be identified. Enhancement, on the other hand, refers to the planning and implementation of efforts to restore degraded ecosystems.

> *The more specific a mitigation measure is, the more likely it is to be effective.*

Council on Environmental Quality (CEQ) regulations (at § 1508.20) define mitigation in the following five ways (emphasis added):

1. **Avoiding** the impact altogether by not taking a certain action or parts of an action.
2. **Minimizing** impacts by limiting the degree or magnitude of the action, and its implementation.
3. **Rectifying** the impact by repairing, rehabilitating, or restoring the affected environment.
4. **Reducing or eliminating** the impact over time by preservation and maintenance operations during the life of the action.
5. **Compensating** for the impact by replacing or providing substitute resources or environments.

During the initial development of this project, mitigation and enhancement measures were included in the design parameters. This meant that avoiding impacts to natural resources was one of the top priorities guiding the development of the alternatives carried forward for further analysis. Specifically, avoidance and minimization of impacts to resources for this project includes:

- using approximately 70 percent of the existing 15-mile Interstate 90 (I-90) footprint,
- developing improvement packages to offset any new impacts from the project,
- providing for a vegetated median strip, and
- incorporating BMPs and other reasonable measures to address any environmental impacts during and after construction.

These overall mitigation and enhancement measures, which are incorporated into the overall design of the proposed alternatives, are discussed below.

Existing Facility

During the initial scoping of this project, four corridor alternatives were considered for this Environmental Impact Statement (EIS). The Rampart Ridge, Split Route, and Roaring Ridge corridor alternatives would have introduced significant new impacts to the environment where none currently exist. These three corridors have been eliminated from further study based partially on those potentially significant environmental impacts.

The Common Route includes four realignments that substantially avoid and minimize impacts to the surrounding environment by using over 70 percent of the existing 15-mile footprint. In this regard, proposed alternatives under the Common Route represent realignments of the existing facility, which is in contrast to the greater likelihood of significant impacts associated with constructing a new facility on a new alignment. The four alignments were developed for the Slide Curve area in order to avoid the avalanche-prone area to meet the project need of eliminating closures due to avalanches, and provide a safer road for the traveling public.

Connectivity Improvements

When originally constructed, I-90 impacted wetlands and hydrologic features, and created a barrier to terrestrial connectivity corridors through the project area. The interstate was constructed in accordance with the design standards and environmental regulations in place at the time. In the last 20 years (since the completion of the last major interstate upgrade), much has changed and much has been learned in the fields of both environmental science and interstate design.

The Mitigation Development Team (MDT) and the WSDOT Design Team took this into account in developing preliminary connectivity options that form the basis of the connectivity proposals. One of the MDT's tasks was to determine the type(s) of structural and performance-based mitigation and enhancement measures needed to offset any new impacts resulting from the I-90 Snoqualmie Pass East reconstruction project.

The location of hydrologic features within the project area provide a logical nexus between ecosystem connectivity needs, regulatory mitigation thresholds and requirements, and design requirements. The MDT and the I-90 Design Team focused their attention on locations where enhancements to hydraulic design solutions would provide for enhanced aquatic, riparian, and terrestrial connectivity, as well as enhanced hydrologic continuity.

The Keechelus Lake alignment and the Connectivity Improvements that are chosen to form the "preferred alternative" for this project will represent a major improvement over the current environmental conditions. Some of the benefits the proposed build features would provide include:

Bridges/Structures: Terrestrial connectivity; fish passage; debris passage; channel migration; surface and hydrologic connections restoration; wetlands connection; riparian habitat restoration; surface and groundwater movement restoration.

Oversized/Bottomless Culverts: Fish passage; terrestrial connectivity; hydraulic capacity; hydrologic connection restoration; debris passage; surface and subsurface water connection restoration.

Building bridges or box culverts to replace standard culverts, or where no culvert previously existed, benefits more than wildlife. Such structures improve the movement of water on the surface and through the ground. These structures also allow for the establishment of wetland and upland habitat.

For agencies that regulate wetlands, WSDOT will work collaboratively with permit writers to help ensure a full understanding of the direct and indirect environmental benefits of these structures. Appropriate wetland mitigation ratios can then be discussed. Direct benefits of structures include spanning areas originally proposed for earthen fill (thereby avoiding and/or minimizing potential impacts), as well as the upland habitat and channel migration opportunities created by such spans. Box culverts will allow for greater channel movement, and a reduced need for ongoing culvert or channel maintenance. Indirect yet equally important benefits include the encouragement of greater terrestrial and

plant diversity, and fewer upstream and downstream maintenance problems, since wider, taller structures allow for larger storm-related streamflows.

Median Facilities

Expanding the overall roadway width to include a vegetated median strip in some areas where none currently exists will provide many different benefits. A median will provide additional snow storage for snow-plowing operations; serve as a stormwater treatment area; increase sight distance on curves (which will improve safety); and, due to increased sight distance, tighter radius curves can be used to avoid creating excessively large cut slopes or to avoid unstable rock slopes along Keechelus Lake and Amabalis Mountain. These plans are included in the contract plans so that all interested contractors are aware of any unique or atypical measures.

Best Management Practices During and Post-Construction

During project design, WSDOT typically creates a series of plans to identify BMPs and reasonable measures that address environmental impacts. These plans include a Temporary Erosion Sediment Control Plan, a Stormwater Management Plan, and a Spill Prevention, Control, and Countermeasure Plan (SPCCP). These plans are in addition to, and complement, any permits that may be issued to WSDOT for the project.

WSDOT South Central Region has instituted a construction services program in order to monitor, track, and report on the effectiveness of the BMPs developed for the Temporary Erosion Sediment Control Plan, Stormwater Management Plan, and SPCCP, and assure environmental permit compliance after construction has started. This program allows for any necessary adjustments to the plans or to the BMPs in order to protect the environment.

4.2 What are the Resource-Specific Mitigation and Enhancement Measures?

By adopting a design philosophy emphasizing impact avoidance and minimization for the proposed alternatives, significant impacts to many resource areas were precluded. Mitigation and enhancement measures specific to each resource area that were incorporated in the design of the proposed alternatives are discussed in Chapter 3. For those resource areas that require additional mitigation measures due to significant adverse impacts, mitigation and enhancement measures are proposed and discussed here. Additionally, some mitigations are required by regulations even though resource impacts may not be significant (i.e., wetlands). Those resources that require mitigation measures in addition to those discussed in Chapter 3 are discussed below. Each resource subsection includes a description of possible measures to mitigate adverse impacts or adhere to regulatory requirements.

4.2.1 Wetlands

As discussed in Section 3.4, the proposed project would have significant beneficial impacts on wetlands (these impacts would vary somewhat by

alternative). These and other environmental benefits of the project are part of the purpose and need for the project. Therefore, these beneficial effects counteract or compensate for adverse impacts of the project on wetlands. The increase in function and value of adjacent wetlands will be considered together with the function and value of lost wetlands in determining the net effect of the project that will require appropriate mitigation.

In accordance with the policy of "no net loss" of wetlands, wetlands will be created, restored, or enhanced to compensate for wetlands lost or significantly degraded as a result of the project. The determination of wetland impacts will be based on a detailed delineation of jurisdictional wetlands and finalization of project design. Mitigation for these impacts will be determined in consultation with the resource agencies considering the beneficial effects of the project. A conceptual wetland mitigation plan, including potential mitigation sites, types of mitigation, and wetland replacement ratios, etc. will be provided in the Final EIS.

As discussed in Section 3.4 and the *Wetland/Biology Report* (WSDOT 2004f) (Appendix Y), BMPs would be implemented to avoid or minimize adverse environmental effects during construction and operation of the project. Furthermore, implementation of the following measures are recommended to minimize impacts to wetlands, vegetation, and streams:

1. Use standard temporary erosion and sedimentation control techniques and BMPs during construction.
2. Minimize vegetation clearing. Retaining native vegetation in the right-of-way (ROW) conserves wildlife habitat and provides buffers for sensitive areas. Unavoidable clearing should be mitigated by replanting appropriate native vegetation in disturbed areas. Any revegetation should be coordinated with WSDOT biologists and landscape architects.
3. Locate bridge piers and/or retaining walls as far upslope as possible from wetland edges and stream channels.
4. Replace highway ditches with flat-bottom ditches adjacent to the widened roadway.
5. Locate wetland and stream mitigation projects where existing vegetation offers opportunity for buffering or providing ecosystem connectivity to existing wildlife habitat.
6. The use of a multi-disciplinary team is advised for the design of wetland mitigation sites. This team should include input from regulatory officials and individuals with experience managing the natural resource areas adjacent to the proposed project.
7. Consultation with the WSDOT Environmental Services Office if the proposed design and/or alignment changes to determine if potential wetland impacts have also changed.

4.2.2 Fish, Aquatic Habitat, and Threatened and Endangered Fish Species

The proposed project would have significant beneficial effects on fish and aquatic habitat. Overall, the beneficial effects of the project on fish and aquatic habitat are considered more important biologically than the adverse impacts (consisting primarily of short-term construction impacts or relatively small habitat losses) for all alternatives except the No-Build.

By restricting the size and the timing of the explosive charges used near the shoreline, acoustic shock capable of injuring fish (i.e., 100 kilo Pascals) would be prevented. Therefore, no injury to bull trout or other fish due to acoustic shock from blasting is expected.

Measures will be used to exclude bull trout and other fish from the pile-driving site, and/or to minimize the strength of the sound/shock waves produced. Potential measures include steel sleeves or air bubble curtains around the piles being driven, or the use of vibratory or oscillatory methods that produce much lower sound levels than impact hammer pile driving.

The following measures would be used to reduce the potential for impacts to lakebed and adjacent habitat:

- Structural foundations above 2,500 feet elevation will be constructed during low reservoir pool conditions if possible.
- Cofferdams or similar containment methods will be used to isolate lower elevation foundations and supports that could be constructed under the water surface.
- BMPs would be used to minimize impacts to water quality and aquatic habitat, as discussed in Appendix G.

4.2.3 Terrestrial Species and Habitat

The proposed project would have significant beneficial effects on terrestrial species and habitat. These beneficial effects will compensate for adverse impacts of the project. Overall, the beneficial effects of the project on terrestrial species and habitat are considered more important biologically than the adverse impacts (consisting primarily of short-term construction impacts or relatively small habitat losses) for all alternatives except the No-Build.

WILDLIFE FENCING

To reduce animal-vehicle collisions and encourage wildlife use of proposed crossing structures, a wildlife fencing plan will be developed for the corridor. Although guide fencing has a demonstrated effectiveness, its use raises important biological, maintenance, safety, and aesthetic issues. Fences should be designed to be permeable to low mobility species in order to minimize this fragmentation effect.

Wildlife collisions with vehicles have also been shown to increase near fence ends (Clevenger et al. 2001). This “fence-end” effect can by reduced by incorporating “V” or “J” shaped fence ends that turn animals back toward the

main fence when they approach the fence end. Fences will also be designed with escape routes for animals that get caught inside the fencing. Finally, merging fence ends with topographic features that limit wildlife movement can also reduce the fence-end effect.

Connectivity strategies currently emphasize use of fencing and other means to encourage wildlife to use crossing structures, and to discourage wildlife presence on the roadway. This approach is appropriate in view of the number of lanes and high volume of traffic on this highway, which greatly reduce the probability of successful surface crossings. However, in areas where fence ends cannot be tied into topographic barriers, cable lane dividers or other lane separation methods that would improve visibility and reduce the chances of wildlife getting trapped halfway across the roadway would be used. In these areas, guardrails should also be designed to enhance visibility and permeability for wildlife that attempt surface crossings.

Use of wildlife exclusion fencing raises maintenance, safety, and aesthetic issues. Maintenance issues associated with wildlife fencing are largely related to effects of snow load and vandalism. Snow load has the combined effects of reducing or eliminating the guiding function, and placing stress on fences that increases repair and replacement needs. Fences with the structural strength to withstand these snow loads are likely to be visually obtrusive and may present a safety risk to winter recreationists. Finding structural solutions to this combination of problems is a challenge. A comprehensive fencing plan will be developed as part of mitigation and enhancement for impacts to wildlife and will be included in the Final EIS.

4.2.4 Historic, Cultural, and Archaeological Resources

Mitigation measures for impacts to historic properties will be identified in consultation with the Washington State Historic Preservation Office (SHPO), appropriate tribal government(s), and applicable land managing agencies. Such measures could include avoidance of impacts through redesign at selected locations. Where avoidance is not possible, mitigation may consist of data recovery at archaeological sites, and Historic American Buildings Survey/Historic American Engineering Record documentation of architectural and engineering resources. Other options can include retention of the character-defining portion of certain structures, site enhancement and protection, and the construction of retaining walls or other barriers between the highway and the historic property. Mitigation measures for traditional resources, if any are present in the project area, would be identified in consultation with the appropriate tribal governments.

In the event of inadvertent discoveries of cultural artifacts during project construction, the contractor will be required to notify the construction engineer who will notify the WSDOT archaeologist. The WSDOT archaeologist will then notify the applicable land manager and appropriate Tribal government. The archaeologist will determine if the material is to be salvaged. Work may be stopped following discovery, as well as during any salvage operation, if recovery

is recommended (Exh. 456-11; WSDOT (2001) Environmental Procedures Manual M31-11, July 2001).

4.2.5 Noise

Mitigation incorporated into the design of the alignment alternatives as well as measures required by regulation, programs and plans, are discussed in Section 3.8.

Modeled traffic noise impacts were found to occur at one existing dwelling at Hyak and at the Crystal Springs Campground. This section evaluates the feasibility of constructing noise barrier walls as a potential noise mitigation measure at those locations.

4.2.5.1 Feasibility and Reasonableness Criteria for Noise Abatement Measures

The following noise abatement measures may be evaluated and incorporated into a project to reduce traffic noise impacts:

- Traffic management measures.
- Alteration of horizontal and vertical alignments.
- Construction of noise barriers.
- Acquisition of real property to create a buffer zone to preempt future development, which would be adversely impacted by traffic.
- Noise insulation of public use or nonprofit institutional structures.

Regarding noise abatement, other mitigation measures (including land acquisition, traffic management, and noise insulation in buildings) were evaluated and presented in Appendix P. In general, noise abatement strategies throughout the project area do not meet the “reasonable and feasible” test.

WSDOT guidance stipulates that noise mitigation shall be implemented only if it is both feasible and reasonable. This guidance is based on federal noise abatement standards. A number of factors go into the determination of whether noise abatement measures are reasonable and feasible as a means of abating noise impacts, including the following:

- Achievable noise reduction
- Cost of abatement
- Highway safety (obstruction of sight distance along curves)
- Environmental effects of abatement construction

For a noise barrier to be considered feasible, it must be constructible without adversely affecting either the structural integrity of the roadway or sight distances along curves. Furthermore, the barrier must provide a minimum of 5 A-weighted decibel (dBA) reduction for the first row of receivers, with at least one receiver having a 7 dBA reduction; efforts must also be made to attain a 10 dBA or greater reduction in sound levels at the first row of receivers.

Once the construction of a noise barrier has been determined to be feasible, WSDOT will then determine whether construction of the barrier is reasonable by considering the following criteria:

- The cost effectiveness of constructing a noise barrier (expressed as construction cost per benefiting dwelling unit) must be less than the range of values specified by WSDOT.
- A majority of the residents near the barrier must desire its construction, considering factors such as aesthetics.

4.2.5.2 NOISE MITIGATION – HYAK

Traffic noise impact was modeled for the vicinity of the White Castle Cabin approximately 150 feet from the highway. This point has a direct line of sight to the highway and is at the same elevation as the highway. The traffic noise modeling noise model was used to evaluate the noise reduction that could be provided at the nearest receiver by the placement of a noise barrier wall. The model recommended a noise wall 900 feet long and 10 feet tall in the Hyak area. The wall would provide at least 3 dBA of noise reduction for three dwelling units (only one of which appears to be permanently occupied). Four other noise-impacted homes on the hillside overlooking the freeway would not receive adequate benefit. The estimated construction cost would be $199,000, while the acceptable cost to satisfy WSDOT's reasonableness criterion is only $96,000. The estimated cost far exceeds WSDOT's reasonableness threshold.

The recommended noise wall in the Wolfe Creek area would be 1,598 feet long and 13 feet tall. The wall would provide at least 3 dBA of noise reduction for six dwelling units. Two other noise-impacted homes overlooking the freeway would receive a 2 dBA reduction or less. The estimated construction cost would be $457,028, while the acceptable cost to satisfy WSDOT's reasonableness criterion is only $180,000. The estimated cost far exceeds WSDOT's reasonableness threshold.

Therefore, it is concluded that noise barrier walls should not be constructed.

4.2.5.3 NOISE MITIGATION – CRYSTAL SPRINGS CAMPGROUND

The Crystal Springs Campground includes 20 campsites within 300 feet of the freeway and is modeled to experience a noise impact for both existing and future conditions. As described in Appendix P, a noise wall 2,500 feet long and 9 feet tall was suggested to provide noise reduction at Crystal Springs. The wall would require a 3 dBA noise reduction for 13 noise-impacted campsites and picnic sites. However, the estimated construction cost would be $497,000, while the acceptable cost to satisfy WSDOT's reasonableness criterion is only $202,000. The estimated cost far exceeds WSDOT's reasonableness threshold. Therefore, it is concluded that noise barrier walls would not be constructed.

4.2.6 Recreation Resources

Measures to minimize the impact from eliminating the Price Creek Sno-park include providing additional parking at the remaining Sno-parks in the vicinity. Discussions regarding potential Sno-park locations with Washington State Parks

and Recreation Commission (WSPRC) and the USFS to mitigate for the loss of the Price Creek facility if it is closed are ongoing.

WSDOT intends to maintain Cabin Creek Sno-park free of staging and construction equipment during winter months to allow winter recreational activities to continue.

While the increased proximity of the highway to the Crystal Springs Campground is not expected to affect use of this facility, mitigation for noise impacts on this and other recreation resources is discussed in Section 4.2.5.

4.3 Preliminary Mitigation Commitments

Listed below are the preliminary mitigation commitments WSDOT and FHWA have made to the responsible regulatory agencies. Once a preferred alternative has been selected, these commitments will be refined.

4.3.1 General Construction

- The project contractor will develop a Stormwater Site Plan and a Temporary Erosion and Sediment Control Plan that would become a part of the contract plans.
- Information will be provided to the public regarding construction delays to ensure that the needs of travelers and freight carriers are addressed.
- During construction, BMPs will be used to control erosion and protect water quality, limit emissions from construction vehicles, and contain rock falls and avalanches.

4.3.2 Wetlands

Implementation of the following measures are recommended to minimize impacts to wetlands, vegetation, and streams:

- In areas where wetlands are affected, WSDOT will create, restore, or enhance wetlands so there is no net loss of wetlands as a result of the project.
- In accordance with the policy of “no net loss” of wetlands, wetlands will be created, restored, or enhanced at a minimum ratio of 1:1 to compensate for wetlands lost or significantly degraded as a result of the project. The determination of wetland impacts will be based on a detailed delineation of jurisdictional wetlands and finalization of project design. Mitigation for these impacts will be determined in consultation with the resource agencies considering the beneficial effects of the project. A conceptual wetland mitigation plan, including potential mitigation sites, types of mitigation, and wetland replacement ratios, will be provided in the Final EIS.
- Standard temporary erosion and sedimentation control techniques and BMPs will be used during construction.

- Vegetation clearing will be minimized. Retaining native vegetation in the right-of-way conserves wildlife habitat and provides buffers for sensitive areas. Unavoidable clearing should be mitigated by replanting appropriate native vegetation in disturbed areas. Any revegetation should be coordinated with WSDOT biologists and landscape architects.
- Bridge piers and/or retaining walls will be located as far upslope as possible from wetland edges and stream channels.
- Highway ditches will be replaced with flat-bottom ditches adjacent to the widened roadway.
- Wetland and stream mitigation projects will be located where existing vegetation offers opportunity for buffering or providing ecosystem connectivity to existing wildlife habitat.
- The use of a multi-disciplinary team is advised for the design of wetland mitigation sites. This team should include input from regulatory officials and individuals with experience managing the natural resource areas adjacent to the proposed project.

4.3.3 Fish, Aquatic Habitat, and Threatened and Endangered Fish Species

- The size and the timing of the explosive charges used near the shoreline will be restricted so that acoustic shock capable of injuring fish (i.e., 100 kilo Pascals) would be prevented.
- Measures will be used to minimize potential effects of in-water construction to fish, to exclude bull trout and other fish from the pile-driving site, and/or to minimize the strength of the sound/shock waves produced. Potential measures include steel sleeves, air bubble curtains, or silt curtains around the piles being driven, or the use of vibratory or oscillatory methods that produce much lower sound levels than impact hammer pile driving.
- Structural foundations above 2,500 feet elevation will be constructed during low reservoir pool conditions in Keechelus Lake if possible.
- Cofferdams or similar containment methods will be used to isolate lower elevation foundations and supports that could be constructed under the water surface.

4.3.4 Terrestrial Species and Habitat

- To reduce animal-vehicle collisions and encourage wildlife use of proposed crossing structures, a wildlife fencing plan will be developed for the corridor.
- Wildlife collisions with vehicles have also been shown to increase near fence ends (Clevenger et al. 2001). This “fence-end” effect can by reduced by incorporating “V” or “J” shaped fence ends that turn animals back toward the main fence when they approach the fence end.

- Fences will also be designed with escape routes for animals that get caught inside the fencing. Finally, merging fence ends with topographic features that limit wildlife movement can also reduce the fence-end effect.

4.3.5 Historic, Cultural, and Archaeological Resources

- Mitigation measures for impacts to historic properties will be identified in consultation with the Washington SHPO, appropriate tribal government(s), and applicable land managing agencies. Such measures could include avoidance of impacts through redesign at selected locations.
- Where avoidance is not possible, mitigation may consist of data recovery at archaeological sites, and Historic American Buildings Survey/Historic American Engineering Record documentation of architectural and engineering resources.
- Other options can include retention of the character-defining portion of certain structures, site enhancement and protection, and the construction of retaining walls or other barriers between the highway and the historic property. Mitigation measures for traditional resources, if any are present in the project area, would be identified in consultation with the appropriate tribal governments.
- In the event of inadvertent discoveries of cultural artifacts during project construction, the contractor will be required to notify the construction engineer who will notify the WSDOT archaeologist. The WSDOT archaeologist will then notify the applicable land manager and appropriate Tribal government. Work may be stopped following discovery, as well as during any salvage operation, if recovery is recommended (Exh. 456-11; WSDOT (2001) Environmental Procedures Manual M31-11, July 2001).
- The Lake Keechelus Snowshed Bridge is listed on the National Register of Historic Places. The Lake Keechelus Alignment Alternatives use tunnels or bridges to bypass the Lake Keechelus Snowshed Bridge, which would be abandoned in place. Since abandoning the Lake Keechelus Snowshed Bridge in place will not substantially diminish its historic integrity, there will be no Section 4(f) use of the Lake Keechelus Snowshed Bridge. In addition, there may be areas in the project corridor that have a high likelihood of containing archaeological resources. In these areas, WSDOT will have archaeologists monitor construction activities as appropriate.

4.3.6 Noise

- Modeled traffic noise impacts were found to occur at one existing dwelling at Hyak and at the Crystal Springs Campground. The feasibility of constructing noise barrier walls as a potential noise

mitigation measure at those locations was evaluated. While constructing noise barrier walls is feasible, the cost to construct such walls relative to the benefit provided makes such barriers unreasonable.

- Regarding noise abatement, other mitigation measures (including land acquisition, traffic management, and noise insulation in buildings) were evaluated in the project Noise Discipline Report (WSDOT 2003e). In general, noise abatement strategies throughout the project area do not meet the "reasonable and feasible" test.
- WSDOT will comply with the noise regulations of Kittitas County if night construction activities occur.

4.3.7 Recreation Resources

- The Price Creek Sno-park would need to be relocated if connectivity enhancement option A or B were constructed at the Price/Noble Creek Connectivity Enhancement Area (CEA). If one of these options is selected, the Price Creek Sno-park will be closed and replaced by expanding an existing Sno-park or by building a new Sno-park at one of several locations currently being evaluated.
- Other Sno-parks along the corridor are at or near capacity on busy weekends. Full use of these facilities will be maintained during winter months.
- Sno-park parking at the Cabin Creek interchange will remain available for winter use.

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