UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Fisheries Science Center
2725 Montlake Boulevard East
Seattle, WA 98112-2097

April 15, 2010

Paula Hammond
Secretary of Transportation
Washington State Department of Transportation
P.O. Box 47316
Olympia, WA 98504-7316

Dear Secretary Hammond:

The Northwest Fisheries Science Center has carefully considered the proposed WSDOT and US Department of Transportation Supplemental EIS Supplemental EIS SR-5290, I-5 to Medina: Bridge replacement and HOV Project and has the following input: a Cover Letter and an Appendix of Detailed Comments to the Supplemental EIS SR-5290, I-5 to Medina: Bridge replacement and HOV Project. They should be read together and considered as a single response.

COVER LETTER:

F-002-001

The Northwest Fisheries Science Center ("NWFSC" or "Center") is deeply concerned that the Supplemental Draft EIS does not reflect the significance of the impacts to the Center's Montlake campus from the proposed SR 520 expansion project. These potential impacts are substantial. There are profound adverse impacts on the Center and its operations from all of the Proposed Alternatives: A, K and L. These will come most directly from site preparation, deconstruction and construction of the Portage Bay Bridge, Montlake Blvd additions and deconstruction and reconstruction of the Montlake/SR-520 interchange. Additional and ongoing impacts from increased traffic on SR-520 and Montlake Blvd are also expected to adversely affect NWFSC operations.

Our concern is not just that certain facts have been overlooked in the document. Our concern is that this omission may reflect a lack of understanding by Washington Department of Transportation (WSDOT), at least at the time the SDEIS was drafted, regarding the extent of the effects on the Center. We believe that this lack of understanding will lead to substantial delays in the project and significantly increase costs to both the SR 520 project and the Center, as well as to citizens of the Northwest and the nation.

F-002-001

Since the SDEIS was published, FHWA and WSDOT have developed a Preferred Alternative that is similar to Option A, but incorporates design refinements that respond to community and stakeholder comments on the SDEIS. A key feature of the Preferred Alternative is an alignment shift to the south at the east end of the new Portage Bay Bridge (a complete description of the Preferred Alternative is in Chapter 2 of the Final EIS). This shift means that the Preferred Alternative would not require relocation of any buildings on the NOAA NWFSC campus, and access to the campus would be maintained during construction.

Also in response to community and stakeholder comments on the SDEIS, WSDOT has developed alternative construction methods and other measures to reduce the project's immediate and long-term effects. The refined construction staging methods and schedule are presented in Chapter 3 of the Final EIS.

In response to NOAA's specific concerns, WSDOT embarked on a series of in-depth workshops with NWFSC staff following publication of the SDEIS. Through this process, WSDOT is documenting a more comprehensive, mutual understanding of the potential impacts of the project on the NWFSC, and appropriate mitigation. As of spring 2011, eleven workshops with NWFSC and NOAA staff have addressed topics like noise, air quality, vibration, and real estate effects, and several site visits to the campus have allowed WSDOT to collect additional data and learn more about the functions occurring at NWFSC. WSDOT has completed additional noise, air quality, and vibration modeling specific to the NWFSC, and has identified a suite of potential on-site mitigation measures. WSDOT's work with NWFSC and NOAA staff is ongoing, with the goal of identifying a mutually agreeable set of measures to ensure that project effects on the campus are avoided, minimized, or mitigated as much as possible.

F-002-001

The purpose of this letter is to clearly communicate our concerns to WSDOT for the record, and encourage and urge you to greatly accelerate the urgency and purpose of meetings between WSDOT and the NWFSC, to assure that there is a clearly documented and mutual understanding of the potential impacts of the project and necessary mitigation. It is our intent to work with WSDOT to help resolve these concerns while keeping the SR 520 expansion as close to schedule as possible. We appreciate, at the time of this writing, that WSDOT has begun meeting with us to discuss these impacts and possible mitigation for them, and that the level of mutual understanding is increasing.

As currently written, the SDEIS gives us the impression that WSDOT believes that the total impact on the Center of Option A is the removal of a few relatively insignificant peripheral buildings from the south side of the Center's property, and that the loss of these buildings would not seriously impact the Center, or alternatively, could be readily mitigated elsewhere. If this is WSDOT's operating assumption, it is incorrect. The facilities proposed for removal provide essential supporting functions for the Center. Unless there is a timely and carefully developed and executed solution for replacement and mitigation, the removal of these buildings will temporarily cripple the operations of the Center and have a profound long-term impact on our research.

The SDEIS also gives us the impression that WSDOT believes that for all of the proposed options that the construction and deconstruction impacts over 6.5 years will either be so minor as to be insignificant or alternatively will be able to be mitigated to the point where they will have no discernable impact on the productivity of the NWFSC work place, the quality of the science and research, or to the occupational health and safety of the 400 staff and additional visitors on the site. If this is the impression WSDOT is presenting then we strongly disagree. All options place the NWFSC property, staff and visitors either adjacent to, or potentially inside one of the State's most expensive, prolonged and impact-generating construction sites. While there may be measures that can be taken to reduce the degree of impact on the Center there is no doubt that there will be remaining impacts that cannot be mitigated and that the cumulative impacts will cause a significant decrease or even cessation of science at the NWFSC site. In some cases the proposed project will reduce the scientific certainty that we can place on the work that is produced.

Our over-arching points, the ones we most want WSDOT to understand and take to heart, are as follows.

F-002-002

1. The on-going research at the Center is Federally mandated and is vital to the Northwest.

The SDEIS fails to give any consideration to the value and impact that the research conducted by the Northwest Fisheries Science Center has upon the Northwest, including the area of the proposed SR 520 expansion project. The Center is one of the world's foremost research institutions for salmon recovery – particularly endangered species – an expertise that deeply affects the environment, the culture, and the economy of the Puget Sound area and much of the remainder of the Northwest. The Center has a leading role in the protection and rebuilding of

Through the National Historic Preservation Act's Section 106 consulting party process, WSDOT has also conducted additional coordination specific to the NWFSC to identify ways to minimize the effects of project construction and operation on historic properties near the corridor. The consulting party process has resulted in the Programmatic Agreement included as Attachment 9 to the Final EIS, which includes a placeholder for the eventual resolution and mitigation plan to be implemented for the NWFSC. WSDOT will continue to refine mitigation measures for the project as the design is developed and throughout the coordination with applicable federal, state, and local agencies during the permit approval process.

F-002-002

WSDOT acknowledges that the ongoing research at NWFSC is federally mandated and important to the Northwest and the nation. WSDOT appreciates the additional description of research activities and the role these activities play in the protection and recovery of Puget Sound's threatened and endangered species. As described in more detail in the Final Cultural Resources Assessment and Discipline Report (Attachment 7 of the Final EIS), the NWFSC is eligible for the National Register of Historic Places under Criterion A because the research supported by the campus has made significant contributions to our local history.

Through the NHPA's Section 106 consulting party process, as well as through additional workshops with NWFSC and NOAA staff, FHWA and WSDOT are in the process of developing measures to address potential effects on the scientific functions supported by the campus. When completed, these mitigation measures will be included in the Section 106 Programmatic Agreement included as Attachment 16 to the Final EIS. WSDOT will continue to refine avoidance, minimization and mitigation measures for the project as the design is developed and throughout coordination with applicable federal, state, and local agencies during the permit approval process.

F-002-002 Puget Sound's other threatened or endangered fish species, and the charismatic local killer whale populations, also listed under the Endangered Species Act. And, the Center provides much of the fundamental scientific advice that underlies decisions about the allowable catch for the commercial and recreational ground fish fishery along the entire West Coast. These activities are supported by or defined in statue.

The SDEIS goes to considerable lengths, as it ought, to describe the immediate impact of the proposed project on threatened and endangered salmon populations and the cultural and economic consequences to those, especially the area's Indian nations, who rely upon salmon for harvest. In addition to providing for protection of the environment and functional equivalency for the NWFSC we believe it is also important to recognize the potential impact on the science and research activities that support the protection and recovery of those same salmon populations, as well as other ESA-listed, and non-listed salmon stocks throughout the Northwest.

F-002-003 **2. Even if the SR 520 expansion does not take right of way from the Montlake facility, the construction and the completed expansion will have a significant adverse impact.**

Regardless of which option is selected for the SR 520 expansion, a major construction project will be taking place immediately adjacent to and in part on the Montlake facility for at least 6.5 years. The detailed comments on the SDEIS accompanying this letter go into greater detail on these impacts; this section is intended to highlight some of these concerns.

The preliminary plans call for extensive pile driving and for a lay-down area for construction materials and equipment immediately adjacent to, or on, the Montlake property. There is the potential for significant vibration impacts, which may disrupt certain sensitive and carefully calibrated instruments such as electron microscopes and genetic sequencers. The construction noise, vibration, dust and equipment fumes are likely to disrupt the biological experiments underway in the fish-rearing facilities. Even if there is no removal of the fish-rearing facilities, the lack of normalized, controlled conditions will cause the validity of those biological experiments to be called into question.

The EIS simply does not adequately document and address the extent of impacts to the NWFSC site. For example the total extent of background sampling for noise reported in the EIS for the NWFSC site is for only two sample sites (one of which is undocumented). The total extent of sampling is: 15 minutes for one site and 46 hrs for the other (undocumented site). We are not confident that these sites represents actual locations where staff typically work or that this low level of sampling adequately represents the existing sound environment at the NWFSC and we cannot discern where the data for development of the noise model was actually collected with respect to the NWFSC site.

F-002-004 The cumulative impact discussion is particularly troubling. For example, at Chapter 7, discusses "Indirect and Cumulative Impacts" and identifies some categories of impacts, for example "Visual Quality and Aesthetics", "Cultural Resources", "Noise", "Air Quality". There is no apparent effort to identify the cumulative

The SDEIS Cultural Resources Discipline Report did note the research activities of the NWFSC. Chapter 5 of the SDEIS and Final EIS also discusses these activities. Additional information about the NWFSC's role is included in the errata sheet for the Land Use, Economics, and Relocations Discipline Report, which is located in the discipline report addendum in Attachment 7 to the Final EIS.

F-002-003

As noted in the response to comment F-002-001, WSDOT has been meeting regularly with NWFSC staff since publication of the SDEIS to clarify potential impacts and develop appropriate mitigation. Construction noise and vibration have been an important topic of discussion at these meetings. WSDOT will continue to coordinate with NOAA NWFSC to provide additional information on noise monitoring methods and to determine the best ways to avoid or minimize the effects of noise, vibration, and other construction factors on NWFSC's scientific work. As part of this coordination, WSDOT will develop a construction vibration monitoring plan for the NOAA NWFSC area. The plan will provide guidelines for monitoring construction vibration near the NWFSC and other sensitive properties and structures to avoid damage during construction in the Montlake area. Monitoring would take place if vibration from impact construction methods is expected to exceed a certain threshold. Such methods include pile driving, and vibratory sheet pile installation.

The Noise Discipline Report Addendum (Attachment 7 to the Final EIS) provides additional information about construction noise and clarifies how noise levels from multiple sources were evaluated and characterized for this project. State and local regulations restrict the noise from construction activities by imposing noise limits depending on the activity and time of day. Section 6.7 of the SDEIS and the Noise Discipline Report (Attachment 7 to the SDEIS) discussed these

F-002-004 impact of all these factors to the NWFSC site? The DEIS should make this clear. There is no discussion at all of the cumulative impact of vibration.

F-002-005 In addition there is no reasonable discussion of the cumulative impact of any single impact factor. Take noise for example. The DEIS suggests that maximum noise impact from the proposal can be characterized by describing the maximum individual noise from any one piece of construction equipment operating independently. We know that multiple construction equipment will be operating on the site at the same time and the resultant impact will be a product of all of that production, plus the noise of the existing SR 520. The EIS does not provide for consideration of this cumulative impact and therefore an unrealistic and unreasonable account of the noise that will result, at the NWFSC, from actual construction and deconstruction work. Similar arguments can be made with respect to the lack of cumulative impacts from the other factors, individually and collectively.

F-002-006 We expect that there will be substantial adverse impacts on the attractiveness of and productivity from the Montlake facility from the perspective of the people who work there. The main NWFSC buildings were designed about the same time as the current SR 520 was built, without special provisions for noise control, that might happen if the buildings were designed today to be adjacent to a freeway or even a construction site. The construction impacts, including the pile driving and other equipment, will create an acoustic environment that is inconsistent with the requirements of careful scientific research and undistracted thinking. In addition, the likely increase in dust and traffic from construction trucks, as well as the potential loss of parking places, will make the Montlake facility a much less attractive place to work. It is important to understand that, because of the design of the facility, it is essential for staff to go outside in order to move between buildings and that this is necessary on a daily basis for most employees. The impacts therefore will be much more severe than a situation where all activities are located in a single building.

The NWFSC depends in large part on the productivity, and skills of the workforce. It recruits across the United States and has in the past been successful in attracting some of the best scientists in the nation. The quality and environment of the work place is a critical factor in attracting and retaining staff. We consider that all of the proposed alternatives will negatively impact our ability to attract and retain a highly trained and exceptionally qualified staff.

F-002-007 An additional issue affects the safety and welfare of all of the nearly 400 people working at the Center. As portrayed in the SDEIS, the changes proposed to Montlake Blvd do not provide for continued access to the Center. More critically, Montlake Blvd provides the route for fire and safety purposes. A major scientific facility, where hundreds of people work each day, cannot rely on limited access.

F-002-008 At the conclusion of construction, the noise and visual impacts are likely to continue. The elevated roadway, the height of which we have not been able to determine and we understand is still under review, will not only dominate the view southward from the Center, but the increased future traffic associated with the expansion, are likely to result in a noticeably higher noise level throughout the complex and in the occupied offices. While there may be measures that can be

regulations. Regarding mitigation of construction noise effects, WSDOT is working in coordination with the Section 106 consulting parties to develop a Community Construction Management Plan (the outline for this plan is included in Attachment 9 to the Final EIS) to reduce the construction impacts on properties in the project area.

The noise analyses performed for the SDEIS and Final EIS are consistent with current FHWA methodology, which is the accepted standard for modeling and mitigation of highway traffic noise. The Noise Discipline Report provides further explanation of the locations and methods used to measure and predict noise levels. Exhibit 10 of that report shows the monitoring locations, and pages 37 through 38, including Exhibit 12, provide further information. For short-term measurements, 15 minutes is generally considered sufficient for obtaining an accurate reading of the noise level on busy highways. Pages 17 through 18 of the Noise Discipline Report include a discussion of how noise changes over time and the noise averaging descriptors used in the analysis. Pages 38 through 39 contain a description of the methods used for sound measurement. As a public facility performing scientific functions, the NOAA NWFSC was an identified noise receptor at which sound measurements were taken. These measurements were taken at more than one location on the campus within audible distance of SR 520 and are considered to be representative of noise levels experienced on the property. WSDOT, with the Department of Archaeology and Historic Preservation's concurrence, has determined the Administration Building to be eligible for listing in the National Register of Historic Places under Criteria A and C for its architectural importance and historic function of the NWFSC. Impacts, whether operational or construction-related, to the peripheral lab buildings would also diminish the integrity of the Administration Building per Section 106 to the extent that they affect the ongoing viability of the campus as a fisheries research facility. By regulation WSDOT has developed a

F-002-008 taken to reduce or mitigate for some of these impacts, the SDEIS gives no indication about how such measures might be applied to the Montlake facility. We note that all of the proposals include a lid on the East side of the Montlake SR 520 Interchange but do not provide for, or discuss, the provision of a lid on the West side. We consider that a lid on the West side, adjacent to the NWFSC property would also help to mitigate impacts from the SR-520 operations and will need to be considered as a mitigation option.

F-002-009 **3. The NWFSC Montlake property operates as a unitary facility.**

The Northwest Fisheries Science Center is a major national fisheries research facility employing approximately 400 people. In the same way that a microbiology laboratory needs to be co-located with facilities for culturing bacteria and viruses, and an agricultural research center needs to be located where there is room to grow plants, a fisheries laboratory needs to have ready access to facilities for rearing and culturing fish and other ocean-dwelling organisms. Although not every scientist will be using those facilities every day, the capability for on-site monitoring of on-going experiments and ability to take fresh samples into the analytical laboratories when needed is at the core of much of the Center's work.

The fish-rearing and wet-lab facilities, as well as a number of staff offices, are located on the south side of the Montlake property. Scientists with offices and laboratories in the building on the north side of the property use the buildings on the south side of the property as an integrated part of their research projects. A number of them visit the fish-rearing facilities and wet-labs daily or several times a day to oversee tests and bring fresh samples to the laboratories. The south side also contains a new and sizable office building with about 115 staff. Scientists with offices on the south side of the property interact throughout the day with their colleagues in the buildings on the north side of the property and vice versa.

F-002-010 **4. The project design under all Options will require major changes in the operation of the entire facility.**

The Center does not believe it is feasible to relocate the activities on the south side of the Montlake property to another place on the Montlake property. The total area of the Montlake property is relatively small, about 6 acres, and virtually all of the usable space on that property is now being used. Based on the limited information that we have from the SDEIS it appears that the unused space remaining on the property is not sufficient to allow rebuilding on the same site and that all SR 520 options essentially preclude any reasonable future expansion on the property, for NWFSC needs.

The Land Use, Economics and Relocation Discipline Report included as part of Attachment 7 to the SDEIS recognizes a relationship among the activities taking place in the buildings on the south side of the property, but fails to give any consideration to the relationship of those activities to the scientists working in the north side of the property. It merely states: "To accommodate the wider highway footprint, Option A would remove 9 of the 11 South Campus buildings (location shown in Exhibit 25). The functions of the two buildings that would not be

Preferred Alternative that minimizes the potential for diminishing the integrity of the Administration Building and the NWFSC.

F-002-004

The SDEIS provided a comprehensive analysis of effects on the environment based on the project design information available at that time. Under NEPA and SEPA, the effects mentioned in this comment would be direct or indirect, rather than cumulative (the definition of cumulative effects for the purposes of NEPA and SEPA is on page 2 of the Indirect and Cumulative Effects Discipline Report). The combination of different types of effects during construction, as described in the comment, is considered a direct effect rather than a cumulative effect.

During ongoing discussions between WSDOT and NWFSC staff to better quantify and address impacts caused by the project, the group continues to discuss combined site-specific impacts and appropriate measures to address them.

F-002-005

The SDEIS provided a comprehensive analysis of effects on the environment based on the project design and construction information available at that time. Under NEPA and SEPA, the effects mentioned in this comment would be direct or indirect, rather than cumulative (the definition of cumulative effects for the purposes of NEPA and SEPA is on page 2 of the Indirect and Cumulative Effects Discipline Report). The comment mentions construction noise from multiple sources as an example. Exhibits 23 and 24 in the Noise Discipline Report (Attachment 7 to the SDEIS) described noise levels associated with typical construction phases, accounting for composite noise levels with multiple pieces of equipment operating concurrently. The Noise Discipline Report Addendum (Attachment 7 to the Final EIS) provides additional information about construction noise and clarifies how noise levels from multiple sources were evaluated and characterized for this project (see

F-002-010 removed are tied to the functions of the nine buildings that would be removed. Therefore, the functions of these two buildings would need to be relocated." [Page 104]

Neither the SDEIS nor WSDOT seems to fully understand the major impact on the Center from the fact that the south side activities are interconnected with and essential to the functions of the remainder of the property. Removing the south side activities to some other location will cause the property to become less functional and efficient as a fisheries research center, and will require changing the way the Center conducts its research activities, as well as the relocation of at least some of the staff who are most involved with the south side activities. At a minimum the proposed right of way for Alternative A would require restructuring major research programs, and the establishment of a new facility with ocean access for vessels, fish-rearing capability, wet-labs, and office space for key personnel and those research scientists needing frequent and immediate access to the rearing facilities.

In short - if the right-of-way is taken for the SR 520 expansion proposed under Option A, the remaining property will not support a "functional equivalent" to the current facility. As you know, providing a functional equivalent is the minimum requirement for taking a federal property for right-of-way. Whether or not the right-of-way is taken under Option A, we expect significant adverse construction and deconstruction impacts and increases in adverse impact from SR 520 operations after construction that cannot be adequately mitigated and which, when considered cumulatively, will require the provision of functional equivalence.

F-002-011 We note that WSDOT characterizes the proposed duration of the 6.5 years of deconstruction and construction activity as only "temporary". We disagree with this characterization and view it instead for what it is: a 6.5 year period where the NWFSC will not be able to conduct its mandated work in a normal and customary way. Even the period of project proposals leading up to this point has been disruptive to our work, with little certainty about what will happen to this site and inadequate assurance that adverse impacts will be fully mitigated.

F-002-012 **5. Relocating the Center, in whole or in part, will be costly and time-consuming.**

The Center would prefer to remain at its current location, where it has been located since 1931. If, however, there is a compelling public need for the current property, and a functionally equivalent replacement facility or combination of facilities is made available, the Center would be willing to consider relocating all or part of its current Montlake activities. However, such relocation of a scientific laboratory will be much more complex, and costly, than simply moving a certain number of people and their equipment to new offices. And, it is important to note that such relocation would require concurrence from other elements of the National Oceanic and Atmospheric Administration (NOAA), of which the Center is a part.

Importance of Location and Connection to UW
As a major national scientific research center with extensive laboratory and fish-rearing facilities, replacing the Center would be complex and expensive regardless of where those functions are located. However, location is critical. The Center relies upon, and interacts closely with, the faculty and students of the University of Washington (UW). In fact, the

Exhibits 16 through 18 and the associated discussion in the addendum). This is one example of how the EIS addresses the concern expressed in the comment. The discipline reports and addenda for other disciplines (Attachment 7 to the Final EIS) describe the methodology used to evaluate effects in those disciplines. A number of disciplines, for example cultural resources and social elements, use effects on noise, air quality, land use, transportation, and other topics as inputs to their analyses. During ongoing discussions between WSDOT and NWFSC staff to better quantify and address potential impacts caused by the project, WSDOT technical experts have completed additional modeling and analysis to assess additive, site-specific noise, air quality, and vibration effects.

F-002-006

WSDOT recognizes the national and international significance of the NWFSC. As noted in the response to comment F-002-001, WSDOT has been meeting regularly with NWFSC staff since publication of the SDEIS to clarify potential impacts and develop appropriate mitigation.

Parking that is located under the existing SR 520 structure and in areas identified within the project's limits of construction would be unavailable during construction (see the Land Use, Economics, and Relocations Discipline Report Addendum and the Final Transportation Discipline Report, both in Attachment 7 to the Final EIS).

The Final EIS discusses the potential for adverse noise effects during construction. However, construction noise would comply with applicable local jurisdiction regulations; otherwise, WSDOT would need to apply for and receive a noise variance. The Noise Discipline Report Addendum provides additional information on the effects of construction noise. Since the SDEIS was published, WSDOT has performed additional studies to identify alternative construction methods and other opportunities to reduce the project's construction effects. The results of

F-002-012

Center was relocated to its present location adjacent to the UW in 1931 specifically to take advantage of collaboration opportunities with the University. This need remains today.

Many Center research programs are cooperatively undertaken with UW faculty and scientists daily travel back and forth between the UW campus and the Center. Dozens of the Center's researchers are students (usually graduate students) at UW and also need to be within walking distance of the campus. These connections are very well established and important to Center's national and regional science enterprise. In support of this collaborative research, the Center also requires easily accessible docking space for its mid-size research vessel, the Harold W. Streeter, which is used for critical research in Puget Sound, including science support for the newly formed Puget Sound Partnership.

There are very few properties, if any, available in the Seattle area that can meet all of the above requirements for Center operations. The Center has, however, begun discussions with the UW to explore the possibility of co-locating with the University on some part of the campus. The University is being extremely helpful and collaborative and is using its best efforts to find a way to make this possible. Nonetheless, the task is difficult, campus space is limited, and the outcome is not assured. While the Center's preference is to continue to be entirely co-located with the UW (apart from the field stations), and if no suitable facilities are available adjacent to the campus, the Center might be forced to relocate part or all of the activities currently at the Montlake property to another site outside the UW campus area, and possibly outside the Seattle area. This possibility has not been given consideration in the SDEIS.

Moving research equipment and ongoing studies is costly and time consuming
The "office move" would itself be exceptionally challenging and expensive. Unlike ordinary offices, the Centers work revolves around a substantial investment in laboratories that include a significant number of extremely sensitive instruments such as electron microscopes and genetic sequencers. Moving this kind of instrumentation requires extensive recalibration and adjustment, which is not only costly, but prevents them from being used for research until the recalibration is complete and the instrument is stabilized in its new environment. This requirement will likely add noticeably to the basic costs of the move, and, more importantly, would increase the time before any new facility can become fully functional. Laboratories are simply not specified or built to the same standards as "office" buildings.

In addition, and more challenging, is the problem of relocating the fish-rearing facilities located on the south side of the Center's property. While the fish-rearing facilities currently at the Center may look simple, or even crude, their successful operation involves a delicate balance of water chemistry, temperature, oxygenation, water flow, lighting (or darkness), filtering and purification. It has taken years of careful experimentation and adjustment to fine-tune the operations of the current facility, and it would likely take many months to test and adjust the replacement facilities so that they provide the optimum aquatic environmental conditions needed for long-term fish rearing and replicable research results.

Perhaps the most difficult challenge of this proposed relocation is the impact on biological experiments that are already underway, such as fish already being reared at the Center. There is

these studies are in Chapter 3 of the Final EIS. Throughout the design development and construction planning process, WSDOT and the contractor will continue to refine construction methods and techniques to accomplish the work while reducing community effects. Since this will occur after completion of the Final EIS, regular updates will be posted on the project web page. Any substantial changes would be communicated through the permit and approval process.

WSDOT is continuing to coordinate with NOAA NWFSC to determine the best way to avoid or minimize the effects of construction on NWFSC's scientific work. The Section 106 Programmatic Agreement provides information about, and includes by reference, a Community Construction Management Plan that is being developed (see the outline in Attachment 9 to the Final EIS) to reduce the effects in the project area.

See the response to Comment F-002-001 regarding permanent effects in the vicinity of the NWFSC.

F-002-007

Because access to the NOAA NWFSC would be maintained throughout construction, the ability of employees or emergency service providers to reach the NWFSC would not be affected. All legal access to the NWFSC would be maintained throughout construction of the project and would continue after it is completed. In addition, WSDOT will develop a Community Construction Management Plan as a stipulation of the Section 106 Programmatic Agreement, which will include an emergency access management plan.

When the project is completed, the NOAA NWFSC would continue to have access from Montlake Boulevard via Hamlin Street, and the proposed changes to Montlake Boulevard as part of the Preferred Alternative would reduce congestion near the NWFSC facility. Chapters 5 and 6 of the Final Transportation Discipline Report in Attachment 7 to

F-002-012 no easy way to "park" the experimental populations while the move is being conducted. And, unless conditions at the new location are properly optimized, the shock of the move can cause enough mortality to the experimental population to invalidate the experiment.

For all of the reasons indicated above, a relocation of the Center, if required, would need very careful planning and a staged approach that would take considerable time.

F-002-013 **6. Substantial lead time, careful planning and commitments are needed before the Center can relocate.**

The lead-time needed to build a new facility would be at least several years. For example, if the Center were to reach an agreement in concept with the UW or others regarding construction of a new facilities and re-use of the buildings remaining at the current facility, a full array of federal procedures and documentation, such as an Environmental Impact Statement or Environmental Assessment, would be required, possibly adding a year or more before the Center's parent agency, NOAA, could complete a decision to proceed and enter into an agreement with the University, or others for construction of the facility.

Once a firm date for occupancy of a new facility is established, careful sequencing of the relocation process will be necessary to ensure continuation of nationally significant research projects. For example, the new fish-rearing facilities would need to be completed, tested, and fine-tuned well before the existing facilities are shut off. Ideally, with enough notice and appropriate timing, biological experiments at the existing facility would be completed and new biological experiments initiated at the new facility prior to the move, so that there would be minimal relocation of experimental populations. This would require a phase-in period of months or even of annual research cycles, not just a few days of equipment relocation.

It is difficult to see how a major relocation of the Center or a significant part of its current projects can be completed within with the proposed SR 520 construction schedule.

F-002-014 **Conclusion**

We have no desire to impede the construction of the SR 520 expansion and fully support its timely completion. The Center is not herein taking a position as to which option should be chosen. Those are decisions appropriately left to others. However, before making that decision, and developing a schedule and cost estimate to implement it, we believe WSDOT needs to more fully appreciate the effect of that decision on the Center, on its work, and on the mitigation that will be required. Given long lead times and extensive procedural steps necessary for both of our agencies to take action, it is very difficult to see how the impacts on the Center and its work can be addressed in a manner consistent with the schedule for SR 520 completion currently proposed by WSDOT.

The Center understands that, as a government agency, it is important to take a broad view on initiatives that are important to the community as a whole. Our request here is simply that WSDOT engages with us immediately to better understand the potential impacts of the SR 520

the Final EIS provide new analyses of congestion and access restrictions around Montlake and Portage Bay under the Preferred Alternative. The ability of emergency vehicles to access the campus via Montlake Boulevard would also be improved because of better traffic conditions along Montlake Boulevard.

F-002-008

The Preferred Alternative includes a number of design refinements and innovative noise reduction strategies along the corridor that respond to public concerns about noise (see Chapter 2 of the Final EIS for a description of the Preferred Alternative). Some of the strategies were affirmations and refinements of ideas that came from mediation. Included in the project design for the Preferred Alternative are four-foot concrete traffic barriers with noise-absorptive coating, which would reduce noise levels at NOAA NWFSC by several decibels depending on the specific location (see the Final EIS and the Noise Discipline Report Addendum for additional detail). While lids are not considered noise mitigation under FHWA and WSDOT policy, they can reduce noise effects. The Preferred Alternative includes a considerably expanded Montlake lid, which is a full rather than partial lid, and it will include noise-absorptive materials around the lid portals (see Chapter 2 of the Final EIS). However, a lid west of the Montlake interchange is not proposed because WSDOT determined that a lid in this area would diminish the integrity of historic properties, namely NOAA, and would increase the amount of wetland fill. Conditions on the NWFSC campus would improve as a result of the project, even without further extension of lids.

After the NEPA process concludes, WSDOT will also engage in public and stakeholder outreach to address the topics of corridor-wide aesthetics and urban design, which will allow NOAA to provide input into how the final bridge will look.

F-002-014 expansion on the Center's Montlake facility, and to jointly develop a cost effective solution, including any needed mitigation that will allow the NWFSC to provide mandated services to the region and the State to advance transportation needs.

In all future discussions, time is of the essence. While the SR 520 proposal has been decades in the making, under the current proposal site work for all options is scheduled to begin on the NWFSC property within 2 years. WSDOT needs to clearly understand that the NWFSC has not received assurance, from the Supplemental EIS or any other source, that the impacts will be mitigated and its operations will be able to continue under any of the options. Without this assurance and a plan and a firm commitment from WSDOT, the NWFSC cannot simultaneously fulfill its mandated trust obligations to the Nation and the region and therefore cannot provide support for any of the options proposed in the Supplemental EIS.

Sincerely,

Usha Varanasi

Usha Varanasi, Ph.D.
Science and Research Director
Northwest Fisheries Science Center

F-002-009

WSDOT appreciates the information about the operations of the NWFSC and how research activities would be affected if these buildings were to be removed. As noted in the response to Comment F-002-001 and described in the Final EIS, the Preferred Alternative would not remove any buildings on the NOAA NWFSC campus. The Land Use, Economics, and Relocations Addendum and Errata (in Attachment 7 to the Final EIS) as well as Final EIS text itself have been revised to reflect this information.

Potential effects on and mitigation for the fish-rearing and wet-lab facilities are being addressed as part of the ongoing coordination between WSDOT and NOAA, as described in the responses to comments F-002-001 and F-002-002. WSDOT is continuing to work with NOAA to address concerns about the interdependent work among the campus buildings, as well as to ensure the ongoing integrity of the NWFSC's scientific functionality as protected by Section 106 regulations.

F-002-010

WSDOT has designed the Preferred Alternative to minimize the effects of the project so that no buildings would be removed from the campus. However, WSDOT will continue to coordinate with NOAA NWFSC throughout the design development process to ensure that project effects on the campus during construction and operation are minimized or mitigated. As part of the process described above in the response to comment F-002-001, WSDOT is continuing to work with NOAA to address concerns about interdependent work among the campus buildings, as well as to ensure that historically significant scientific functions of the campus can be maintained. As noted above, potential effects on and mitigation for the fish-rearing and wet-lab facilities on the southern portion of campus are being addressed as part of the ongoing coordination between WSDOT and NOAA.

APPENDIX OF DETAILED COMMENTS

F-002-015

NWFSC Detailed Comments on Supplemental EIS SR-5290, I-5 to Medina: Bridge replacement and HOV Project. To be read in conjunction with Draft NWFSC Cover Letter on Supplemental EIS SR-5290, I-5 to Medina: Bridge replacement and HOV Project.

Background:

The Northwest Fisheries Science Center (NWFSC) is a major national scientific laboratory for the National Marine Fisheries Service, a part of the National Oceanic and Atmospheric Administration within the United States Department of Commerce.

The Pacific North West Region of the National Marine Fisheries Service includes Washington, Oregon and Idaho. The NWFSC is the head office for 5 other research stations located in the Pacific Northwest: at Mukilteo, Manchester and Pasco in Washington State; and, at Newport and Port Adams in Oregon.

The laboratories provide scientific research necessary to support mandatory regulatory and management decisions under various Federal mandates including the Magnusson Stevens Fishery Management and Protection Act, the Endangered Species Act and the Marine Mammals Protection Act. Current work includes research to support the recovery of endangered Salmon, and Killer Whales, to understand the impacts of climate change and ocean acidification on species of concern and to understand the causes and impacts of freshwater or oceanic events the affect human health.

Recovery of endangered Salmon and Killer Whales and protection of human health is a priority for the United States Congress, the Governor of the State of Washington and Tribes.

The NWFSC has an annual budget approaching $80M. About 400 employees work from the Montlake site that has been continuously occupied as a National Research laboratory since 1931.

Comments:

In summary – there are significant adverse impacts for the Center's operations from all the options and the NWFSC is not convinced that the proposed mitigation is sufficient to offset the impacts. None of the options will allow the NWFSC to provide continuity of mandatory research work at the site.

F-002-016

We are concerned that WSDOT description and understanding and consideration of probable adverse impacts and necessary mitigation and compensation at the NWFSC site as a scientific laboratory is seriously flawed and deficient. Moreover the timing and location of proposed work exacerbates impacts at the NWFSC site: through decisions by WSDOT to demolish essential research structures on the NWFSC site, by using the NWFSC site as an access way for construction equipment, by scheduling maximum construction work to coincide with the daily work schedule of the NWFSC and by the immediate proximity of construction and

F-002-011

The construction timing presented in Chapter 3 of the SDEIS has been updated in Chapter 3 of the Final EIS, which contains a more detailed discussion of construction sequencing. Under the proposed sequence, many of the effects with the highest potential for effects on the NWFSC (e.g., pile driving) would occur only intermittently during the construction period, rather than for the full duration. The discussion of construction-related effects included in Chapter 6 of the Final EIS notes the currently anticipated durations of these activities.

F-002-012

As noted in the response to Comment F-002-001 and described in the Final EIS, the Preferred Alternative would not require the relocation of any buildings on the NOAA NWFSC campus. The Preferred Alternative alignment of the new Portage Bay Bridge now avoids removing or relocating any NWFSC buildings. WSDOT is continuing to work with NOAA to address concerns about the interdependent work among the campus buildings, as well as to ensure that historically significant scientific functions of the campus can be maintained.

F-002-013

See the responses to Comment F-002-001 and Comment F-002-002.

F-002-014

As described in the responses to comments F-002-001 through F-002-012, since publication of the SDEIS, WSDOT has been meeting frequently with NOAA on these topics. We look forward to continuing to work together as project planning progresses to identify mitigation measures that meet the needs of the NWFSC.

F-002-015

WSDOT acknowledges the importance of the NWFSC as a major

F-002-016 deconstruction. These factors together with the aggressive time line that the WSDOTR has adopted for starting demolition and construction, has put the NWFSC into an extremely difficult position.

Given the current construction schedule there is insufficient time for the NWFSC to relocate to an alternative site, yet current research cannot continue without relocation and the EIS does not adequately describe the probable adverse impact of the proposed SR 520 replacement on the operations and responsibilities of the NWFSC or planned mitigation measures.

F-002-017 We relied on the paper Supplemental SEIS to fully inform us on the project and impacts. In a few cases we looked to the 5000 pages of "disciplinary reports" to try to understand some information, however it is our assumption that the purpose of the electronic disciplinary reports is only to support conclusions drawn by WSDOT and that every conclusion and finding is fully communicated in the paper SEIS.

The following comments relate to specific sections of the DEIS (or in a couple of cases disciplinary reports) – that are identified in **bold.**

F-002-018 **Disciplinary Report - Cultural_VI DR p.140**

The Disciplinary report includes the following:

…."However, removal of the South Campus property, which houses the fisheries research facilities, would significantly impair the ability of the NOAA Northwest Fisheries Science Center to operate. The historic buildings hold administrative functions for the NOAA Northwest Fisheries Science Center campus. If the research facilities were removed, there would no longer be a need for administration buildings. This could cause the remaining NOAA Northwest Fisheries Science Center site, including the historic buildings, to be vacated. Not only would this result in abandonment of the buildings, but it would cause a change in the character of the property's use that contributes to its historic significance. The 1931 building was specifically built to serve as the offices for the NOAA Northwest Fisheries Science Center, the first federal fisheries building constructed on the West Coast, and has fulfilled that purpose since its construction. All three historic buildings important research that is significant locally, regionally, and nationally, so a change in use that would not be associated with this research would be considered an adverse effect. In addition, the 1931 building is significant under Criterion C for its architectural design that incorporates marine motifs to visually demonstrate its association with marine research. The loss of that association would diminish the characteristics that qualify the property for the NRHP to the point where it would no longer convey its significance. Therefore, Option A would result in an adverse effect on the historic NOAA Northwest Fisheries Science Center buildings."

The NWFSC concurs with the WSDOT conclusion above that "removal of the South Campus property, which houses the fisheries research facilities, would significantly impair the ability of the NOAA Northwest Fisheries Science Center to operate". The NWFSC notes that the WSDOT

national scientific laboratory, and is committed to continuing the process described in responses to Comment F-002-001 and Comment F-002-002 in order to identify and implement appropriate mitigation measures. This mitigation discussion is not expected to be finalized until after this Final EIS is published.

F-002-016

The SDEIS found that Option A would diminish the integrity of the NWFSC as a historic property under Section 106 of National Historic Preservation Act. As noted in the responses to Comments F-002-001 and F-002-002 and described in the Final EIS, the Preferred Alternative would not require relocation of any buildings on the NOAA NWFSC campus. Through a series of ongoing workshops WSDOT is working with NWFSC and NOAA staff to understand potential construction impacts to the facility's scientific functions.

During construction, access to NWFSC from Montlake Boulevard and via Hamlin Street would be maintained. Although construction could occur for long periods, WSDOT is committed to working with NWFSC to minimize any effects as much as possible.

With the Preferred Alternative, truck access for construction of the Portage Bay Bridge would occur within existing WSDOT easements and right-of-way pending resolution of property ownership and easement rights, and further coordination with NOAA NWFSC (see the Land Use, Economics, and Relocations Discipline Report Addendum).

The eastern portion of the easement would be for construction of the realigned Bill Dawson trail, and a portion of the easement would be permanently acquired for the new trail alignment and associated retaining wall. Truck use of the easement on the east side of the property would be limited to that needed for construction of the realigned Bill Dawson trail within the easement.

F-002-018 needs to understand that the level of impairment of project will effectively prevent the NWFSC from operating at the site – because the essential physical connection of south campus property to other laboratories and administrative buildings will be lost and because of the ongoing and insufficiently mitigated impacts to the remainder of the NWFSC site. The Center also notes that Construction and Deconstruction impacts from options K and L will have a similar impact – effectively preventing the use of the South campus regardless of the need for building destruction.

F-002-019 **2-2 Scope of the project for Portage Bay Bridge.** While WSDOT characterizes the project as a "6 lane alternative" as approved by the Washington State Legislature, for the Portage Bay Bridge it appears to be a 7 lane alternative because it includes an "auxiliary" lane and exhibit 1-7 Option A specifies 7 lanes.

F-002-020 **2-11 Actual permanent needed use of the NWFSC.** The EIS shows a current width significantly in excess of 110' (total width of the Option A) in Exhibit 2-6. The actual width of the new 6 lane options immediately adjacent to the NWFSC site is not shown, however it is substantially in excess of 110' with the majority of the additional width located to the North and within the current NWFSC property.

The NWFSC has repeatedly requested the provision of detailed GIS information from the WSDOT on the exact extent of the proposed SR520 replacement options, including any permanent, construction or other types of easements that will be needed. This data is needed to more fully understand the expected direct physical intrusion and ongoing impacts of the project on the NWFSC facility. At the time of responding to the EIS this information has not been provided to the NWFSC. Our comments are subject to change once this detailed information and other information that we have requested is made available.

F-002-021 **Discipline Report - Cultural VI p. 174.** We have only been able to locate one definitive measurement of the physical proximity of the proposed option A to the NWFSC.

"The existing Portage Bay Bridge is 280 feet from the closest corner of the NOAA Northwest Fisheries Science Center West Wing building. The new Option A Portage Bay bridge would be seven lanes wide, with an overall width of at least 108 feet. This would be 35 feet wider than the existing bridge. The bridge would curve north at the east end to align with new improvements in the Montlake vicinity. The new Option A Portage Bay bridge would be 169 feet from the southwest corner of the NOAA Northwest Fisheries Science Center West Wing building. Therefore, the new seven-lane Portage Bay bridge would operate 111 feet closer to the NOAA Northwest Fisheries Science Center historic buildings than the current bridge. Although this would have a visual effect to the setting and feeling of the historic buildings, it would not be considered adverse. The current sound level at the NOAA Northwest Fisheries Science Center property is between 66 and 69 dBA. Under Option A with no sound walls, it would decrease to between 64 and 67dBA. With sound walls, it would decrease to 55 dBA, which would be beneficial to the property."

With respect to the above we strongly disagree as follows: We consider that the visual effect of a

As noted in the response to comment F-002-001, over the course of nearly a dozen workshops held between WSDOT, NWFSC and NOAA, the project team has provided more detail about the kinds of construction activities – and related effects – likely to occur within the project's limits of construction on and near the NWFSC campus. Staff from both agencies have worked collaboratively to research and clarify the property boundaries and ownership history of the property in question. A variety of measures intended to respond directly to NOAA's concerns are under discussion WSDOT has been meeting with NOAA frequently over the last several months in order to provide as much lead time as possible to implement mitigation measures that are ultimately selected.

F-002-017

Comment acknowledged. The project discipline reports, which were provided on a DVD that accompanied the printed SDEIS and on the project website as part of the SDEIS, are part of the project's record of environmental review under NEPA and SEPA. Conclusions and findings from these reports are summarized in the SDEIS and Final EIS to provide a single, comprehensive reference for the public.

F-002-018

As noted in the responses to Comments F-002-001 and F-002-002 and described in the Final EIS, the Preferred Alternative would not require the relocation of any buildings on the NOAA NWFSC campus. However, as described in the Final Cultural Resources Assessment and Discipline Report (Attachment 7 to the Final EIS), WSDOT found that construction of the Preferred Alternative would diminish the integrity of the historic properties at the NWFSC. Through a series of nearly a dozen workshops since publication of the SDEIS, WSDOT has and will continue to coordinate with NOAA NWFSC to ensure that these effects are mitigated and that other project effects on the campus are minimized as much as possible. The requirement for permanent acquisition or easement for the

F-002-021 freeway will cause an adverse visual impact – with or without sound walls.

F-002-022 We note that 169' is not, in any event, the closest point of the planned 7 lane alternative in relation to the NWFSC research buildings because the proposal does not account for the South Buildings which are located closer to the existing freeway than the historic buildings, and because the measurements do not appear to provide for additional intrusion onto the NWFSC property for proposed relocation of the Bill Dawson trail.

F-002-023 We also do not agree that either the data collection or the modeling of the sound data is representative of the current or future conditions at the NWFSC site and do not agree that the proposal will be "beneficial" to the NWFSC property from a noise impact perspective under any of the options.

F-002-024 **3-2** The proposed construction impacts for 6 years for the Portage Bay Bridge, and for 5-6 yrs for the Montlake interchange will have direct adverse impacts on all of the NWFSC property. We consider that both the construction and ongoing operation of all the options will cause adverse impacts to the NWFSC property that cannot be adequately mitigated.

3-4 We are concerned that WSDOT intends to provide a construction ramp directly into the construction zone from the SR 520 westbound Montlake off ramp. See also Exhibit 7 at 3-15. While we have not yet seen a detailed map in the DEIS showing this construction ramp we understand that it will pass through existing NWFSC property.

F-002-025 **3-9** The DEIS does not adequately mitigate for impacts from the demolition (or construction) phases. We expect unacceptable levels of noise, dust, fumes and vibration from what WSDOT describes as demolition: "major breaking, crushing and cutting of existing structures for eventual disposal" and removal, defined as "…vibrating pulling and dismantling existing structures…"

F-002-026 **3-14** Of concern is that for demolition and construction of Portage Bay area alone WSDOT estimates an average of 10 trucks per day (with a peak of 50 trucks) – with an undefined number planned for routing through NWFSC property. This is over and above existing use of SR 520. Over the 6 years of operation this will amount to 21,600 truck trips (during peak work hours for the NWFSC). It is our understanding that this number does not account for other vehicle trips such as pick-up and utility vehicles and large specialized vehicles such as cranes which will need to be staged and will also contribute to noise, dust fumes and vibration.

F-002-027 **3-15** The Exhibit 3-7 appears to show an otherwise undefined retaining wall on existing NWFSC property. The impact, size and purpose is not described.

F-002-028 **3-15** The NWFSC notes with concern that all pile driving (and all other work) is scheduled to be during the day (as opposed to at night) and mostly during the week – which coincides with the regular core work times at the NWFSC and guarantees maximum impact of the proposal on the NWFSC. There is no discussion in the EIS concerning the impact of this decision on the NWFSC scientific and other operations.

new alignment of the Bill Dawson trail and associated retaining wall would not alter the integrity of historic properties.

F-002-019

It is correct that under SDEIS Option A, the Portage Bay Bridge included a seventh, auxiliary lane. In response to comments received on the SDEIS, the Preferred Alternative design provides a narrower footprint for the Portage Bay Bridge. The Preferred Alternative includes a westbound managed shoulder rather than an auxiliary lane, reduced widths on other shoulders, and a landscaped median. Also, the design speed has been lowered to 45 mph to reduce traffic noise (see Chapter 2 of the Final EIS).

F-002-020

Exhibit 2-6 in the SDEIS depicted the width of the Portage Bay Bridge along its entire length and provided a cross-section to illustrate the typical width at the midpoint of the bridge. The description in the SDEIS acknowledged that the adjacent interchange ramps at both I-5 and Montlake Boulevard would add width near both ends of the bridge. The maps in the SDEIS and Final EIS are to scale and were developed using detailed GIS and design information. Exhibit 2-9 in the Final EIS illustrates the Portage Bay Bridge design for the Preferred Alternative. Detailed GIS information about the extent of the Preferred Alternative's effects on the Bill Dawson Trail, including the proposed permanent acquisition and construction easement areas, has been shared with NOAA and is included in Chapter 9 of the Final EIS.

F-002-021

WSDOT considered the proximity of the NOAA facility to the roadway in developing the design of the Preferred Alternative, which includes a shift of the alignment to the south at the east end of Portage Bay, thereby moving the roadway away from the NOAA NWFSC campus. The visual

F-002-029

3-21 While Exhibit 3-9 shows proposed demolition of NOAA facilities, the NWFSC is not aware of and has not seen any plans that propose to compensate NOAA for the loss of these resources or for managing any other collateral impacts that the proposal will cause to the NWFSC operations. Similarly we have not seen mitigation plans for options that do not involve loss of NWFSC buildings.

There is conflicting information on the WSDOT web site and in the DEIS with respect to removal of NWFSC property. The WSDOT developed and widely distributed video, viewable on u-tube at http://www.youtube.com/watch?v=QvMhyY3cRE4&feature=related shows all the NWFSC facilities as in place and intact after the SR520 rebuild is complete. Other graphics show these facilities as demolished

F-002-030

3-21 The diagram appears to show a loss of direct access from the NWFSC to the SR-520 on-ramp. This access currently benefits the NWFSC property by providing NWFSC staff and visitors with direct and valuable access to SR 520 West and to Montlake Blvd south. Without this access (even temporarily) all NWFSC visitors and staff will need to transit through the Montlake neighborhood streets causing increased traffic in those locations and adding travel time to work assignments and commutes.

F-002-031

4-36 While the DEIS places the NWFSC in the Montlake landscape unit, the Portage Bay Landscape Unit is the primary and originally designed viewscape from the NWFSC. The view of Portage Bay is an important part of the amenity value of the NWFSC property and contributes to the attractiveness of the site to staff and visitors. The view will be diminished by the project during and after completion and this will diminish the value of the NWFSC property.

F-002-032

4-37 The description of the "large multi-story buildings at NOAA" does not come close to adequately describing their function or capabilities. A more accurate description is that they are large multi-story purpose-built laboratory and research buildings with dependent support facilities and fresh and saltwater access.

4-45 The description of the NOAA Fisheries Center as being made up of only "buildings" is insufficient. The Center is a national research laboratory with significant infrastructure committed specifically to that purpose.

The NWFSC property is secured to federal standards. It is guarded 24/7 and is fenced. Federal law requires that this security is maintained at all times and provision of security will be made more difficult and expensive as a consequence of the proposed activity.

F-002-033

4-52 We are concerned about the adequacy of data collection for the sound monitoring and subsequent modeling for the NWFSC site. The "Noise Disciplinary Report" at Exhibit 13 states that data was collected at two sites for the NWFSC as follows:

"M18 NOAA NWFSC Building—North End Long-Term 46 hours 67
M19 NOAA NWFSC Building—South End by Docks Short-Term 15 minutes 67"

quality analysis was conducted using accepted methodology based on FHWA guidance (see pages 16 through 20 of the Visual Quality and Aesthetics Discipline Report). While the new Portage Bay Bridge would be wider than the existing bridge, operation of the project would not result in a change in the visual quality measurements of character, vividness, intactness, or unity of the views in the Portage Bay area. The SR 520 facility would appear similar to its current condition from the NOAA NWFSC. Noise walls are not recommended for the bridge (see the Noise Discipline Report Addendum for further information).

F-002-022

The Cultural Resources Discipline Report stated that, "[t]he new Option A Portage Bay Bridge would be 169 feet from the southwest corner of the NOAA NWFSC West Wing building." The statement is an indication of how close the new bridge alignment of Option A would be to the historic buildings located in the northern portion of the property, not to the research buildings located more to the south, and assists the Section 106 analysis of Option A. As indicated in the comment, the realignment of the Bill Dawson Trail was not discussed in this section, entitled, "How would operation of the project affect cultural resources?" because a trail relocation would have no effect on NOAA's three NRHP-eligible buildings. The Land Use, Economics, and Relocations Discipline Report (Attachment 7 of the SDEIS) described the effects of Option A on NOAA's NWFSC property and South Campus buildings.

The effects of the Preferred Alternative on the NOAA Administration Building and the NWFSC campus are discussed in the Final Cultural Resources Assessment and Discipline Report (Attachment 7 of the Final EIS). The Land Use, Economics, and Relocations Discipline Report Addendum (Attachment 7 of the Final EIS) contains information pertaining to property acquisitions for the Preferred Alternative, and the Recreation Discipline Report Addendum (Attachment 7 of the Final EIS) discusses the proposed trail realignment.

F-002-033 However, Exhibit 10 only shows a location for M-19. We do not have enough information to be able independently determine if the sites WSDOT monitored at the NWFSC are representative of the noise we currently experience at the NWFSC.

We are further concerned about the limited nature of the data collected. 15 minutes for M-19 and 46 hrs for the undocumented site. Was all of the short-time data from all of the multiple sites collected simultaneously and during the same time period? Was all of the (so-called) long-term data collected during the same time period? What were the actual dates and time of the data collection? Where exactly on the NWFSC site was the data collected from?

At the NWFSC differences in sound from the existing SR 520 are evident on the site depending on weather conditions and season, for example when vehicles are using snow tires and depending on the direction and speed of wind. How did you account for these factors? We are also concerned that, depending on the actual location, your sites M-18 and M-19 may have been partly shielded by buildings or trees and do not in any event represent the sound environment at the site.

F-002-034 **4-76** The EIS lists the NWFSC as a "low to moderate impact" Hazardous Material Site. We could not find data or documentation in the EIS to support this listing, or indicate why this might be relevant to the proposed action. The Center does have Hazardous Materials on site and some of these are housed in a building that is proposed for demolition by WSDOT. The EIS should properly identify the significance of the proposal with respect to actual hazardous materials.

F-002-035 A comment states that the 1931building (this is the West Building) is a contributing element to the Montlake Historic District – however elsewhere in the EIS the entire NWFSC property is recognized as a part of the Montlake Historic District as shown on Exhibit 4.6-1. How does WSDOT reconcile this information?

F-002-036 **4-79** The EIS states that NOAA currently docks vessel on Lake Union and has some provisions stored at its Sandpoint facility. With respect to NWFSC vessels this is only partly correct. The 60' NWFSC research vessel "Harold W Streeter" is normally docked at Montlake. Most provisioning of the vessel is completed at the NWFSC dock. In addition the NWFSC stores and operates 6 smaller trailer-able research vessels from the Montlake Facility. Routine maintenance and staging is completed at the NWFSC site (within the area affected for use by WSDOT) before and after research trips. An area proposed for use by WSDOT as a construction is currently used to store these vessels. The personal communication "NOAA, Seattle, Washington January 2009" may be correct with respect to NOAA vessels located at or using NOAA Sandpoint or Lake Union but it is not correct for the NWFSC. The NWFSC is also planning for increased use of the Montlake site for operation and maintenance of vessels.

F-002-037 **5-1** The proposal is deficient in failing to document the impact of the proposal on the approximately 400 staff who travel to the NWFSC site on a daily basis, especially during the construction phases. We consider that the construction phases will add considerably to the commute time for staff, visitors and other workers and this will make the NWFSC a less attractive work location.

F-002-023

Please see the response to comments F-002-001 and F-002-002. Since publishing the SDEIS, WSDOT has met with NWFSC and NOAA staff through a series of workshops, where project-related noise analysis, potential impacts, and mitigation have been explored in more detail. Noise experts from the project team described the data collection and modeling performed to date, and bolstered this analysis by collecting additional site-specific data and performing additional modeling to confirm anticipated impacts, as well as identify appropriate mitigation measures. This additional information has helped WSDOT develop several potential measures to help minimize and mitigate noise impacts during construction. These measures are continuing to be discussed with NOAA staff as part of a comprehensive set of mitigation measures.

Noise modeling results for the Preferred Alternative, as described in the Noise Discipline Report and in Section 5.7 of the Final EIS, show a reduction in noise levels with operation of the project, compared to the No Build Alternative, in the NWFCS area. Noise levels would also be reduced compared to existing conditions. The noise analyses performed for the SDEIS and Final EIS have been consistent with current FHWA methodology, which is the accepted standard for modeling and mitigation of highway traffic noise. See the Noise Discipline Report and its addendum for the locations of the noise monitoring sites. See Section 5.7 of the Final EIS and the Noise Discipline Report for additional detail.

F-002-024

See the response to Comment F-002-001 regarding construction effects and mitigation and the design of the Preferred Alternative, which was refined to avoid and minimize effects that would diminish the integrity of historic properties in the Area of Potential Effect. Although construction could result in long periods of disruption, WSDOT is committed to working with neighborhood groups and affected property owners to minimize these effects much as possible. As noted in the response to

F-002-038 **5-31** The NWFSC does not agree with the WSDOT parking impact data in Table 5.1-2: the claimed utilization rate of 78% is not supportable: in part because some of the existing NWFSC parking is actually under the current 520 Bridge and aerial photographs (used by WSDOT) would not show this parking; because the number of parking spaces that will be affected during construction is estimated by a NWFSC count of parking spaces to be 110, not 12; and because there is no actual support by WSDOT for its claim that removal of part of the NWFSC facility will mean that the NWFSC needs 12 fewer spaces so there would "be no net loss".

F-002-039 **5-32** Land Use and Economic Activity. Figure 5.2-5 "Montlake Area" is out-of-date and does not represent current facilities. It does not show the most recent NOAA building at the NWFSC: the 11,400 s.f. "South Building" commissioned in July 2007 which houses about 110 staff. The EIS does not account for the loss of this building.

F-002-040 **5-38** While this section of the EIS states that the 9 of these buildings would be "removed", 3-21 Exhibit 3-9 states that they will be "demolished". There is an important difference between removal and demolition. If they will be removed – where will they be removed to and when? More importantly, there has been insufficient consultation with the NWFSC on future of these buildings, the overall impact of removal of these buildings on the NWFSC operations, or any indication about how WSDOT plans to compensate the NWFSC for loss of functional equivalency.

F-002-041 **5-39** The EIS claims that the "north campus, which consists of offices laboratories a library and a 150 seat auditorium would not be affected". The NWFSC disagrees with this conclusion and considers that the project is likely to cause adverse impacts so severe that current and planned use of this site for ongoing scientific research will not be able to continue.

(Please note: that there is no "North Campus". There is a South Campus, a Library/Auditorium, a West Building and an East Building.)

The EIS states "that WSDOT is working with NOAA to identify how research activities on the South Campus would be affected by removal of these buildings and how their functions could be relocated elsewhere." While there has been some preliminary discussion with WSDOT arrangements and agreements on actual impact and necessary mitigation have not been developed.

F-002-042 **5-40** The impact or the proposal on economic activity is devoted to consideration of the benefits to the broad community from the anticipated decrease in traffic delays and increase in road capacity. Possible negative economic impacts to the NWFSC, or the City of Seattle, or the region because of direct and indirect impacts to the Center have not been identified.

The NWFSC currently contributes about $80M of funding in direct expenditures in labor, contracts and other purchases to the region with 400 staff working from the NWFSC at Montlake and living within commuting distance. Economists typically use a multiplier to identify the total economic impact derived from direct expenditures of a given activity so the actual contribution

Comment F-002-011, many of the specific construction activities affecting NOAA would last considerably less than the full duration of construction; see Chapter 3 of the SDEIS and Final EIS for more detail. Access to the NOAA NWFSC campus will be maintained during construction.

See the response to Comment F-002-016 regarding truck access.

In response to concerns expressed by NOAA and from comments received on the SDEIS, WSDOT is collaborating with NOAA to accurately identify property boundaries and easement requirements to minimize construction effects and truck access needed on the NOAA property. Chapter 3 of the FEIS discusses the possibility of providing a construction egress at the Montlake Blvd on-ramp, pending negotiations with NOAA.

F-002-025

The SDEIS provided a comprehensive analysis of effects on the environment based on the project design information available at that time and presented mitigation measures based on that effects analysis. Since publication of the SDEIS, workshops with WSDOT, NWFSC and NOAA staff have developed more detailed information about anticipated levels of noise, dust, fumes, and vibration during project construction – including demolition. Based on this information, WSDOT has identified potential mitigation measures and is in the process of finalizing an agreed-upon set of mitigation measures with NOAA. As stated above, this mitigation discussion is not expected to be finalized until after this Final EIS is published.

See the response to Comment F-002-001 regarding the additional analysis of construction effects and development of appropriate measures to reduce and mitigate potential effects. The Section 106 Programmatic Agreement describes a Community Construction

F-002-042 of the NWFSC to the economy of the region is likely to be significantly higher than this base figure. Note – at page 6-25 the WSDOT uses a similar argument to support the economic benefits to the region from the 6 lane alternative. The WSDOT should apply a similar argument to consider the economic consequences of the possible loss of the economic activity generated by the NWFSC.

The worst-case and most likely impact for the NWFSC is that it will not be able to continue to conduct its work on the site. If the worse case is realized the NWFSC will need to move and the economic activity (and tax-base) that that it currently generates will move with it.

Any plans or activities that will require the relocation of the NWFSC, or impact it, must provide for continuity of service. At this time those plans are not in place and without them the NWFSC cannot, reasonably support any of the options for the WSDOT SR-520 project.

F-002-043 **5-41** We disagree with your conclusions about the extent of parking removal – see previous comment.

F-002-044 **5-45** The exhibit graphics are out of date with respect to the NWFSC – as mentioned above.

F-002-045 **5-65** None of the "visualization locations" characterize views from the NWFSC which directly faces west to the Portage Bay Bridge and which is one of the most significant users of this view. The original designers for the NWFSC oriented the buildings to take advantage of this view. There is no analysis to support the WSDOT contention that the visual impact on the NWFSC will not be adverse.

F-002-046 **5-66** While the EIS states that the "East end of the Bridge would be farther north, which could have a positive effect for the Montlake Playfield views" it should also acknowledge that this would also have a direct negative impact on the NWFSC which is located directly to the North of the Montlake Playfield.

F-002-047 **5-84** The NWFSC considers that the Northwest Fisheries Science Center will experience an adverse effect under all options.

F-002-048 **5-85** The NWFSC considers that all options will have an adverse affect on the entire NWFSC Center property, including property that is not directly impacted by the property proposed to be subject to easements that the WSDOT will seek from the Federal Government. While the property has been subject to changes since 1931 (including land previously granted to WSDOT for the current SR 520 easements) it has been a site for continuous scientific research prior to 1931. The NWFSC views the entire property (land, buildings and equipment) as a complete entity and considers that removing portions will adversely and significantly affect continuity and quality of research and operations. The Center also considers that the 6 lane alternative will prevent the NWFSC from any practical further development on this site to meet future needs of the Center, Region and Nation.

Management Plan (an outline of which is provided in Attachment 9 to the Final EIS) with provisions to avoid or minimize construction effects within the project area. The mitigation outlined in the Programmatic Agreement includes impact-minimizing measures afforded historic properties such as the NWFSC Administration Building. See the response to Comment F-002-003 regarding monitoring vibration during construction.

F-002-026

Revised information on haul routes and trips was developed for the Preferred Alternative and is presented in Chapter 3 of the Final EIS. The haul trip estimates account for both the heavy vehicles required for grading, concrete pouring, etc., and miscellaneous trips such as deliveries that constitute most of the construction truck volume. As described in the response to Comment F-002-016, truck access for construction of the Portage Bay Bridge would occur within existing WSDOT easements and right-of-way pending resolution of property ownership and easement rights, and further coordination with NOAA NMFS. A map of the potential haul routes is included in Chapter 3 of the Final EIS and information on the location, description, construction duration, haul route, and estimated truckloads per day is included in Chapter 6 of the Final EIS. Large specialized vehicles such as cranes that will need to be staged would not cross the NOAA property.

The Transportation Discipline Report characterizes the estimated truck trips for average and peak construction periods and the duration of those periods. See the response to Comment F-002-004 regarding additional analysis of construction effects on air quality and noise. WSDOT will continue to work with the NOAA NWFSC to ensure that effects to the campus are minimized or mitigated as much as possible.

F-002-027

Exhibit 3-7 of the SDEIS showed a new retaining wall on property that would have been acquired from NOAA NWFSC under Option A.

F-002-049 **5-86** The EIS is not clear about the height of the proposed freeway adjacent to the NWFSC. Will it be increased or decreased or the same height? At 5-105 the EIS states, "If sensitive receivers are located above the roadway grade, the overall effectiveness of the noise wall can be considerably reduced unless the wall is placed at the same level as the receiver. Thus, walls in locations where the roadway is below the receivers are generally higher." The NWFSC will need to see a more complete description of the locations and size of the freeway and noise walls adjacent to the Center and more extensive sound survey and monitoring.

The Center considers that it is likely to be physically difficult if not impossible to effectively reduce traffic noise at the NWFSC site through the use of noise walls on the proposed Portage Bay Bridge. This is because the proposed alignment of the new Portage Bay Bridge is directly towards the NWFSC property. A lid to the west of the Montlake Blvd/SR 520 interchange should also be considered as an option for mitigation of ongoing noise impact.

F-002-050 **5-102** We are concerned with the levels of expected noise during deconstruction and construction and do not agree that these can be adequately mitigated. We expect significant adverse impacts for a period of at least 6 plus years during construction, and beyond, this from highway operation.

F-002-051 **5-103** We do understand how your Exhibit 5.7.1 (for the red data point closest to the NWFSC East Building) can show a noise level for 2030 no build in excess of the noise abatement criteria (66-80dB) while under Option A in 2030 without noise walls for the same location you predict no noticeable change. We don't see how this is consistent with your proposal.

F-002-052 **Noise Disciplinary Report.** We are concerned that Exhibit 26, Potential Pile driving noise shows pile driving noise of at least 87db in the proximity of most of the main occupied research buildings at the NWFSC with some of the buildings (and the new South Campus building) showing an impact of 93dB. We understand that these noise levels are close to or above levels where the wearing of hearing protection is advised by the State of Washington's own Department of Labor and Industries.

F-002-053 **5-112**
The proposed 520 construction, deconstruction and operation on the revised SR-520 must not contribute to extant fine particle (PM2.5) and inhalable coarse particle (PM10) pollution within the boundaries of the Northwest Fisheries Science Center (NWFSC), above the U.S. Environmental Protection Agency's primary national air quality standards of 35 ug/m3 and 150 ug/m3 respectively in a 24-hour period. The 24-hour concentrations of PM2.5 and PM10 should be collected on the NWFSC Montlake campus prior to construction, to establish a baseline for these particle pollutants. This concern relates to the health of Northwest Fisheries Science Center staff who may be sensitive to particle pollution.

F-002-054 **6-7** As mentioned above are concerned about direct intrusion into the NWFSC property from the "construction access ramp into the construction zone from the SR 520 Westbound Montlake ramp" and from related noise, fumes, dust and vibration impacts.

However, the Preferred Alternative, which is similar to Option A, would avoid the removal of any NOAA NWFSC buildings. The Preferred Alternative would still require a permanent acquisition or easement for a new alignment of the Bill Dawson trail and an associated retaining wall. Details are in the Land Use, Economic, and Relocations Addendum (Attachment 7 to the Final EIS) and the Recreation Discipline Report Addendum (Attachment 7 to the Final EIS). As design development progresses, WSDOT will continue to coordinate with NOAA NWFSC through NEPA and the Section 106 process to identify ways to minimize and mitigate the effects of corridor construction and operation on the NWFSC.

F-002-028

Page 6-69 of the SDEIS mentions NOAA as a receiver of particular concern because of its use of vibration-sensitive scientific equipment. The Final EIS provides further discussion of potential vibration effects on the NWFSC. Please see the response to Comment F-002-003 regarding vibration monitoring. WSDOT will develop a construction vibration monitoring plan for the NOAA NWFSC area. Measures to ensure that the scientific purposes of the NWFSC can continue unimpeded during construction will be stipulated in the Section 106 Programmatic Agreement. The workshops conducted with NOAA following the SDEIS (see the response to comment F-002-001) have included additional discussion and analysis of vibration effects at the facility, as well as potential mitigation measures; final mitigation measures will become part of the Section 106 Programmatic Agreement implementation.

State and local regulations restrict the noise from construction activities by imposing different noise limits, depending on type of activity and time of day and property type. WSDOT will comply with applicable noise regulations; however, some construction processes may need to occur outside of the defined city of Seattle noise requirements, and WSDOT would seek noise variances for such activities. Pile driving during

F-002-055 **6-10** The loss of the Freeway Transit Station will negatively affect existing employees travelling to and from work and employees using buses to take a more cost effective and fuel efficient mode of travel to work meetings.

F-002-056 **6-12** The temporary loss of the Bill Dawson trail will impact some employees using the trail for commuting and for employees using if for access to the Montlake recreation area.

F-002-057 **6-12** Access. It should be obvious that the Montlake Boulevard is the only point of access to the NWFSC. Therefore all project impacts negatively affecting Montlake Blvd to: buses, bicycles, cars, service and delivery trucks, safety services and pedestrian use will impact the Center and this impact is most likely to be negative.

F-002-058 **Exhibit 6.2-2** "Property Affected by Construction in the Portage Bay Area" is illegible and unacceptable for the purposes of evaluating the extent of impact on property.

Exhibit 6.2-3 "Property Affected by Construction in the Montlake Area" is illegible and unacceptable for the purposes of evaluating the extent of impact on property.

F-002-059 **6-23** We expect construction/demolition impacts on the NWFSC to adversely impact mandatory work at the Center and that these impacts will not be able to be mitigated to the extent necessary to complete the work.

F-002-060 **6-23** The SEIS is deficient in not acknowledging that the options would change access for 400 employees, visitors and contractors at the NWFSC.

F-002-061 **6-26** The SEIS in the section "How could the project minimize negative effects during construction" fails to identify any coordination that is planned with the NWFSC that would potentially minimize impacts to the NWFSC during construction. This is an unfortunate oversight and deficiency in the SEIS since the proposal involves the planned reduction of size of the NWFSC campus, the loss of buildings, the use of part of the site as a construction site, the effective prevention of further development by the NWFSC for the site, the use of the property as a construction access road and the fact that the NWFSC's work will be adversely impacted.

F-002-062 **6-27** While the SEIS acknowledges the likelihood of increased travel time to various identified locations it does not state that this is likely to affect the NWFSC.

F-002-063 **6-28** The map incorrectly names the "NOAA Northwest Marine Fisheries Science Center. It is the NOAA, National Marine Fisheries Service, Northwest Fisheries Science Center. In any event is not possible from the Exhibit 6.3-1 map to determine exactly how the limits of construction and construction staging areas actually relate to the Northwest Fisheries Science Center property except to see that they are significantly and adversely impacted. The maps are deficient.

F-002-064 **6-35** We are concerned about probable delays in fire/emergency service to the NWFSC. WSDOT must assure the Center that there will be NO increase in the time of service due to the

nighttime hours is not planned because of local noise regulations and because of the effects it would have on residents in the project area. As described in Chapter 3 of the Final EIS (see Table 3-4), actual durations of pile driving would be relatively brief in relation to the length of construction as a whole.

F-002-029

Section 5.2 of the SDEIS explained that WSDOT would conduct property acquisition and relocations in accordance with the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Since the SDEIS was published, WSDOT has developed the Preferred Alternative, which uses an alignment shift to avoid removing the NWFSC buildings. Since publication of the SDEIS, WSDOT Real Estate Services staff and other project team members have met with NOAA to discuss property ownership and right-of-way impacts in greater detail. These discussions will continue until acquisition needs have been fully identified and the necessary agreements have been executed for transfer of property and/or easements.

The WSDOT video was consistent with the SDEIS. Option A would have removed nine of the 11 south campus buildings. These effects are most clear at the time count of approximately 2:17 within the video.

F-002-030

Please see the response to Comment F-002-016. All existing access to the NWFSC would be maintained with completion of construction, and as much as practicable throughout construction of the project, including access to and from Montlake Boulevard.

F-002-031

Views of Portage Bay from the NWFSC were considered in the visual quality analysis (Attachment 2 to the Visual Quality and Aesthetics

F-002-064 construction. We do not think that an acceptable alternative is to "minimize negative affects" to these essential services.

F-002-065 **6-35** We are concerned about the expected temporary power (or other utility including telecommunication and fiber optic) outages that are expected or could occur. While the Center has a significant emergency power generating capacity on site it is sized to provide for emergency equipment, to allow computer servers to run and to maintain preservation of valuable specimen collections. Any loss of regular power supplies, or other utilities to the Center would stop work.

F-002-066 **6-51** The NWFSC site users would also be "most affected by these changes" to the Portage Bay landscape Unit. The primary outlook from the Center and it's planned landscape orientation is to the west looking directly at Portage Bay or to the south looking over the freeway to Capital Hill.

F-002-067 **6-52** The NWFSC notes the WSDOT concern in the EIS - that boaters in the Montlake cut and SR520 commuters will be most sensitive to changes in visual quality during construction. We consider that there will also be sensitivity to change in visual quality for NWFSC staff who work at the NWFSC site.

F-002-068 **6-57** The NWFSC does not view the proposed re-vegetation work - where WSDOT will replace vegetation removed as a part of the construction activity as an action that will minimize negative effects during construction. This is restoration.

F-002-069 **6-59** WSDOT notes that 'historic properties in the Montlake area would be affected by noise, fugitive dust, glare from lights for nighttime construction and possibly vibration from noise and construction". We agree that historic properties including the NWFSC will be affected but disagree that vibration is only a "possibility". It will occur and it will negatively affect the work of the NWFSC and its staff. We consider the area to the WEST of Montlake Blvd would also be "Particularly affected by construction". The severity of impacts to the NWFSC property and the scientific work must be specifically identified in the EIS and mitigated for.

F-002-070 **6-59** WSDOT states that Option A…would have an overall adverse impact on the historic district. We concur but we consider that the impact will be severe and adverse (not just adverse) and we do not agree with you that the effect would result primarily only from property acquisitions and changes in the historic setting. We consider that there will be severe impacts on the NWFSC property both during construction and from ongoing freeway impacts when construction is complete from all Options.

F-002-071 **6-62** The NWFSC is an historic property. WSDOT states that it will "Maintain pedestrian and vehicular access to historic properties, except for unavoidable short periods during construction". The loss of access to the NWFSC except for State or National emergency declarations is unacceptable to the NWFSC.

Discipline Report). The Visual Quality and Aesthetics Discipline Report noted that there would be changes to visual quality during construction for views of the Portage Bay Bridge (see page 52). It noted that, with completion of construction, "if the design of the Portage Bay Bridge is noteworthy and architecturally appropriate in terms of style and scale for the setting, vividness and unity would remain high, and intactness could increase."

Please see the response to Comment F-002-021 regarding view effects of the Preferred Alternative. The comment's characterization that views will be diminished during after completion of construction is not supported by the visual quality analysis.

The value of real estate cannot be predicted with any certainty, nor can WSDOT speculate on the effect on property values of a change in the view of the new bridge.

F-002-032

The description on page 4-37 of the SDEIS was used only for the visual quality analysis and was intended to focus on the appearance of the campus, rather than to describe the functions of the buildings. The description on page 4-45 is a summary table that lists only those buildings at the NOAA NWFSC that are listed or eligible for listing in the National Register of Historic Places.

WSDOT is continuing to work with NOAA to ensure that effects on the campus, including potential effects on campus security, are minimized.

F-002-033

Please see the response to F-002-023 regarding additional noise analysis for the NOAA NWFSC campus since the SDEIS. The noise analyses performed for the SDEIS and Final EIS have been consistent with current FHWA methodology, which is the accepted standard for

F-002-072 **6-66** The NWFSC is concerned about the impact of noise from impact, non-impact, demolition and pile driving on the work of the Center from all options. The Center considers that the noise associated with this project will have significant adverse impact on the work of 400 employees at the Center.

F-002-073 **6-69** The EIS lists the use of floating electron microscopes in its work and notes that this activity can be affected by vibrations. The NWFSC does not have a "floating electron microscope" however it is providing a partial list of equipment at the Center that is sensitive to vibration as follows:

Scanning Electron Microscope
Zeiss Epifluorescence/light Transmission Microscope.
Mettler and other Balances (for weighing chemicals to as little as 1ug.)
Nikon Eclipse E400 Microscope
ABI Prism 7700 Sequence Detector
Nano Drop ND-1000 Spectrophotometer
Bio Rad icycler Thermal Cycler
Bio Rad C1000 Thermal Cycler
Mettler UM3 Microbalance
Luminex 100 Plate Reader
Packard Cobra II Gamma Counter
Packard Tricarb 1600TR Liquid Ccintillation Counter
Molecular Devices Versamax Microplate Reader
Perkin Elmer 1420 Multi Label Counter Victor 3
Two ABI 3100 Genetic analyzers (DNA sequencing and genotyping). These are capillary electrophoresis machines with a laser-based detection system.
An ABI 7900 Real-time genetic analyzer. Another laser-based genetic analysis system.

The NWFSC is not satisfied with the solution for vibration impacts provided by the WSDOT: essentially that it will "ensure that researchers are aware of potential vibration –producing activities near the facility". Some of the work of the NWFSC is pre-programmed where samples are collected on specific schedules and analysis is needed within a specific time-window. We do not have the flexibility to adjust all work schedules to meet, for example, intermittent impacts from vibration. At other times samples are analyzed on an emergency/high priority basis for example related to deaths of species of concern and preventing impacts to human health.

F-002-074 **6-70** The detail on the paper maps is poor and generally insufficient to determine exact impacts on the NWFSC however the maps appear to show noise impacts from pile driving of greater than 99dB for part of the NWSFC site and greater than 87dB for other parts of the site. We do not understand why the WSDOT noise model shows a greater level of pile driving noise to the south of the freeway near Montlake when the new freeway is projected to be wider by more than 111' on the North side of the freeway.

modeling and mitigation of highway traffic noise. Pages 19 and 20 in the Noise Discipline Report contain a discussion about topography and atmospheric conditions in relation to noise modeling. Pages 21 through 23 of that report describe how the noise study was conducted. Because weather can change frequently, atmospheric conditions are not considered in traffic noise studies. See the response to Comment F-002-003 regarding the sufficiency of noise data collection and specific locations.

F-002-034

The information about hazardous materials at the NOAA NWFSC site that was presented in the SDEIS is included in Exhibit 10 and Attachment 4 of the Hazardous Materials Discipline Report. That information was obtained during the Washington State Department of Ecology site file review conducted in 2004. WSDOT understands that this information reflected materials that are stored onsite consistent with applicable regulations for use in NWFSC's scientific work. The Hazardous Materials Discipline Report Addendum notes that contaminated groundwater at the NWFSC property was reported to be cleaned up in 2003. Because the Preferred Alternative would not require removal of any buildings at the NWFSC, the potential for generating hazardous materials associated with building demolition has been eliminated and the potential for encountering subsurface contaminated material at this site has been minimized. The Final EIS and the Hazardous Materials Discipline Report Addendum conclude that construction activities under the Preferred Alternative would have minimal potential to affect hazardous materials on the NWFSC property.

F-002-035

The Montlake Historic District is eligible for the National Register of Historic Places (NRHP), with a period of significance dating from 1905-1952. All properties within its boundaries are considered part of the District. However, the 1931 NOAA building is the only historic building on

F-002-075 **7-11** The Seattle Land Use map omits to identify the NWFSC site as a Scientific Laboratory. The NWFSC is involved in formal federal planning for the use of the site.

F-002-076 **7-19** We do not concur with the statement that "no indirect effects on land use patterns would occur". Any of the Options could force a relocation of the NWFSC.

F-002-077 **7-20** The statement that the 6-lane alternative would not indirectly affect the regional economy (except through expected beneficial affect of improved transportation efficiency) is not correct. In the event that the NWFSC was forced to move from the region and was not replaced there would be a negative affect on regional economic activity.

F-002-078 **7-21** We do not agree that there will be a benefit to community cohesion and that there will be no long-term adverse effect on public service providers. The NWFSC is a public service provider. The project will result in long term adverse increases in noise, pollution and visual impacts to the site and less cohesion with the Montlake neighborhood. In addition the proposed activity essentially eliminates any prospects for substantive capital investments or other improvements to the NWFSC site.

F-002-079 **7-25** We consider the 6 lane alternative will adversely affect visual quality and aesthetics to the NWFSC. It will likely be closer to the NWFSC site and it will also be larger and more imposing. The EIS is not clear on proposed use of sound barriers however we expect that they would add to visual impact at the site.

F-002-080 **7-26** We are not persuaded by the WSDOT proposals to mitigate the effect on visual quality and aesthetics. We looked for, but could find, any substantive descriptions of planned mitigation.

F-002-081 **7-28** We are not persuaded by the WSDOT contention than the 6 lane alternative "will have noise levels equal to or slightly less than current levels" at the NWFSC site. The EIS does not commit to sound wall installation. We also dispute the ability of sound walls to effectively control noise at this site because of the physical alignment of the replacement bridge with respect to the NWFSC property.

F-002-082 8-1 We agree that the Montlake neighborhood would experience especially severe impacts under the phased implementation scenario and note that the impacts to the NWFSC will be amongst the most extreme within the Montlake area. While the EIS provides a 6 to 7 year estimate for the duration of construction, we cannot tell what the WSDOT assumptions for this estimate are. Is this the most optimistic time of construction that assumes everything going perfectly and to schedule? This is a critical issue for the NWFSC because the NWFSC must have a full disclosure as to the period of impact as well as the magnitude of impact. While we appreciate that there may still be uncertainty about design elements of the project we are concerned that WSDOT is not yet confident about the time-line of this project because the EIS makes the following statement: "with at least two distinct periods of intense construction activity – **perhaps** separated by years – directly affecting the community" (Our emphasis). We agree that most of the impacts of construction from the project cannot reasonably be mitigated on the NWFSC site.

the NOAA NWFSC campus that falls within the stated period of significance, so it is the only building at the NWFSC that can be considered a contributing element to the Montlake Historic District. As described in the SDEIS and Final EIS, all three historic buildings on the NOAA NWFSC campus are individually eligible for the NRHP for their association with important research that is significant locally, regionally, and nationally.

F-002-036

The Navigable Waterways Discipline Report has been updated in the errata sheet to reflect this information about NOAA vessels, storage, and supply transport, and related activities. The errata sheet is contained in Attachment 1 to the Navigable Waterways Discipline Report Addendum, located in Attachment 7 to the Final EIS.

F-002-037

The SDEIS provided a comprehensive analysis of environmental effects based on the project design and construction information available at that time. In response to comments on the SDEIS, the construction effects to local streets were further described to the extent practicable at this stage of design for the Preferred Alternative. The estimated effects to local street travel times are discussed in Chapter 10 of the Final Transportation Discipline Report.

F-002-038

As stated in a footnote to Table 5.1-2 in the SDEIS and Exhibit 9-2 in the Transportation Discipline Report, the utilization rate of 78 percent was based on in-person hourly field surveys in 2004. A photograph of the parking spaces under the SR 520 structure is in Exhibit 9-4 of the Transportation Discipline Report.

As noted in the comment, Option A would have permanently removed 12

F-002-083 **8.4** There is an urgent need to complete formal consultation and commit to mitigation arrangements with the NWFSC. Without this consultation the matter may cause controversy. The NWFSC has previously written, on more than one occasion, to the WA State Secretary of Transportation to make its position clear, as early as May 2005.

F-002-084 At the December 8, 2009 meeting of the legislative workgroup the WSDOT provided information related to possible costs of various options and sub-options. The NWFSC does not understand why information related to possible costs of mitigation for the NWFSC were not included. By way of comparison the December 8 "Detailed Option 'A Plus Hybrid' estimate: I-5 to Floating Bridge" option included cost for items for the project at the $8 million level. The cost to mitigate impacts at the NWFSC is considered to be higher than $8M and should have been included as a part of the evaluation of options.

F-002-085 **A4-1** A minor issue - the correct name of "NOAA Northwest Fisheries" is the Northwest Fisheries Science Center.

F-002-086 **Draft Section 4 (f) Evaluation:**

The NWFSC previously provided comments on the Evaluation. These comments are in addition to those previously provided.

Exhibit A does not adequately show the impact of option A, K or L on the NWFSC site. A large portion of the site is omitted (the map cuts right through the middle of the Center). We note that "Sound walls" are identified only as potential.

F-002-087 **Exhibits 10a and 10c**. We note and concur that the entire NWFSC site appears to be an Historic Property with a Section 4 (f) use.

p.29 The EIS is confusing. At page 29 it lists the NWFSC as a property that will experience a use defined by Section 4 (f) and then at page 30 states that FHWA and WSDOT are expecting to make a de-minimus determination with respect to the NWFSC. This issue needs to be discussed further before WSDOT makes a final determination.

F-002-088 **p.33** The NWFSC must be included in direct discussion with respect to any future use of the NWFSC property for the Bill Dawson Trail. The EIS is proposing that the Bill Dawson trail be moved northward to occupy land that the NWFSC currently owns and uses for research and where WSDOT proposes to demolish existing research buildings and infrastructure.

F-002-089 **Draft Parks Mitigation Technical Memorandum. p.25**

The NWFSC is concerned that a parcel of the NOAA (Department of Commerce) campus in the Montlake District can be considered as a mitigation site when the entire NOAA property has already been identified as an impacted 4(f) property – see Exhibit 10a. Detail of Properties with a Section 4(f) use. Is the WSDOT saying that the proposal is to use part of the NWFSC property for a permanent easement, another additional part of the property for a temporary construction

parking spaces. Designs for all of the SDEIS options indicated that parking could continue to be accommodated under the structure after the project is completed.

Footnote "d" in SDEIS Table 5.1-2 should not have applied to the NOAA NWFSC, and does not apply to it in Final EIS Table 5.1-15. Additionally, WSDOT updated the field surveys in 2010 and revised the NOAA utilization rate to 90%, as shown in the Final EIS. Temporary parking loss during construction was described on page 9-5 of the Transportation Discipline Report. See Table 6.1-9 in the Final EIS for a summary of parking effects during construction of the Preferred Alternative.

With the Preferred Alternative, no buildings would be removed at the NWFSC. The parking supply at NOAA NWFSC includes 142 spaces, 38 of which are located within a WSDOT easement under the existing SR 520 structure. None of the parking that is located outside of the WSDOT easement would be permanently affected by the Preferred Alternative. However, parking that is located within the easement (under the existing SR 520 structure) would be unavailable during construction, and an additional 15 stalls near the WSDOT easement (in areas identified within the project's limits of construction) would also be affected during construction(see Chapter 9 of the Final Transportation Discipline Report). Workshops between WSDOT and NWFSC and NOAA staff (see the response to comment F-002-001) have included negotiations about parking effects and mitigation. Appropriate mitigation for parking effects both during and after construction are being finalized and will be included in the final set of mitigation measures agreed upon by both agencies to avoid, minimize, and mitigate effects to the NWFSC.

The average utilization of parking at the NWFSC is greater than the 94 spaces not located within the WSDOT easement; therefore, the parking supply of the Preferred Alternative would not support the existing demand. Following completion of construction, there would be an excess

F-002-089 | easement and another (undefined parcel) for a mitigation site? We need a clear and unambiguous explanation of what exactly the WSDOT is planning.

F-002-090 | **Attachment 2 Agency Correspondence** does not include copies of letters sent to the WDOT from the NWFSC.

demand of 25 spaces; however, WSDOT and NOAA are discussing an agreement or other mechanism that would allow the NWFSC to use the area under the new structure for parking, which would accommodate the demand. This mitigation discussion is not expected to be finalized until after this Final EIS is published.

During construction, based on the utilization described above, there would be an excess demand for 40 stalls; however, WSDOT and NOAA are discussing options to temporarily relocate the parking affected by construction. Again, this mitigation discussion is not expected to be finalized until after this Final EIS is published.

F-002-039

The SDEIS considered the "South Building" described in the comment in the environmental analyses, but determined there would be no impact or loss because it was located outside the limits of construction of Option A.

The aerial photograph has since been updated in the Land Use, Economics, and Relocations Discipline Report Addendum and in the Final EIS to show the NOAA South building. The Preferred Alternative would not require the removal of any NOAA buildings. Please see the Land Use, Economics, and Relocations Addendum for more detailed information.

F-002-040

Since the SDEIS was published, WSDOT has developed the Preferred Alternative, which includes an alignment that avoids removal of the NWFSC buildings. Whether the structures would have been demolished or relocated under Option A would have depended upon additional design and construction information and coordination with NWFSC and NOAA staff. As discussed in the responses to previous comments, WSDOT has been working extensively with NOAA to refine project impact assessments and identify appropriate mitigation.

F-002-041

Please see the responses to comments F-002-009 and F-002-010. As noted, WSDOT continues to meet with NOAA NWFSC staff to provide information on the Preferred Alternative and gain a better understanding of how to minimize project impacts on facility operations.

F-002-042

The Preferred Alternative would not require relocation of any the buildings currently on the NOAA NWFSC campus. WSDOT is working with the NWFSC to ensure continuity of campus activities during construction. Economic effects disclosed in the EIS were analyzed consistent with FHWA guidance.

F-002-043

Please see the response to Comment F-002-038. As stated in that response, with the Preferred Alternative, no buildings or parking would be permanently removed at the NWFSC. However, parking that is located within the WSDOT easement (under the existing SR 520 structure) would be removed, and an additional 15 spaces near the WSDOT easement would be temporarily unavailable during construction. WSDOT and NOAA staff are currently in discussions to identify appropriate mitigation measures to offset parking impacts during construction, and after the project is complete. See Chapter 9 of the Final Transportation Discipline Report for further discussion.

F-002-044

The exhibits in discipline report addenda and the Final EIS have been updated as necessary with a more current aerial photograph. However, the SDEIS and Final EIS analyses were consistent with NOAA facilities as they existed at the time of publication. The aerial photograph was not the primary source of information for the property.

F-002-045

Please see the response to Comment F-002-021. Views of Portage Bay from NOAA have been added to the Final EIS. Additional views were considered in the visual quality analysis (see Attachment 2 to the Visual Quality and Aesthetics Discipline Report) and are depicted in visual simulations included in that analysis.

F-002-046

Please see the response to Comment F-002-021. The Preferred Alternative alignment has shifted south from the Option A alignment identified in the SDEIS.

F-002-047

The adverse effect described on page 5-84 of the SDEIS is an effect designation under 36 CFR 800 pertaining only to historic properties protected by Section 106 of the National Historic Preservation Act. In the spring of 2010, WSDOT initiated an intensive outreach process for the Section 106 consulting parties. NOAA participated in both group and individual meetings with WSDOT representatives to discuss the adverse effect determination and potential mitigation measures for preparation of a Programmatic Agreement under Section 106. Potential construction effects were discussed as part of this process. The Final Cultural Resources Assessment and Discipline Report contains additional information about the involvement of the consulting parties and the evaluations conducted for the Preferred Alternative.

WSDOT has determined that, while the effect on the NOAA NWFSC under the Preferred Alternative is considerably less than under Option A, the change to setting, feeling and association from construction of the Preferred Alternative may affect the scientific research conducted at NOAA and would temporarily diminish the integrity of the setting and feeling of historic properties at the NWFSC. The resulting mitigation measures for the adverse effect on historic properties are included in the

Section 106 Programmatic Agreement (Attachment 9 to the Final EIS). Also, see the response to Comment F-002-004. WSDOT will continue to work with NOAA NWFSC, through the NEPA and Section 106 processes, to avoid, minimize, and mitigate for the project's adverse effect. The requirement for a permanent acquisition or easement for the new alignment of the Bill Dawson trail and associated retaining wall would not alter the integrity of historic properties.

F-002-048

Please see the response to Comment F-002-047 regarding effects on historic properties. WSDOT has determined that, while the effect on the NOAA NWFSC under the Preferred Alternative is considerably less than under Option A, the use of some land during construction would temporarily diminish the setting and feeling of integrity of historic properties under 36 CFR 800. WSDOT will continue to work with NOAA NWFSC, through the NEPA and Section 106 processes, to avoid, minimize, and mitigate for the project's adverse effect. Please see the responses to comments F-002-009, F-002-015, and F-002-016 regarding continued operation of the NWFSC. The Preferred Alternative would not require relocation of any buildings on the NOAA NWFSC campus.

F-002-049

As described in the response to Comment F-002-008, noise levels during operation of the Preferred Alternative are predicted to be lower than either existing conditions or No Build as a result of noise reduction measures that are part of the project design.

F-002-050

Please see the responses to comments F-002-006 (construction noise levels), F-002-008 (operational noise levels), and F-002-011 (duration of construction impacts). The Final EIS discusses the potential for adverse noise effects during construction. However, construction noise would

comply with applicable local jurisdiction regulations; otherwise, WSDOT would need to apply for and receive a noise variance. WSDOT will continue to coordinate with NOAA NWFSC to determine the best way to avoid or minimize the effects of construction on NWFSC's scientific work. Following completion of construction, the Preferred Alternative would result in reduced noise levels at NOAA NWFSC from traffic on SR 520.

F-002-051

The No Build conditions are used as a reference point for gauging project effects, so the phrase "no noticeable change" is meant with respect to No Build, not to existing conditions. Noise changes too small to be detectable by the human ear (less than 3 dBA) are referred to in this manner. In general, a doubling of traffic volumes is required in order to produce a 3 dBA increase at a receiver a given distance from the noise sources, and vehicle traffic on SR 520 in this area is not expected to increase by more than 7 percent as a result of the project.

F-002-052

The expected noise levels during pile driving shown in Exhibit 26 of the SDEIS represent levels that could be experienced at times outside the buildings. The exhibit represents peak levels that could occur for limited durations. Exhibit 20 in the Noise Discipline Report Addendum updates this exhibit for the Preferred Alternative. If pile driving near the NWFSC were to exceed the maximum noise levels set forth by the City of Seattle (see Exhibit 20 in the Noise Discipline Report), WSDOT would be required to obtain a noise variance. As described in Chapter 3 of the Final EIS, pile driving activities would be confined to short durations interspersed through the construction period.

F-002-053

The page referred to in the comment concerns air quality effects during operation of the project. Monitoring data in the region show that PM10

and PM2.5 concentrations do not exceed the National Ambient Air Quality Standards (NAAQS). This project is not expected to result in a violation of the NAAQS.

As part of the series of workshops described in the response to comment F-002-001, project-related air quality analysis, potential impacts, and mitigation have been explored in more detail since the SDEIS. Air quality experts from the project team described the data collection and modeling performed to date, and performed additional modeling to confirm anticipated impacts, as well as to identify appropriate mitigation measures. A number of potential measures to mitigate air quality impacts during construction are continuing to be discussed with NOAA staff as part of a comprehensive set of mitigation measures.

See Section 6.8 for a description of construction air quality effects. For further information, see the Air Quality Discipline Report Addendum, which provides a quantitative analysis of construction air quality effects.

F-002-054

Please see the response to Comment F-002-024. WSDOT continues work with the NWFSC to ensure that project effects on the campus are minimized or mitigated as much as possible.

F-002-055

With the Preferred Alternative, bus stops would be located on the new Montlake lid, which would continue bus access similar to the existing bus access. Pedestrian access to the transit stops would be improved compared to the existing stairs, the walk to the NWFSC would be shorter, and the user experience would be improved compared to the current bus stop, which is adjacent to the freeway. The SR 520, I-5 to Medina project in combination with the SR 520, Medina to SR 202: Eastside Transit and HOV Project would provide continuous HOV lanes between SR 202 and I-5, allowing buses to bypass congestion and

operate more cost effectively (less time lost due to congestion) and more fuel efficiently (steady speeds versus stop and go) than with the No Build Alternative, particularly for trips to and from the Eastside. Chapter 8 of the Final Transportation Discipline Report contains an assessment, including quantitative data, of the effects that removing the Montlake Freeway Transit Station would have on transit service, rider travel times, and connections with the Preferred Alternative.

F-002-056

A temporary detour would be provided during the closure of the Bill Dawson Trail to maintain access throughout the construction period. The detour would connect to the original trail in the safest and most efficient way possible, and additional wayfinding signs would be installed to guide trail users to their desired route. The detour route will be developed prior to construction. WSDOT will provide notification of the detour to the public and to NOAA NWFSC prior to its implementation.

F-002-057

The existing access to NOAA NWFSC from Montlake Boulevard, and via East Hamlin Street will be maintained during construction. The intersection of the westbound off-ramp from SR 520 at Montlake Boulevard would be reconfigured and would allow for access to the northbound left-turn lane onto Hamlin. Chapter 10 of the Final Transportation Discipline Report provides additional analyses of local street conditions and congestion issues during construction. WSDOT will continue to work with NOAA NWFSC, through the NEPA and Section 106 process, to avoid, minimize, and mitigate any adverse effects.

F-002-058

The purpose of the exhibits in Section 6.2 is to illustrate generally where construction easements would be required for each option. The scale of the exhibits was such that all options could be compared to one another

in a single exhibit. The extent of the impacts are explained more clearly in the text. Exhibit 9-12 in the Final EIS provides a larger scale exhibit to clearly illustrate the extent of impact on NOAA NWFSC property.

F-002-059

As described in previous responses, WSDOT continues to work with NOAA to ensure continuity of campus activities during construction. The Preferred Alternative would not require the relocation of any buildings on the NOAA NWFSC campus, and access would be maintained during construction to ensure continuity of services. During ongoing discussions between WSDOT and NWFSC since the SDEIS, WSDOT technical experts have completed additional modeling and analysis to assess construction impacts on work at NWFSC.

F-002-060

Access to the NWFSC would not be changed. Please see the response to Comment F-002-057 regarding access during construction. A more detailed discussion about those effects and construction-related traffic congestion is included in Chapter 6 of the Final EIS.

F-002-061

Please see the responses to comments F-002-001 and F-002-016. WSDOT will continue coordination with NOAA NWFSC as project design advances to identify appropriate mitigation measures. The Community Construction Management Plan, a requirement of the Section 106 Programmatic Agreement, will identify methods and tools that WSDOT will use to coordinate with NOAA NWFSC and other property owners near the corridor throughout construction with the aim of minimizing and mitigating construction-related impacts as much as possible.

F-002-062

Project effects on social elements, including and neighborhoods and

community services such as schools, religious institutions, government facilities, utilities, and fire protection, emergency medical and police services, were identified on page 6-27, which is in Section 6.3 of the SDEIS. The Transportation Discipline Report has a broader discussion of potential effects on travel times in the project area.

F-002-063

The exhibit has been updated in Section 6.3 of the Final EIS. Please see the response to comment F-002-029 regarding ongoing work to confirm property ownership and identify acquisition needs in this area.

F-002-064

WSDOT will continue to coordinate with police and fire departments to ensure timely provision of emergency services access during construction. The list of measures on page 6-37 of the SDEIS has been updated in the Social Elements Discipline Report Addendum (Attachment 7 to the Final EIS) and Section 6.3 of the Final EIS. In addition, WSDOT will develop a Community Construction Management Plan as a stipulation of the Section 106 Programmatic Agreement, which will include an emergency access management plan.

F-002-065

WSDOT will coordinate with utility service providers throughout the design and construction of the SR 520, I-5 to Medina project. Measures to minimize utility services disruption include avoiding service disruptions whenever possible and timing any necessary disruptions for off-peak times. When a disruption cannot be avoided, WSDOT works with the utility to notify all affected neighborhoods and businesses. Additional public services and utilities discussions are in the Social Elements Discipline Report Addendum. As part of its ongoing coordination with NOAA NWFSC, and WSDOT is pursuing additional utility survey work on the NWFSC property.

F-002-066

Section 6.5 of the Final EIS notes that people at the NOAA facility would be among the viewers most affected by construction in the Portage Bay landscape unit.

Please see the response to Comment F-002-021. Views of Portage Bay from the NWFSC were considered in the visual quality analysis (Attachment 2 to the Visual Quality and Aesthetics Discipline Report).

F-002-067

Section 6.5 of the SDEIS included people at the NOAA facility among the viewers most affected by the construction in the Montlake landscape unit, and Section 6.5 of the Final EIS also notes this.

F-002-068

The comment is correct in noting that revegetation occurs as a restoration activity after construction is complete. Seeding, mulching, and some planting may occur as a temporary erosion control measure. However, full benefit of landscape treatment will not be realized until construction within the Montlake landscape unit is completed.

F-002-069

The adverse effect described on page 6-59 of the SDEIS is an effect designation under 36 CFR 800 pertaining only to historic properties. The Preferred Alternative would not require relocation of any buildings on the NOAA NWFSC campus. See the responses to comments F-002-001, F-002-003, and F-002-027 regarding vibration during construction. The operational conditions of the Preferred Alternative will ease impacts currently experienced in terms of reduced noise effects, improved visual quality, and access to the NWFSC. Please see the response to Comment F-002-047 regarding effects on historic properties. WSDOT has determined that, while the effect on the NOAA NWFSC under the

Preferred Alternative is considerably less than under Option A, the use of some land during construction would temporarily diminish the integrity of the setting and feeling of historic NOAA buildings. WSDOT will continue to work with NOAA NWFSC to avoid, minimize, and mitigate for the project's adverse effect. Please also see the responses to comments F-002-001, F-002-002, F-002-009, F-002-015, and F-002-016.

F-002-070

Please see the response to comment F-002-069.

F-002-071

The statement cited was a general statement of intent that was not used in reference to specific properties. Access to the NWFSC would be maintained during construction.

F-002-072

Please see the responses to comment F-002-003, F-002-006, F-002-028, and F-002-050.

F-002-073

The statement about the NWFSC's equipment has been corrected in the Final EIS. Please see the response to Comment F-002-003 regarding vibration effects during construction and the response to Comment F-002-001 for a discussion of ongoing coordination to better understand and mitigate for effects on the campus.

F-002-074

The contour lines shown in Exhibit 6.7-3 reflect distances from the limits of construction, rather than from the SR 520 mainline. Based on the project design and construction information available at the time the SDEIS was published, this was the best way to provide an appropriate conservative analysis of the potential noise effects of pile driving.

However, key features of the Preferred Alternative now respond to NOAA NWFSC's concerns; these include an alignment shift to the south at the east end of the new Portage Bay Bridge (Chapter 2 of the Final EIS has a description of the Preferred Alternative). Section 6.7 of the Final EIS includes an updated exhibit showing pile driving noise versus distance under the Preferred Alternative. Please see the responses to Comments F-002-001 and F-002-003 for information on ongoing coordination with NOAA NWFSC to reduce and mitigate for project effects.

F-002-075

WSDOT acknowledges that the NWFSC is involved in planning for the use of the site; however, no specific plans for redevelopment have been identified at this time. The exhibit on page 7-11 was intended to identify specific future actions individually and/or as part of adopted planning documents. This exhibit is not included in the Final EIS.

F-002-076

The indirect and cumulative effects analysis evaluates effects on a regional level. The analysis did not find that significant direct or indirect changes to land use patterns would result from the project, in part because it is located in an already urbanized area (see page 7-19 of the SDEIS). However, as stated in the responses to Comments F-002-001 and F-002-002 and described in the Final EIS, the Preferred Alternative would not require the relocation of any of the buildings on the NOAA NWFSC campus. Ongoing work with NWFSC and NOAA staff to identify appropriate mitigation measures is described in the response to Comment F-002-001.

F-002-077

As stated in the response to Comment F-002-001 and described in the Final EIS, the Preferred Alternative would not require the relocation of

any of the buildings on the NOAA NWFSC campus. WSDOT will continue to coordinate with NOAA NWFSC throughout the design development process to ensure that project operational effects on the campus are minimized or mitigated as much as possible and that NWFSC is able to continue its activities during construction.

F-002-078

While the NWFSC does provide an important governmental service, the public services analyzed in the Social Elements Discipline Report and the Indirect and Cumulative Effects Discipline Report are limited to fire protection, emergency medical, and police in accordance with NEPA guidelines. Nonetheless, the Preferred Alternative, which was developed after the SDEIS was published, would avoid the NWFSC campus buildings by shifting the roadway alignment to the south at the east end of Portage Bay. The Preferred Alternative would also enhance community cohesiveness in the Montlake area by providing a larger Montlake lid, which would create more opportunities for north-south pedestrian connections than any of the design options in the SDEIS.

Once completed, the SR 520, I-5 to Medina project would improve mobility, access, neighborhood connectivity, air quality, and water quality in the project area. Because WSDOT has not identified direct or indirect adverse effects on noise, pollution, visual quality, community cohesion, or public services from the Preferred Alternative, the findings also conclude that the project would not contribute to cumulative effects on these resources.

F-002-079

Please see the response to Comment F-002-021. While the new Portage Bay Bridge would be wider than the existing bridge, operation of the project would not result in a change in the visual quality measurements of character, vividness, intactness, or unity of the views in the Portage

Bay area. With the Preferred Alternative, noise walls on the Portage Bay Bridge are not recommended.

F-002-080

The indirect and cumulative effects analysis is expressly intended to evaluate effects on a regional level. Because the project-specific analyses found that operation of the project would not change the character, vividness, intactness, or unity of views in the Portage Bay area, it is reasonable to conclude that the project would not contribute to cumulative effects on visual quality at the regional level. This is why page 7-26 of the SDEIS and the Indirect and Cumulative Effects Discipline Report do not list specific mitigation measures. The Visual Quality and Aesthetics Discipline Report Addendum describes urban design measures that will be used to develop context-sensitive design approaches and landscape treatments in the corridor. Mitigation is associated with adverse effects under NEPA. Please also see the response to Comment F-002-021.

F-002-081

Please see the responses to comment F-002-023. The Preferred Alternative would result in reduced noise levels at NOAA NWFSC from traffic on SR 520, compared to the No Build Alternative and to existing conditions. Noise walls are not recommended on the Portage Bay Bridge.

F-002-082

As stated in the response to Comment F-002-001 and described in the Final EIS, the Preferred Alternative would not require the relocation of any of the buildings on the NOAA NWFSC campus. The SDEIS discussed the possibility of constructing the project in separate phases over time, with the vulnerable structures (the Evergreen Point floating bridge, west approach bridge, and Portage Bay bridge) built first. This

“Phased Implementation scenario” was analyzed for each environmental resource. Due to the funding shortfall, FHWA and WSDOT still believe it is prudent to evaluate the possibility of phased construction of the corridor should full project funding not be available by 2012. Currently committed funding is sufficient to construct the Evergreen Point floating bridge and landings; a Request for Proposals has been issued for this portion of the project, with proposals due in June 2011. Accordingly, the Final EIS discusses the potential for the floating bridge and landings to be built as the first phase of the SR 520, I-5 to Medina project. This differs from the SDEIS Phased Implementation scenario, which included the west approach and the Portage Bay bridge in the first construction phase. See Section 2.8 of this Final EIS for further discussion, and Sections 5.15 and 6.16 of this Final EIS for description of the effects associated with the revised potential phasing. With revised potential phasing, many effects in the Montlake area would not occur until full buildout. Revised phasing would not require construction of interim connections to the Lake Washington Boulevard ramps.

See the response to Comment F-002-011 for additional discussion of construction durations.

F-002-083

Please see the response to Comment F-002-001 and other comments above regarding ongoing coordination between WSDOT and NWFSC staff to consult about the design of the Preferred Alternative, potential effects, and appropriate mitigation measures.

F-002-084

As a result of comments received on the SDEIS, Section 1.10 of the Final EIS provides additional information regarding project costs, including mitigation costs. More detailed estimates of mitigation costs will be developed as project design progresses.

F-002-085
The distribution list in the Final EIS reflects this correction.

F-002-086
The comment appears to pertain to Exhibit 4. Exhibit 4 is intended to portray the Montlake area. Exhibit 5 portrays the Portage Bay Bridge area and includes the entire NOAA NWFSC property, and a number of other exhibits in the Draft Section 4(f) Evaluation show the project and the NOAA NWFSC property at a larger scale.

Noise walls are portrayed as “potential” because, even where recommended based on the findings of the Noise Discipline Report and the FHWA’s reasonability and feasibility determinations, the decision to build them depends on neighborhood interest. Based on the results of the noise analysis for the Final EIS, noise walls are not recommended under the Preferred Alternative in the Seattle portion of the I-5 to Medina corridor, except potentially along I-5 in the North Capitol Hill area where the reasonableness and feasibility of a noise wall is still being evaluated (see Section 5.7 of the Final EIS).

F-002-087
The statement on page 29 of the Draft Section 4(f) Evaluation describes properties within the project’s affected environment that are protected by Section 4(f). The statement on page 30 lists potential de minimis determinations, which pertained to the NOAA NWFSC property under Options K and L. Page 75 states that there would be a Section 4(f) use of the NOAA NWFSC as a result of Option A. See Exhibits 38, 44, and 49 for a summary of Section 4(f) use impacts under Options A, K, and L, respectively.

The Preferred Alternative, which is evaluated in the Final Section 4(f) Evaluation (Chapter 9 of the Final EIS) includes an alignment shift to the south at the east end of the new Portage Bay Bridge (see Chapter 2 of

the Final EIS for a description). This shift means that the Preferred Alternative would not require the relocation of any of the buildings on the NOAA NWFSC campus; however, it would require acquisition of some property or a permanent easement in the eastern portion of the campus for the new alignment of the Bill Dawson Trail and associated retaining wall. Therefore, under the Preferred Alternative, the NOAA NWFSC property would experience a Section 4(f) use as a historic resource eligible for listing on the National Register of Historic Places (NRHP). As required by 23 CFR 774, WSDOT has incorporated all possible planning to minimize harm to Section 4(f) properties.

F-002-088

The existing ownership of the land on which the Bill Dawson Trail is located was described on Page 33 of the Draft Section 4(f) Evaluation; however, it was inaccurate with regard to NOAA, and has been corrected in the Final Section 4(f) Evaluation (Chapter 9 of the Final EIS). The trail is not currently located on NOAA property. Potential relocation of a portion of the trail under Option A is discussed on page 65, stating that there would be no change in land ownership of the affected trail segment; this, too, has been corrected in the Final Section 4(f) Evaluation. The Preferred Alternative would also require acquisition of some NOAA property or a permanent easement for the new alignment of the trail and associated retaining wall. WSDOT continues to work with NWFSC and NOAA staff to clarify real estate boundary and ownership issues related to the campus, and will continue to coordinate with NOAA NWFSC to ensure that project effects on the campus are minimized or mitigated as much as possible.

F-002-089

The NWFSC campus will not be used as a mitigation site. With the Preferred Alternative, WSDOT would acquire a temporary construction easement on the NOAA NWFSC property (see Exhibit 7 in the Land Use, Economics, and Relocations Discipline Report Addendum, as well

as responses to Comments F-002-016 and F-002-024). The Final Section 4(f) Evaluation provides evaluation of the Preferred Alternative. See also the response to Comment F-002-087 regarding the findings of this evaluation.

F-002-090

Comment noted. Correspondence from NOAA is included in attachments to the Section 4(f) Evaluation, as appropriate.