From: Reinbold, Stewart G (DFW) [mailto:Stewart.Reinbold@dfw.wa.gov]

Sent: Monday, April 12, 2010 4:14 PM

To: SR 520 Bridge SDEIS (2) Subject: WDFW SDEIS comments

WDFW comments attached.

Please send me a email letting me know you received this email.

Thanks Stewart

Stewart G. Reinbold Assistant Regional Habitat Program Manager Washington Department of Fish and Wildlife Region Four, Issaquah Office Tel: 425-313-5660

Cell: 425-301-9081 Fax: 425-427-0570



State of Washington

Department of Fish and Wildlife

Mailing Address: 1775 12th Avenue NW, Suite 201, Issaguah, WA 98027 (425) 313-5660

April 12, 2010

Jennifer Young SR520 Project Office 600 Stewart Street, Suite 520 Seattle, WA 98101

Dear Mrs. Marsha Tolon,

SUBJECT: WDFW SR 520 Supplemental DEIS Comments

First I would like to thank you for giving the Washington Department of Fish and Wildlife (WDFW) the opportunity to comment on the SR 520 Supplemental DEIS.

S-001-001

Chapter 1 covers how the Westside Mediation A, K and L alternatives were adopted by WSDOT. What is not clearly stated is the differences between WSDOT's past A, K, and L alternatives and the adopted Westside Mediation alternatives. Bridge height and width is one clear example. The WDFW and other regulatory agencies have been and still are requesting this write-up covering the last seven years and how the alternatives have changed.

S-001-002

To assist in the review process, please show the pile spacing and size (from an aerial view), especially in the bridge section east of Foster Island to the floating bridge section, to allow a more complete review of each alternative.

S-001-003

A section needs to be added explaining why a cut and cover tunnel design approach will not work in the Arboretum area and why. Example: Potential to fish life, work window, etc... This area is the bottleneck for the entire Lake Washington system.

S-001-004

On page 4-66, the diagram showing the known sockeye spawning area does not exactly represent the information provided on the WDFW lakeshore sockeye spawning maps. Also the logic in the write up is flawed. Lake Washington lakeshore sockeye areas are based upon upwelling. This wouldn't have changed so there is the potential for sockeye to spawn here every year.

S-001-005

Potential affect to wildlife and wildlife habitat really needs to be completely reviewed.

S-001-001

Attachment 8 to the SDEIS, Range of Alternatives and Options Evaluated, describes the history of alternatives development in greater depth than SDEIS Chapter 1. The bridge heights and roadway widths of alternatives or options that were removed from further evaluation were only defined generally, in terms of lane width and bridge type in the SDEIS and the Range of Alternatives Discipline Report (Attachment 7 to the SDEIS). For Options A, K, and L, roadway width and bridge height are described in Chapter 2 of the SDEIS.

S-001-002

WSDOT has worked with the Department of Fish and Wildlife (DFW) during the Natural Resource Technical Working Group Process to provide engineering and improved scale drawings to assist regulators in assessing the potential impacts of the project on natural resources, including the possible locations and areas of piles and columns in the west approach area. The scale and detail of column/pile locations shown in the SDEIS and Final EIS is consistent with and sufficient for the Ecosystems analysis at the current stage of design.

S-001-003

As discussed on page 46 of the Construction Techniques and Activities Discipline Report, two types of tunnel construction would be employed for the construction of the tunnel included with Option K: cut and cover and sequential excavation method (SEM). Exhibit 20 of this report shows where each type of tunnel would be constructed.

Through the analyses conducted for the SDEIS, WSDOT determined that Option K would result in more impacts on natural resources than the other options. As discussed in the Ecosystems Discipline Report (Attachment 7 to the SDEIS) construction of the tunnel would result in impacts to the Ship Canal that other options would not.

S-001-005

Page 5-127, the relationship between height and width with shading can be defined. Page 39 of WSDOT's own light study (Summary and Minimization Section) is very clear on preferred bridge height and design features to maximize light to allow vegetation to grow. This is also part of the avoidance, minimization, then compensatory mitigation step process that WSDOT will need to show that it followed.

Chapter five covers the fish tracking study but critical information concerning the study is not given. What is the definition of hold (pause)? What is the timing information on the other third? What about coho and sockeye? Has any attempt been made to get an idea on amount of predator fish using the existing bridge as ambush? Also how the bridge height, pile size and spacing of the three alternatives might affect future juvenile out-migration and survivability? Not sure if I would agree that the Chinook are using the bridge as a shelter.

S-001-006

Page 6-85 talks about piling driving and mentions it will have relatively minor affect. Is this statement based upon the limited time windows that were agreed upon by the regulatory agencies at the sub-group work meetings? Also considering that now each year we have an annual adult salmon die off in the ship canal is adding additional stress by single or multiple pile driving really a relatively minor concern?

S-001-007

Page 6-102 Refers to ground freezing appears to be the most reasonable ground stabilization alternative. Once again what I do not see a write-up on why a cut and cover tunnel would not work.

Thank you for your time,

Stewart G. Reinbold Habitat Program

Stand & Kall

Cc: WDFW Olympia David Brock There is no tunnel proposed as part of the Preferred Alternative. If Option K were identified as the Preferred Alternative in the future, WSDOT would complete the necessary documentation as part of final design and permitting and ensure that negative effects associated with the tunnel are mitigated to the extent practicable.

S-001-004

The sockeye spawning information was derived from maps in a WDFW report that did not provide detailed descriptions or delineations. The SDEIS exhibit is only meant to show the general location of spawning. The text does not state that spawning no longer occurs in the area, only that no surveys have been conducted in the area recently.

Based on data from other beach spawning areas, spawning at this site may not occur every year. Subsequent geotechnical surveys found more offshore groundwater upwelling in the East Approach area than originally estimated in the SDEIS. The upwelling supports the potential for sockeye spawning habitat in the area (see the Ecosystems Discipline Report Addendum in Attachment 7 to the Final EIS).

S-001-005

The Preferred Alternative effects to ecosystems were reviewed during preparation of the Final EIS, and included special consideration of issues raised during the public comment period. See the Ecosystems Discipline Report Addendum in Attachment 7 to the Final EIS for the following:

- Updated analysis of wildlife and habitat
- A clearer description of the relationship between bridge height and width and the light conditions underneath
- A clearer definition of the fish tracking studies, as well as predator distribution information. (In regard to Chinook salmon, the term used in the SDEIS is cover, not shelter, because this term was used in the tracking study report.)

• Results of the test pile program, with regard to underwater noise levels generated by pile driving

S-001-006

The rationale for the determination that noise from driving piles would cause only minor effects is based on both working within the approved in-water work windows, and the results of the 2009 test pile evaluation conducted in the project area. See the response to Comment S-001-005 regarding pile driving.

S-001-007

Please see the response to Comment S-001-003.