# I-5 Marvin Rd to Mounts Rd Planning and Environmental Linkages

Agency Coordination Group Meeting #4 Summary

**Meeting purpose**

The purpose of the Agency Coordination Group (ACG) meeting was to:

- Build awareness of Environmental Existing Conditions
- Discuss Initial (Level 1) Alternatives Evaluation Results
- Gather input on Detailed (Level 2) Alternatives Evaluation Results

**Meeting logistics**

April 17, 2023, 9:00 a.m. – 11:00 a.m.
Virtual Meeting

**Attendees**

*ACG Participants*

- Dan Sacks, Joint Base Lewis McChord
- David Troutt, Nisqually Indian Tribe
- Dennis Wardlaw, Department of Archaeology and Historic Preservation
- Glynnis Nakai, Billy Frank Jr. Nisqually National Wildlife Refuge
- Joe Cushman, Nisqually Indian Tribe
- Marty Chaney, Natural Resources Conservation Service
- Matthew Pahs, Federal Highway Administration
- Penny Kelley, Washington State Department of Ecology
- Portia Leigh, Washington Department of Fish and Wildlife
- Sharon Love, Federal Highway Administration
- Susan Sturges, Environmental Protection Agency

*WSDOT Project team*

- Ashley Carle, WSDOT Project Team Leadership
- George Mazur, WSDOT Project Team Leadership
- John Perlic, Parametrix Project Team Leadership
- Hayley Nolan, PRR
- Jenifer Young, Parametrix
- Kirk Wilcox, Parametrix
- Lauren Wheeler, PRR
- Rachel Durham, Parametrix
- Sharese Graham, SCJ Alliance

**Meeting Opening, Purpose and Goals**

The I-5 Marvin Rd. to Mounts Rd. Planning and Environmental Linkages (PEL) Study Agency Coordination Group (ACG) met for the fourth time on Monday, April 17, 2023. The WSDOT study team began the presentation by welcoming participants, reviewing the agenda, and leading the ACG through introductions. The study team provided best practices and guidance for engaging using Zoom features during the meeting.



*Prepared by: Hayley Nolan*
*Reviewed by: Lauren Wheeler*
*Accepted by: Ashley Carle*

The study team convened the ACG to receive input, facilitate active participation, and build an understanding of the PEL process among local agency representatives. In the fourth ACG meeting, participants will build awareness of Environmental Existing Conditions, discuss initial (Level 1) Alternatives Evaluation results, and provide input on detailed (Level 2) Alternatives Evaluation results.

The responsibilities of the ACG include:

- Representing agencies and resources in the study area
- Providing data and input on direction of study
- Advising on range of alternatives and alternatives evaluation criteria
- Helping to build consensus and support for alternative(s) selection

**Schedule and study process**

The team reviewed the study schedule and status. The study is on track with the planned schedule, working to reach concurrence point number three in early May, which will focus on the Alternatives Evaluation. Concurrence point number four, planned for July, will focus on the final PEL Report.

The study team provided a recap of Meeting 1, held on January 11, 2023, Meeting 2, held on February 13, 2023, and Meeting 3, held on March 13, 2023. During Meetings 1 - 3, the study team shared the project background and desired outcomes of the study, advisory groups reached consensus on the Conceptual Purpose and Need and Alternatives and existing data sources, and participants shared feedback on the Alternatives Evaluation Process, including Level 1 and Level 2 criteria, and the initial (Level 1) Alternatives Evaluation results.

**Existing conditions**

Jenifer Young (Parametrix) provided an overview of the list of existing conditions the study team has analyzed. Advisory groups members are encouraged to reach out to the study team for a copy of a report they would be interested in reviewing. Email request to Ashley Carle at Ashley.Carle@wsdot.wa.gov.

| Element | Results |
|---|---|
| **Stormwater and Water Quality** | *Stormwater*<br>• Drainage is generally collected in catch basins and conveyed by ditches to nearby waterbodies<br>• No treatment except in vicinity of Exits 111 and 116<br><br>*Water Quality*<br>• Portions of Nisqually River, McAllister/Medicine Creek & Red Salmon Creek on 303(d) list for temperature, fecal coliform |
| **Wetlands and Streams** | *Wetlands*<br>• 23 wetlands identified:<br>• 11 Category I<br>• 6 Category II<br>• 6 Category III<br>• Moderate to high biological, chemical, & physical functions |

| Element | Results |
|---|---|
| | *Streams*<br>• Nisqually River, McAllister/Medicine Creek, Red Salmon Creek + unnamed tribes & backwater sloughs |
| **Vegetation, Wildlife, and Fish** | *Vegetation*<br>• Mature upland and riparian forest; estuarine and freshwater wetlands<br>• 2 ESA listed plant species<br><br>*Wildlife*<br>• Study area overlaps with 8 WDFW priority habitat areas<br>• 9 listed and 1 proposed wildlife species<br><br>*ESA Listed Fish Species*<br>• Bull trout*<br>• Chinook salmon*<br>• Steelhead*<br>• Boccacio rockfish<br>• Yelloweye rockfish<br>** designated critical habitat in study area* |
| **Floodplains and Sea Level Rise** | *Floodplains*<br>• Entire valley mapped as floodplain<br>• Base (100-yr) flood elevation = 15.7 feet at I-5<br>• FEMA maps are being updated<br><br>*Channel Migration*<br>• WSDOT has documented Nisqually River migration; avulsion may affect I-5 in 10-15 years |
| **Geology and Soils** | *Topography and Soil Types*<br>• Upland soils: Vashon till and Vashon advance outwash<br>• Valley soils: Recent alluvial deposits<br><br>*Geologic Hazards*<br>• Landslides<br>• Liquefaction<br>• Volcanic Hazards |
| **Visual Quality** | *Visual Resources*<br>• Built environment around interchanges<br>• Forested areas<br>• Nisqually River Valley<br><br>*Viewers*<br>• Travelers on I-5<br>• Refuge users<br>• Homes and businesses closest to corridor |



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| Element | Results |
|---|---|
| | |
| **Air Quality** | *Air Quality*<br>• Nisqually Valley is an environmentally sensitive area<br>• Area is currently in compliance with all AQ standards<br>• I-5 corridor currently exceeding highway design capacity during peak travel periods<br>• Traffic volumes are currently higher than pre-COVID |
| **Cultural and Historic Resources** | *Recorded and Known Resources*<br>• 6 archeological sites<br>• 5 inventoried historic resources<br>• Medicine Creek Treaty National Memorial<br><br>*Survey*<br>• 5% of project area covered by previous intensive survey<br>• Unrecorded aboveground and belowground resources may be present |
| **Noise** | *Noise Sources*<br>• I-5 Traffic<br>• WSDOT dBA criteria = 66<br>• Existing noise levels range from 65-73 dBA<br><br>*Sensitive Receivers*<br>• Residences adjacent to corridor<br>• Billy Frank Jr. Nisqually National Wildlife Refuge |
| **Hazardous Materials** | *Known Sites*<br>• 109 active sites within 1 mile<br>• 37 sites of potential concern<br>• 5 active cleanup sites within ¼ mile |
| **Land Use and Farmlands** | *Land Use*<br>• City of Lacey<br>• Thurston & Pierce Counties<br><br>*Farmlands*<br>• Prime & Statewide Importance<br>• Active agricultural production south of I-5<br><br>*Section 6(f) Resources*<br>• LWCF projects within refuge |
| **Section 4(f)** | *Recreation*<br>• Eagle's Pride golf course<br>• Hawk's Prairie Off-Leash Dog Park |



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| Element | Results |
|---|---|
| | • WSU Closed Loop Park Demonstration Garden<br><br>*Wildlife Refuge*<br>• Billy Frank Jr. Nisqually National Wildlife Refuge<br><br>*Historic Resources*<br>• Medicine Creek Treaty National Memorial |

*Discussion*

- Marty Chaney (Natural Resources Conservation Service) asked if Federal Emergency Management Agency (FEMA) flood categories will change if the project removes fill from the I-5 corridor.
    - Jenifer Young (Parametrix) responded that the project team will examine this topic and study what happens to flood plains when fill is removed from the corridor.
- Marty Chaney asked if the team is including runoff from developed uplands (particularly on the west side of the valley) in runoff volumes.
    - Jenifer said yes, the team will account for runoff from developed uplands in design of future stormwater treatment facilities.
- Sharon Love (Federal Highway Administration) asked if Eagles' Pride golf course is publicly owned.
    - The team responded that the golf course is not publicly owned, it's owned by JBLM. But it is open to the public.
- Glynnis Nakai (Billy Frank Jr. Nisqually National Wildlife Refuge) asked the team to clarify 6(f) requirements related to using Land and Water Conservation Funds (LWCF).
    - Sharese Graham (SCJ Alliance) said the parcels of land purchased with LWCF funds are closer to the delta and do not overlap with the project study area. The study team will do more research to verify the parcel information. The team is paying close attention to these areas and will follow through with the appropriate coordination.
- Sharon Love asked a clarifying question on if there is 6(f) anywhere in a resource where other requirements would be applied.

The team acknowledged there is a difference between 4(f) and 6(f) requirements. With 6(f) requirements, you treat the whole area as if it is an acquisition. It was determined afterwards that if even one parcel within the refuge is acquired with LWC funds, Section 6(f) applies to the entire resource (refuge).

**Initial Alternatives Evaluation Results**

The project team will eliminate the following unreasonable alternatives from consideration. Project purpose categories are bolded for reference.

*Alternative 1 (Operations Improvements)*

- Low performance in the ***Enhance Mobility and Connectivity*** category
    - Higher traffic congestion for GP vehicles, transit, and trucks

- Does not improve transit travel time compared to GP vehicles
- Highest traffic diversion to local roadways
- Minimal increase in person and freight throughput

- Low performance in the ***Economic Vitality*** category
  - Higher travel time on I-5 for trucks and freight movement
- Similar performance to Alternatives 2, 3, and 4 in other categories

*Alternative 4 (Lane Conversion from GP to HOV lane)*

- Low performance in the ***Enhance Mobility and Connectivity*** category
  - Higher traffic congestion for GP vehicles and trucks
  - Some traffic diversion to local roadways
  - Minimal increase in person and freight throughput
  - Does not Compliment Local and Tribal Planning Efforts
- Low performance in the ***Economic Vitality*** category
  - Higher travel time on I-5 for trucks and freight movement
- Similar performance to Alternatives 1, 2, and 3 in other categories

*Design Option D (high-level, long span bridge)*

- Removal of the Nisqually interchange
  - Ramp connections to the high-level bridge are not feasible
  - Impact to freeway-oriented businesses
  - Local street traffic increases
  - Higher emergency response times
- Property impacts outside of WSDOT right-of-way
- Highest estimated cost

Of the remaining alternatives and bridge options, participants expressed greatest support for Alternative 2 (84%) and 3 (68%) and bridge Design Options B (67%) and C (85%) during Meeting Series 3. Design Option A (33%) received less support.

**Detailed Alternatives Evaluation Criteria Updates**

For Level 2 analysis, the study team used the same evaluation criteria as Level 1 analysis, except for the following updates:

Additionally, Level 2 analysis uses an expanded rating scale with 5 colors. The study team also added quantitative analysis results to several evaluation criteria and looked at existing conditions of all resources in the corridor that have the potential to be impacted. A new criterion was added under ***Enhance Mobility and connectivity*** for “Consistency with WSDOT policy”.

*Discussion*

- Mathew Pahs (Federal Highway Administration) asked how freight mobility would benefit from Alternative 3 rather than Alternative 2 since larger trucks would not be able to use the left lane as a general-purpose lane.

- John Perlic (Parametrix) explained the team's traffic modeling shows a higher level of congestion relief with Alternative 3, that moves it into the higher performing category.

**Detailed Alternatives Evaluation Results**
The study team reviewed the focus of Level 2 analysis and the descriptions and common features of each remaining alternative and design option before previewing the preliminary results.

Enhance mobility and connectivity

*Preliminary results*

- Alternative 2 is rated higher in the Accommodates Transit modes and Provides Congestion Relief for Transit and HOV's because of the HOV/transit priority lane
- Alternative 2 is rated higher in the Consistency with WSDOT Policies category
- Alternatives 3 is rated higher in the Increases Person and Freight Throughput categories

System resiliency

*Preliminary results*

- Alternative 2 and Alternative 3 have the same footprint impact in the corridor
- Option C rates highest in reducing the risk of infrastructure failures followed by Option B and Option A
- Longer bridge lengths remove more fill material reducing the risk of infrastructure failure from Nisqually River movement
- Risk of infrastructure failure due to seismic activity is the same for all Options—new bridges will be designed to the same seismic standard

Environmental restoration and ecosystem resiliency

*Preliminary results*

- Alternative 2 and Alternative 3 have the same footprint impact in the corridor
- The longest bridge, Option C, enables the most environmental restoration and ecosystem resiliency followed by Option B and Option A

Economic vitality

*Preliminary results*

- Alternatives 2 and 3 and all bridge options do not impact river navigability
- Alternative 3 performs more reliably for freight movement due to a higher level of congestion reduction compared to Alternative 2
- Alternative 2 provides a higher level of transit access to opportunities compared to Alternative 3

Equitable outcomes

*Preliminary results*

- Alternative 2 and Alternative 3 have the same footprint impact in the corridor, resulting in the same impact on business and residential impacts or displacements
- Alternative 2 and Alternative 3 have the same minimal impact to emergency response
- The longest bridge, Option C, minimizes the flood risk potential for EJ populations the most followed by Option B and Option A

Relative cost

The team prefaced preliminary results by saying this is a very high-level look at cost that primarily looks at cost of construction and doesn't consider other factors.

*Preliminary results*

- Alternative 2 and Alternative 3 have the same cross-section and construction staging plan, and would result in the same cost depending on the Bridge Option A, B, or C
- The estimated cost for Option C is highest and Option A the lowest

Summary

The project team reviewed the overview of Level 2 results once more before summarizing the findings of the analysis. Project purpose categories are bolded for reference.

- Alternative 2 rates slightly higher than Alternative 3 overall, with higher ratings in the ***Enhance Mobility and Connectivity*** category
    - Alternative 2 rates higher in Accommodating Transit Modes and Providing Congestion Relief to HOV/Transit
    - Alternative 2 has a substantially higher degree of consistency with WSDOT Policy
        - Continuity with the funded I-5 HOV lanes north of Mounts Road
        - Consistency with Statewide climate change and greenhouse gas emission reduction goals
- In the ***Economic Vitality*** category
    - Alternative 2 is rated higher than Alternative 3 for the Multimodal Access to Opportunities Category
    - Alternative 3 is rated higher than Alternative 2 for the Freight Reliability criteria
- All ratings in other categories are the same with differences among Options A, B, and C only
- Option C rates slightly higher than Option B and Option A overall, with higher ratings in the ***System Resiliency***, ***Environmental Restoration,*** and ***Equitable Outcomes*** categories
- Option C rates lower (highest cost) than Option B and Option A (lowest cost) in the ***Planning Level Cost*** category. The incremental environmental benefit of Option C compared to other options may not be commensurate with the added cost of Option C.



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- Option A and Option B both address ***System Resiliency and Environmental Restoration*** by providing a natural connection from the Nisqually River to the north overflow channel

*Discussion*

- David Troutt (Nisqually Indian Tribe) shared in the chat that there is a significant environmental benefit to the 12,000' opening.

***Poll #1: Based on the evaluation, which alternative do you support to be evaluated during NEPA?***

a) Alternative 2 – Widen I-5 for HOV lanes (8/8 or 100%)
b) Alternative 3 – Widen I-5 for General Purpose Lanes (3/8 or 38%)

***Poll #2: Based on the options, which alternative do you support to be evaluated during NEPA?***

a) Design Option A – 3,000 ft (5/8 or 63%)
b) Design Option B – 6,000 ft (5/8 or 63%)
c) Design Option C – 12,000 ft (6/8 or 75%)

**Next steps**

The study team shared the following next steps:

- Post meeting materials for review
- ACG members can request Existing Conditions Memos for early review
- Review and comment request on Detailed (Level 2) alternatives evaluation
- Updated Detailed evaluation results will be sent before May meeting
- Let us know if you haven't received the May 15 calendar invite

The final ACG meeting is on May 15, 2023.

***The meeting adjourned at 10:15 a.m.***



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