Updates on Vessel Movement Module Webinar Notes 11/19/20

Ecology Staff:

Brian Kirk, Prevention Section Manager

Jase Brooks, Legislative Policy Analyst and Tribal Liaison

Adam Byrd, Research and Information Technology Unit Supervisor

Kim Morley, Program Rule and Process Coordinator

Sonja Larson, Response Technology Specialist

Alex Suchar, Expert Model and Analysis Scientist

JD Ross Leahy, Maritime Risk Modeling Specialist

Justine Asohmbom, Shorelines and Stormwater Education Manager

Rachel Assink, Washington Sea Grant Hershman Fellow

Participants:

Alan Sorum, Prince William Sound Regional Citizens'

Advisory Council

Bettina Maki, WA Board of Pilotage Commissioners

Bob Poole, Western States Petroleum Association

Bonnie Gee, B.C. Chamber of Shipping

Brendan Cowan, San Juan County Emergency

Management

Casey Dick-Wyatt, Tsawout First Nation

Chris Wills, Port of Longview

David Berliner, U.S. Coast Guard, Marine Safety Unit

Portland

Don Pettit, OR Department of Environmental Quality

Gary Greene, Moss Landing Marine Labs, Tombolo

Mapping Lab

Heather Stebbings, Shaver Transportation Company

Jaimie Bever, WA Board of Pilotage Commissioners

John Fu, U.S. Coast Guard

John Veentjer, Marine Exchange of Puget Sound

Kate Mickelson, Columbia River Steamship Operators'

Association

Kim Pearce, Transport Canada

Kris Faucett, Lund Faucett

Liz Wainwright, Maritime Fire and Safety Association

Lovel Pratt, Friends of the San Juans

M. W. (Mac) McCarthy, Mac McCarthy, Inc.

Martin Teachout, Trident Seafoods

Norma Serra, University of Victoria

Rein Attemann, Washington Environmental Council

Richard Vincent, *Port of Portland*Rick LaBlond, *Shell Trading N.A.*

Ross McDonald, Sause Bros.

Shayne Cothern, WA Dept of Natural Resources

Sheri Tonn, WA Board of Pilotage Commissioners

Sol Kohlhaas, *Marathon Petroleum* Sven Titland, *Centerline Logistics*

Tessa Coulthard, Clear Seas Centre for Responsible

Marine Shipping

Todd Hass, Puget Sound Partnership

Tom Ehrlichman, Swinomish Indian Tribal Community

Valerie Chu, US Fish and Wildlife Service

The following summary notes are not intended to be a transcript but rather a review of the discussion session. Participant questions and comments are shown in bold text followed by Ecology responses.

It looks like you have general cargo listed on both "route" and "non-route based" list. Shouldn't it be on partially route-based list? (John Fu)

JD Leahy: The text is missing a differentiation based on length. Cargo vessels over 40 meters are classified as route based vessels and cargo vessels under 40 meters like landing craft or other smaller vessels, would be nonroute based.

With respect to risk and consequence, will there be a taxonomy feature that differentiates laden from inballast tankers? Possibly through Vessel Type Codes or equivalent? (Mac McCarthy)

JD Leahy: The vessel taxonomy we've been talking about is geared toward facilitating vessel movement. It's not necessarily the same set of categories that we'll use in later modules. As you point out, we are going to have to figure out a way to assign laden or in ballast status. That will be assigned at a later point in the simulation. Our general thought is that we will be creating a set of assumptions to make that assignment.

Alex Suchar: After we get the vessel movements figured out, we'll have to look at this issue. It will definitely be something we address, though not from a vessel taxonomy point of view.

What are the plans for the Columbia River system? If it will be included, what is the timeline? (Richard Vincent)

JD Leahy: The mandate from the legislature is to build a model that addresses oil spill risk in all Washington waters. That said, the first two analyses we are assigned are focused on the Salish Sea. We are building a model that we think will be adaptable to all Washington waters, but right now, in terms of data and analysis, we are focused on upcoming analyses that are associated with the Salish Sea. We don't have any analyses assigned to us that are linked to the Columbia River currently.

The hydrology of the Columbia River is so much different than the Salish Sea and I am wondering how you'll address that. It's probably too soon for you to answer, but it is a very different system. (Richard Vincent)

JD Leahy: There are a lot of differences in the type of vessels and hydrology as you mentioned. We think that our foundational model will be able to be used in any assigned investigation of the Columbia or the Snake River. Though the components that make up those modules will have to be different. We are hopeful we can use the same foundation, but there will be a lot of work to do to address differences that you allude to.

Brian Kirk: We do have some insight into watching an organization go through the process of modifying a risk model for the Columbia River, and we'll draw on that experience.

Would the question about differentiating laden vs. in ballast tankers apply to barges as well? I was curious if you figured out a way to identify if towing vessels are towing a barge or not. And if you will know what they are towing? (Lovel Pratt)

JD Leahy: Yes, that will carry over to barges as well. We'll have to have a method for determining fuel amount on any vessel, so we'll be coming up with assumptions to assign various values for amount and type of oil on a vessel. Similarly, we'll have to come up with a set of rules or assumptions to figure out if a towing vessel is towing or not. We may find that based on the routes used, we may be able to assume if they are towing or not.

All those assumptions will need to be validated in some way. In terms of what they are towing, for purposes of the model, this isn't as crucial, in terms of if it's a container barge or log barge. That's less relevant to spill risk.

I know other datasets that Ecology collects don't differentiate between the Vendovi anchorages and Jack Island anchorages and the other anchorages in that area. I just want to confirm that you will be treating those anchorages separately? (Lovel Pratt)

Adam Byrd: We are looking at published areas for anchorages, and historical data to see where people are using anchorages. Each of those will be distinct locations.

Does the waypoint framework in the model artificially turn the waypoints into locations that are more likely to have incidents in the model? If a waypoint is one single point, and you have multiple vessels from multiple areas all coming to that same point, does that increase the risk? (Ross McDonald)

JD Leahy: In this case, the "waypoints" are actually represented as lines, not points. Vessel tracks in the simulation will cross specified lines, but the vessels won't converge on a single point. This shouldn't result in an artificial increase in risk.