Southern Resident Killer Whale Executive Order Immediate Action Report May 1, 2018

Executive Order Task
Develop strategies for quieting state ferries in areas most important to Southern Residents.

<table>
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<th>Completion Date</th>
<th>May 31, 2018</th>
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<tbody>
<tr>
<td>Lead Agency</td>
<td>Washington State Department of Transportation (WSDOT)</td>
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<tr>
<td>Agency Contact</td>
<td>Kevin Bartoy</td>
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Supporting Agencies, if applicable

Outcomes/Progress Narrative

Currently, WSF is pursuing research to understand the baseline sound levels of its fleet. This includes overall sound levels as well as the frequencies of most concern. As a pilot project, WSF is contracting with JASCO to analyze existing data recorded near the Seattle Ferry Terminal. If analysis is successful, WSF will move forward to analyze other existing data recorded at other terminals. Once existing data is analyzed, WSF will plan for new data collection to fill in any data gaps. The result of this effort will be baseline sound level data for the entire fleet.

Concurrently, as data becomes available, WSF will work to identify the sources for frequencies of concern coming from the vessels. Once sources are identified, WSF will develop countermeasures to lessen the sound levels from these vessels. WSF vessel engineering staff is aware of many potential measures that can be used as soon as there is a better understanding of what is generating frequencies of concern.

Recently, WSF issued a Fleet Advisory to be responsive to the Governor’s EO 18-01 in regards to lowering GHG emissions and moving towards a zero emissions fleet. The WSF Fleet Advisory set normal operating speeds by vessel class for the entire fleet based on hull size calculations, which will reduce overall speeds as crews are being advised that speed has a limited effect on making up schedules. While WSF needs the baseline data outlined above to be certain of the effect of these reductions on noise, in general, current science suggests that running at these normal operating speeds should have a co-benefit of noise reduction in addition to the reduction of fuel use.
In order to be further responsive to the Governor's interest in taking immediate actions this summer, WSF is also working to develop potential measures to be immediately implemented that may have a positive benefit on noise reduction. WSF is continuing to explore the feasibility of several measures, particularly as it relates to financial implications and on-time performance of vessels. These potential measures are as follows:

- Continue the slowdown of the WSF vessel run through Haro Strait as was done as part of a trial last year.
- Work with the Port of Vancouver’s ECHO Program (of which WSF is a member) to develop real time notification technology that can be used to identify cetaceans in the vicinity and allow the vessel time to take positive action, either through slowdown or displacement.
- Require all vessel deck and bridge staff to pass a soon-to-be-launched, online Marine Mammal Training Program hosted through ECHO and developed by BC Ferries and ECHO.
- Optimize trim on all vessels to potentially reduce pressure differential and cavitation. (This action is going to begin in the Fall of 2018 as part of WSF efforts to reduce GHG emissions, but it has a potential co-benefit with noise reduction as well.)