

## Mark or Uhart

I was disappointed the Second Supplemental Environmental Impact Statement (SSEIS) prepared for the proposed Kalama methanol plant didn't provide updated information on the potential effects the 4.6 million metric tons (MMT) per year would have on climate change and the survivability of Pacific NW shellfish, salmon and steelhead. The SSEIS references the U.S. Geological Survey (USGS) National Climate Change Viewer (NCCV) and states it "contains historical and future climate projections at county levels for the US. The viewer indicates that, in Cowlitz County, minimum temperatures are likely to rise and that both increases and decreases in precipitation may occur, depending on other variables."

What it didn't say, but was in the Final Supplemental EIS (FSEIS), was that the "Cowlitz County minimum temperatures are likely to rise by 3.8 to 4.3 degrees F and maximum temperatures by 4 to 5.4 F degrees by 2040." (See FSEIS Section 3.2.2 ♦ Greenhouse gases and climate change.) I checked the NCCV for Cowlitz County and the mean yearly temperature is expected to increase 5 degrees F by 2040. Juvenile salmonids released into the Columbia River, and adult salmon in the ocean, will not survive if water temperatures get much warmer, and it will with an increase of 5 degrees in ambient temperature.

Section 3.2 of the SSEIS also downplayed the effects of GHGs on climate change by stating, "Thus, equivalent GHG emissions originating from the proposed project would have the same effect as those from any other location (and vice versa). It is not meaningful to link a specific climate change directly to a specific emissions source." That's like saying they don't believe in climate change, because one huge hurricane hitting the Gulf Coast, or uncontrollable forest fires over a uniquely hot and dry summer in Western states in 2020, or a heavy snowstorm in Colorado in early September, don't in themselves prove climate change will impact Washington. We've heard this argument from the anthropogenic climate change deniers many times, but the IPCC (which was referenced in the same section), makes it clear that these GHGs will accelerate climate change. The above statement is also like saying it is not meaningful to link an infectious disease like COVID-19 to death rates on the other side of the world. The actions we take in the US, with respect to GHG emissions, will effect climatological changes in China, and vice versa. Air within the lower troposphere knows no boundaries.

In the FSEIS, "Table 2-1. Permits and Authorizations Required for the Proposed Project," with NOAA as the Agency and NEPA as the Permit/Authorization, it stated that there was a finding by NOAA of "No Significant Impact" in their assessment issued 10/24/2016. This is not a true statement.

The Portland office of the National Marine Fisheries Service (NMFS), subordinate to NOAA, rendered a biological opinion pursuant to section 7(a) (2) of the Endangered Species Act (ESA) on the effects of the proposal by the U.S. Army COE of Engineers (COE) in order to issue permits to the Port of Kalama for the construction of the KMMEF and lateral pipeline. It also included an essential fish habitat (EFH) consultation for the proposed methanol plant. The biological opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation listed 28 Endangered Species Act (ESA) threatened or endangered species within the

## Action Area.

NOTE: "Action area" means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 C.F.R. 402.02) The Action Area includes the interrelated and interdependent activities related to methanol transport, and includes not only the KMMEF and lateral pipeline, but also extends downstream through the Columbia River navigation channel and into the Pacific Ocean where effects from ship traffic will occur.)

The NMFS non-concurred with the COE's 10/9/15 biological assessment (BA) report by stating, "In that letter, the COE concluded that the proposed action is not likely to adversely affect (NLAA) LCR Chinook salmon, UWR Chinook salmon, UCR spring-run Chinook salmon, SR spring/summer-run Chinook salmon, SR fall-run Chinook salmon, Columbia River chum salmon, LCR coho salmon, SR sockeye salmon, LCR steelhead (*O. mykiss*), UWR steelhead, MCR steelhead, UCR steelhead, SRB steelhead, and southern distinct population of eulachon. The COE also concluded that the proposed action is NLAA Snake River (SR) sockeye salmon (*O. nerka*), southern distinct population of eulachon and southern distinct population of green sturgeon (*Acipenser medirostris*), (hereafter referred to as green sturgeon). However, the NMFS non-concurred with DOE's BA report and stated, "Due to the short- and long-term indirect impacts caused by the proposed project, NMFS does not concur with the COE's determination that the proposed action is NLAA for most species. ... We also concur that the proposed action will adversely affect critical habitat for any of these species (emphasis added.)"

It should be noted that although NMFS participated in pre-application meetings with NWIW, the Port of Kalama, many state departments, and other governing stakeholders, the COE was not part of these meetings/discussions until 3/16/16, at which time the Corps informed NMFS that the DOE would be a cooperating agency on the project. Many meetings with these stakeholders followed between 10/21/15 and 9/27/17, collaborating on mitigation efforts, water quality and dredging, dredge disposal, outfall design and temperature discharge, ballast water and chemical constituents in the outfall discharge, and other concerns. This author cannot find any discussion among these stakeholders on mitigating GHGs, or the project's long-term effect on climate change. This is anomalous considering NMFS's non-concurrence with the DOE BA, whereas NMFS determined that the project was "likely to adversely affect" 19 of the 24 ESA-listed threatened or endangered species and their habitat.

It appears that many of the KMMEF construction-related effects can be mitigated through "Reasonable and Prudent Measures" and by following the proposed "Conservation Recommendations." But good governance requires methods of compliance and without surveillance and inspections during the two year construction period, by a non-biased environmental engineer, and oversight by Ecology, what assurance is there that these prudent measures and recommendations will be followed?

The greater concern is the long-term effects of 40-years of GHG emissions, which was the NMFS's primary reason for non-concurrence with the COE's BA. Ecology must take note that this facility will be responsible for a whopping 185 MMTs of unmitigated GHGs. The only acceptable mitigation would be to sequester 100% of the GHGs for which this facility will be responsible, from natural gas extraction to the burning of the methanol as a fuel, not just the in-state GHGs as proposed in the VMF. Ecology's decision will impact Washington and our iconic fisheries for not

just the next 40 years, but for as long as humans exist on earth.