

# Scott Starbuck

Director Watson and Dept. of Ecology:

I have fished the Columbia River and her tributaries for 50 years, and I'm concerned about impacts on salmon. I worked the Pacific Ocean as a commercial salmon troller and charter captain, and now I mainly fish the rivers.

In addition to climate impacts, I understand the proposed gas-to-methanol site is unstable as noted in the draft EIS explaining soil at the plant site has a "moderate to high liquefaction susceptibility" in the event of an earthquake.

I saw a July 13, 2015, New Yorker article by Kathryn Schulz noting "In fact, the science is robust, and one of the chief scientists behind it is Chris Goldfinger. Thanks to work done by him and his colleagues, we now know that the odds of the big Cascadia earthquake happening in the next fifty years are roughly one in three." The article continues "In the Pacific Northwest, the area of impact will cover some hundred and forty thousand square miles, including Seattle, Tacoma, Portland, Eugene, Salem (the capital city of Oregon), Olympia (the capital of Washington), and some seven million people. When the next full-margin rupture happens [odds are 'are roughly one in ten'], that region will suffer the worst natural disaster in the history of North America, outside of the 2010 Haiti earthquake, which killed upward of a hundred thousand people."

Therefore, I imagine building the world's largest fracked gas-to-methanol refinery in Kalama is about as smart as building the Fukushima Daiichi Nuclear Power Plant in Ōkuma, Fukushima Prefecture, near the Pacific Ocean about 33 feet above sea level partly to reduce operating costs of seawater pumps. You know the result of that. Charles Perrow wrote in the April 1, 2011 issue of the Bulletin of the Atomic Scientists "Currently our approach to risk is 'probabilistic,' and the probability of a tsunami seriously damaging the Fukushima Daiichi plant was extremely small. But we should also consider a worst-case approach to risk: the 'possibilistic' approach, as Rutgers University sociologist Lee Clarke calls it in his 2005 book Worst Cases: Terror and Catastrophe in the Popular Imagination. In this approach, things that never happened before are possible. Indeed, they happen all the time."

In short, in addition to the obvious climate impacts, a one in three chance of a big earthquake hitting Kalama in the "next fifty years" should be enough risk to say "No."

Sincerely,

Scott T. Starbuck