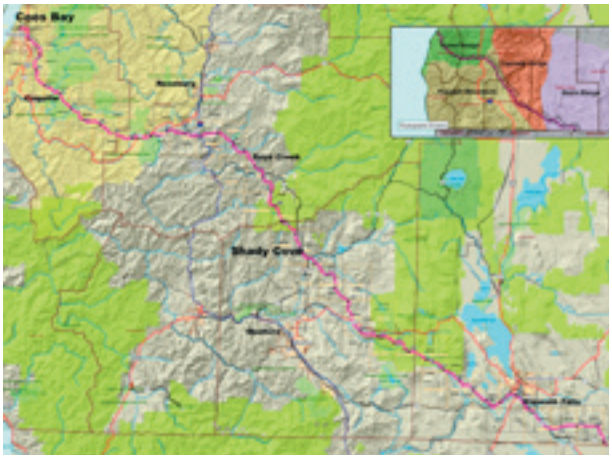
Liquefied Natural Gas Threatens Rogue River Basin

On December 17, 2009, the Federal Energy Regulatory Commission (FERC) approved the Jordan Cove/Pacific Connector Liquefied Natural Gas (LNG) import facility in Coos Bay and associated pipeline across Coos, Douglas, Jackson and Klamath Counties. There are a multitude of concerns about this project, including threats to public safety, the environment and private property rights.

LNG projects in Oregon would make us more dependent on imported fossil fuels that are more expensive than domestic natural gas and have a much larger carbon footprint.

FERC did the public a disservice in a deeply flawed analysis of the project that has drawn the ire of state and federal agencies, private landowners and various stakeholders. FERC neglected to fully analyze the proposal, including impacts on water quality, water supplies, wetlands, wildlife, salmon, safety, habitat, old-growth and invasive species. FERC did not provide a detailed or clear basis for some of its conclusions, but rather made significant natural resource decisions based on an inadequate body of information. Perhaps most troubling, FERC has failed to demonstrate a need for this project.



The pipeline would run 235 miles with 379 waterbody crossings in the Coos, Coquille, Umpqua, Rogue and Klamath Basins.

The project would impact Coos Bay and the Coquille, Umpqua, Rogue and Klamath Basins. The project would require dredging 5.67 million cubic yards of sediment across 53 acres of the Coos Bay estuary for the purpose of constructing a LNG import terminal, which poses significant threats to adjacent communities, fish and aquatic life. The 235-mile, 36-inch high-pressured gas pipeline would be placed through Coos Bay and permanently impair streams, wetlands, and sloughs, along with causing associated deleterious impacts to upland habitat, forest, farm, recreational, and residential uses. The pipeline would require 379 waterbody crossings, clear-cutting of 270 acres of remaining old growth forests on public lands in Oregon, cross steep and remote terrain prone to landslides where emergency response is limited to local volunteers, impact and permanently impair more than 6,000 acres of state, federal and privately owned lands and threaten 675 private landowners with eminent domain before it reaches California.

Rogue Riverkeeper offers this brief summary of impacts to the Rogue Basin. This summary is not meant to be comprehensive of the myriad impacts from this LNG proposal.

"Based on my review of the evidence, I believe that there are reasonable alternatives that would more efficiently, more reliably, and in an environmentally preferable manner meet the projected energy needs of the markets that the Jordan Cove Project is intended to serve. I am also concerned about specific characteristics of the Jordan Cove Project. Therefore, I conclude that the Jordan Cove Project is not in the public interest, and I respectfully dissent from today's order."

- FERC Chairman Jon Wellinghoff on the 12/17/09 approval of the Jordan Cove/Pacific Connector LNG project

There are currently no site-specific analyses for the hundreds of stream crossings, including this one at South Fork Little Butte Creek in the Upper Rogue.

Stream/Wetland Crossings and Water Quality

In total, the pipeline would entail 379 waterbody crossings and require 57,981 feet of wetland crossings, excavating 121,353 cubic yards of material. The pipeline would cross 19 fifth-field watersheds, including Rogue River/Shady Cove, Big Butte Creek and Little Butte Creek in the Rogue Basin.

The Upper Rogue and its tributaries are home to anadromous fish species including Coho and Chinook salmon, steelhead and Pacific lamprey. Many of the streams that would be crossed by the pipeline already fail to meet water quality standards that are meant to protect beneficial uses, such as salmon. The proposed pipeline would cross five streams in the Rogue Basin that are already listed on the Clean Water Act 303(d) list as water quality impaired: West Fork Trail Creek, Lick Creek, Salt Creek, North Fork Little Butte Creek and South Fork Little Butte Creek. The increase in temperature as a result of this project is significant.

"Construction of the pipeline would remove riparian vegetation, reduce shade, and increase the exposure of surface water to radiant energy, including those within riparian reserves, (FERC FEIS 4.3-44)." The limited modeling that was conducted on stream temperature impacts predicted initial average temperature changes of 1.0 to 8.6 degrees Celsius, which is obvious stream heating.

The FERC FEIS states that, "Clearing and grading of streambanks, removal of riparian vegetation, instream trenching, trench dewatering, and backfilling could result in streambank modification, increased sedimentation, turbidity, increase in temperature, decreased dissolved oxygen concentrations, releases of chemical and nutrient pollutants from sediments; and introduction of chemical contaminants, such as fuel and lubricants. An increase in soil compaction and vegetation clearing could potentially increase runoff and subsequent streamflow or peak flows. Surface waters could be impacted due to alteration of groundwater flow where the pipeline intersects waterbodies (4.3-31)."

There is no site-specific data on crossing plans or water quality impacts. The FEIS failed to analyze the site specific or cumulative impacts of the pipeline on streams in the Rogue Basin and impacts on existing water quality impairments.

Blasting

Seven waterbodies in the Rogue Basin would likely require blasting because the streambed substrate is bedrock. While FERC states that the blasting would occur in the Trail Creek, Rogue/Shady Cove and Big Butte watersheds, there is no more specific information on locations or impacts. The FEIS (4.3-34) states: "Blasting could alter the in-channel characteristics and hydrology of the stream, potentially decreasing flows due to increased infiltration where bedrock would be fractured."

"FERC continues to ignore Oregon's very real concerns about the unknown environmental impact of the pipeline associated with the proposed LNG facility. FERC's decision to issue a conditional license for a project with such profound potential impacts on the lives of Oregonians was based on woefully inadequate information that demands reconsideration."

- Governor Ted Kulongoski, 1/19/10

"FERC has failed to do its job and conduct the kind of environmental analysis that is required under multiple federal statutes. The United States should be striving for energy independence instead of relying on fossil fuels imported from countries like Russia and Iran. This takes us in the wrong direction."

- Oregon Attorney General John Kroger, 1/19/10

Rogue River Crossing

There is at least one proposed Horizontal Directional Drill (HDD) under the Rogue River near Trail (an Avista tie-in might include a second HDD under the Rogue). Major impacts to water quality and fish would result if substantial drilling muds seeped into the river via a "frac-out." The location of the proposed drill is an important Chinook spawning area on the Rogue. FERC states that in the event that the proposed HDD crossing fails at the Rogue (sending clay mud into the river), Pacific Connector's contingency plan would entail a wet open-cut crossing at the same location. Oregon Department of Fish and Wildlife (ODFW) does not consider a wet open-cut to be an acceptable alternative due to the impacts to fish, habitat, the river, the sports fishery and the economy of upper river communities.

The proposed crossing of the Rogue River near Trail threatens important spawning habitat for Chinook salmon.

Drinking Water Supplies

The FEIS states that the pipeline would cross or be adjacent to 11 public drinking water source areas, including the watersheds serving the Medford Water Commission, as well as numerous private wells.

Hydrostatic Testing and Water Withdrawal

The project would require 58 million gallons of water for hydrostatic testing of the pipeline, yet the source and ultimate dumping of this water is not fully determined. Such a volume of water could negatively impact waterbodies, transport invasive species to other watersheds, cause erosion and negatively impact hydrology. Furthermore, there would likely be contaminants in the water discharged by hydrostatic testing, but there is no analysis on what kinds of contaminants may be present, or at what levels, nor the associated impacts on aquatic resources.

This 6-foot diameter Douglas fir is within the 95' clearcut right-of-way corridor of the Pacific Connector pipeline. This is in the Rogue watershed, Umpqua National Forest at approximately milepost 113.2 of the pipeline.

Salmon and Wildlife

FERC has failed to thoroughly analyze the impacts of the project on fish and wildlife during construction and operation and throughout the life of this project. However, FERC believes that the project will adversely affect eight species listed on the Endangered Species Act, including Coho salmon, Marbled murrelets, Northern spotted owls and Gentner's fritillary.

Old-Growth and Riparian Reserves

Approximately 80 miles of the pipeline would cross public land and 150 miles would cross private land. The pipeline would impact 280 acres on the Rogue River National Forest, all of which are within a Late-Successional Reserve (LSR). Of that, 104 acres is old-growth. The pipeline would create a linear 90-foot wide clearcut with associated habitat fragmentation. ODFW submitted comments to FERC stating that the project proponents should, "either avoid the impacts to the identified Category 1 habitats through alternatives or that the project not be authorized." ODFW Category 1 habitats that would be impacted by

the pipeline include 561 acres of LSRs on National Forests, as well as vernal pool wetlands, mature oak woodlands and rare plant habitat. The National Forest management plans (for the Rogue River, Umpqua and Winema National Forests) currently do not allow for this type of development and therefore they are proposing amendments to their management plans to facilitate pipeline construction by weakening protections for old-growth and riparian reserves, and soil and visual standards.

Purpose and Need

"The FEIS discussion of purpose, need and alternatives is inadequate...the FEIS...sets a very low threshold, making the purpose and need component of the FEIS relatively meaningless...Perhaps the most troublesome aspect...is FERC's conclusion that there is a need for importing LNG...without addressing whether this need could be met by other domestic sources and pipeline supply options."

- Oregon Department of Land Conservation and Development

Be it for public safety, salmon, eminent domain, habitat fragmentation on public lands or renewable energy issues, Oregonians are organizing to stop LNG in our state.

Herbicides and Fertilizers

Herbicides will be used for this project, including picloram, which is known to be toxic to fish. FERC has not analyzed the impacts of this and other herbicides on Coho salmon, other native fish and aquatic invertebrates. In addition, thousands of pounds of fertilizer will be used to reseed some of the project area. Lost Creek Reservoir on the Upper Rogue has experienced health warnings for the past three years due to outbreaks of a toxic cyanobacteria. The key management action for these toxic blooms is to control and reduce external nutrient loading to the water body, which includes run-off and erosion from fertilized areas. There has been no analysis on the impacts of this project's fertilization use in the Rogue Basin.

Soils

Soil integrity is a major issue with pipeline construction. Impacts to soil chemistry, productivity, hydrology, and biological integrity were not analyzed on a site-specific basis. FERC's decision currently violates the Rogue River National Forest Land and Resource Management Plan soil standards, which are under proposed amendment.

Off-Road Vehicles

A 90-foot clearcut will be an open invitation for Off-Road Vehicle (ORV) enthusiasts to enter forests, degrade habitat, molest wildlife, impact water quality, compact soils and increase fire hazards. Easy access to the corridor will be places like the Big Elk Road crossing in the Upper Rogue.

Rogue Riverkeeper—a program of the Klamath-Siskiyou Wildlands Center—works to protect and restore water quality and native fish populations in the Rogue Basin and adjacent coastal watersheds through enforcement, field work and community action.

www.rogueriverkeeper.org; 541.488.5789