DOCKETED	
Docket Number:	23-OPT-01
Project Title:	Fountain Wind Project
TN #:	254055
Document Title:	Patrick Duval's Comments
Description:	N/A
Filer:	System
Organization:	Joseph Osa
Submitter Role:	Public
Submission Date:	1/19/2024 8:04:55 PM
Docketed Date:	1/22/2024

Comment Received From: Joseph Osa Submitted On: 1/19/2024 Docket Number: 23-OPT-01

## Patrick Duval's Comments

Additional submitted attachment is included below.

My name is Patrick Duval. My wife and I had a home on Big Bend Road for over 30 years and have been Shasta County taxpayers for over 60 years. My background is in soils, having earned a BS degree in soil science at Cal Poly, San Luis Obispo. My wife and I operated a successful consulting business in the commercial horticultural industry in the San Francisco and Monterey Bay Areas.

Very little has been said during this whole controversy about whether or not the wind generators should be constructed in our region and the potential damaging effect that they could have on the soils where they are planned to be located. The annual precipitation of the mountain area is 72 inches, the highest in the state with the exception of the north coast. Conifer forests develop rapidly in this abundant moisture and over many, many millennials of time, sandy loam soil develop. These soils are exceedingly fragile and are subject to sheet erosion once the surface duff is disturbed or removed by these gigantic wind generators.

Erosion is not my only concern. The soils are teeming with life and are made up of a very complex network of processes containing more than just sand, silt, clay and varying amounts of organic matter. A major portion of the forest ecosystem is made up with the "Fantastic Fungi"! of which the mycorrhizae is one of three major groups of fungi that are found in the soil. These microscopic organisms can grow to many acres in size in a forest and can weigh a thousand tons. Most noteworthy of the mycorrhizae is that they are associated with the movement of life-giving nutrients to the trees and plants in the forest. They have the ability to wrap their minuscule hyphae around the plant roots and assist the root hairs to absorb essential nutrients that the trees and plants require. The mycorrhizae also have the ability to attach themselves to soil particles and secrete a type of glue-like material that bind the soil particles together in small aggregates increasing the porosity and water holding capacity of the soil. The mycorrhizae covers large swaths of the forest floor contributing to its health which is essential developing a sustainable forest.

Little is known how the infrasound or vibrations caused by these gigantic wind generators will produce, but I am positive that these special soils will be subjected to unnecessary erosion.

I am thankful that the Shasta County Planners and the Board of Supervisors voted against this project and banned them in the unincorporated areas of Shasta County, and they can look back proudly by voting for our forest rather than the wind. I am asking the CEC to vote no on this project.

Respectfully, Patrick Duval