April 10, 2020

Mr. Eric Sklar, President California Fish and Game Commission P.O. Box 944209 Sacramento, CA 94244-2090 Sent electronically to: fgc@fgc.ca.gov

Support for Petition to List Shasta snow wreath as endangered under the California Endangered Species Act

Dear Mr. Sklar,

I appreciate the opportunity to provide comments on the proposal to list Shasta snow wreath as endangered under the California Endangered Species Act. I spent my career as a botanist and conservation biologist, including thirty years (1989-2019) as the botany program manager for the Shasta-Trinity National Forest, where the Shasta snow wreath lives.

The petition details the current and foreseeable threats to the continued existence of the snow wreath, and documents the information with peer-reviewed, published literature. I am the co-author of several of the papers cited (under the name Julie Kierstead Nelson), on the species' ecology and genetic structure. Most of the research and field work on Shasta snow wreath since its discovery a quarter century ago has been directed and funded by the USDA Forest Service and the USDI Bureau of Reclamation, and can be considered reliable information. Because of the environmental studies associated with the proposed Shasta Dam raising, this rare species has been well studied, more so than many other rare plants. There are still unknowns, of course, and these are spelled out in the petition.

The proposal to raise Shasta Dam threatens numerous populations of Shasta snow wreath via inundation and activities associated with construction of new infrastructure to replace that which would be inundated. While many populations of this species occur on land managed by the U.S. Forest Service, it is a fallacy to assume that this affords the species adequate protection on these federal lands. The agency is under urgent pressure to proceed with fuels reduction, fire suppression, recreational facility maintenance, and other activities that currently and in future will affect the species. One of the most pernicious threats, that currently is not effectively addressed by federal management, is the current encroachment into snow wreath populations by aggressive invasive non-native plants, especially Himalayan blackberry, Scotch broom and French broom. It gets worse every year.

Other populations occur on land that is privately owned. The increased protections afforded by its listing as endangered under the California Endangered Species Act will ensure that current and proposed actions affecting Shasta snow wreath on private and public lands receive the appropriate attention.

I strongly support a decision by the Fish and Game Commission that listing Shasta snow wreath under the California Endangered Species Act is warranted, and initiating a one-year status review period.

Thank you very much for supporting the conservation of California's floristic magnificence. I am grateful to be a botanist in such a remarkable place for plants.

Sincerely,

Julie A. Kierstead California Certified Consulting Botanist, CCB# 0005 Research Associate in Botany, California Academy of Sciences