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Comments: I am writing to encourage continued support of the Pacific Northwest Bioacoustics Lab, which provides critical ecological monitoring services in support of the Northwest Forest Plan Effectiveness Monitoring Program and is a regional hub for groundbreaking research and technological innovation.

As the NWFP is being revisited and revised, the importance of long-term, large-scale monitoring data is made abundantly clear. Effective land management decisions can only be made with timely and comprehensive scientific data to support them. At the time of the NWFP's adoption in 1994, this was recognized by the authors of the Plan, who laid out a future for monitoring that would eventually involve networks of passive sensors collecting data across the entire NWFP footprint. That prospect has been made a reality by the efforts of the PNW Bioacoustics Lab.

Over the past 8 years, the PNW Bioacoustics Lab has collected over 10 million hours of acoustic data from more than 4,000 locations, covering an area of over 24 million acres. This is an absolutely unprecedented effort and is one of the largest-if not the largest-such monitoring programs in the world. Data from the monitoring program have provided essential information on spotted owl populations, particularly with respect to the impacts of barred owl competition and wildfire. Further, these datasets contribute detections on other species of concern and illuminate broader biodiversity trends that meet the objectives of NWFP monitoring.

Additionally, the PNW Bioacoustics Lab is leading the way in technological development and is a prime example of interagency cooperation and stakeholder-driven research. The AI methods developed by the lab and its partners are at the cutting edge of the emerging field of conservation technology, harnessing advanced machine learning models to enable efficient data collection and processing to support scalable solutions for wildlife monitoring. The research conducted by the lab is directly informed by the needs of Forest Service land managers as well as partners in the U. S. Fish and Wildlife Service, Bureau of Land Management, and state agencies who are using passive acoustic monitoring to carry out their stewardship of natural resources and to fulfill their survey mandates.

Simply put, passive acoustic monitoring is the way forward for scientific data collection, and the Forest Service has an opportunity to continue to invest in this innovative and important work. Passive acoustic monitoring methods have undergone the scrutiny of the scientific community and have additionally been upheld as robust and scientifically sound by agency decision makers. While programs across the public and private sector are now aiming to increase capacity in monitoring efforts and technological innovation, the PNW Bioacoustics Lab is already well-established in this realm and is providing these services directly to implement mandated federal monitoring and through partnerships with agency and institutional collaborators across the region.

The research and development invested in this program has already directly supported the conservation and recovery planning for imperiled species, provided information to develop land management plans and resolve conservation conflict, and provided training opportunities for countless technicians, research fellows, students, scientists, and staff. The PNW Bioacoustics Lab should be an immense source of pride to the Forest Service.

As the Agency embarks on the important work of re-imagining the Northwest Forest Plan, critical attention must be paid to ensuring its continued effectiveness, and the PNW Bioacoustics Lab is essential to this work.

Thank you for your consideration of my comments.

Sincerely,

Cara Appel
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