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April 20, 2015

Senator Richard Devlin
Representative Dan Rayfield
Joint Ways & Means Subcommittee on Natural Resources
Oregon State Capitol
Salem, OR 97301

RE: Oregon "Statewides" Budget Proposal by the OSU Forestry Research Lab

Dear Co-Chairs Devlin and Rayfield, and Members of the Committee:

As Dean of the College of Forestry at Oregon State University, I appreciate the opportunity to offer this testimony in support of the current and proposed additional funding for Oregon State University "Statewides" that are essential to the Oregon Forest Research Laboratory and College of Forestry.

Overview of Research Funded at OSU by Statewide Dollars

The Oregon Forest Research Lab ("FRL") at Oregon State University is Oregon's primary source for conducting and distributing scientific, technical, social, and economic analyses of forest resource issues. Our researchers work on nearly every aspect of forestry and related renewable materials, including tree genetics, forest soils, tree growth, forest watersheds, water quality, forest wildlife, forests and climate, forest management, forest recreation, timber harvesting and transportation, wood products manufacturing, wood products engineering, high-tech wood-based composites, uses for wood products in green buildings, bio-based renewable energy, forest policy and economics, and the human dimensions of forest resources.

All of these fields are fundamental to the mission of the College of Forestry at Oregon State University, and are extraordinarily relevant and integral to private and public forest land management and policies in Oregon. The Oregon Forest Research Lab is Oregon's research and development enterprise focused on forest resources, and is completely integrated with the College's teaching and outreach missions. Those three missions – teaching, research, and outreach – are how we meet our Land-Grant responsibilities to serve all Oregonians, both urban and rural.

I hear again and again just how important this work is to Oregon's timber and wood products industry, state and federal land managers, small landowners, and those who care deeply about healthy working landscapes in our state. We collaborate with all these interests to deliver knowledge and information on a range of issues vital to sustaining the competitiveness of this important sector of Oregon's economy in the context of growing ecological and social constraints and pressures.

Pending Request for Additional Research Funds for the FRL

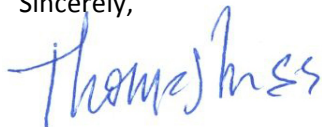
Included in the request pending for additional Statewide funding are dollars for research program initiatives at the College of Forestry targeted to address issues of great importance to management of working forest landscapes. We have recently re-oriented our program for stakeholder engagement and participation in defining key research goals of the FRL and College so they more directly align with management and policy issues facing Oregon and the Northwest. Called the "Institute for Working Forest Landscapes", the Institute has a 21 member board representing a variety of interests and perspectives from across Oregon and from the private, public, and nonprofit sectors – all with an interest in having the research undertaken at our College be relevant, focused and important to Oregon. Attachment 1 is a diagram of the framework for this new Institute.

The pending request for additional Statewide dollars for the FRL includes a key research initiative the Institute will oversee that is focused on better defining Marbled Murrelet habitat in relation to active management of forest landscapes. Attachment 2 to this testimony is a more complete description and budget for this research. We seek these funds in response to extensive discussions and encouragement from multiple stakeholders who have advocated that developing better science on the Marbled Murrelet is not only desirable but critically important to public and private land management decisions in Oregon. With this in mind, a team of scientists framed the attached research initiative and identified the dollars necessary to successfully accomplish the outcomes being sought.

If funded, the College will further refine the project with the assistance of interested stakeholders and with the oversight of the Institute Board to help insure that the FRL provides credible, timely research that is highly relevant to the management and policy needs of the State. Every dollar will be used to accomplish the agreed upon research objectives. Accordingly, \$4 million additional research funds that are the FRL portion of the pending Statewides request will not fund new permanent faculty positions at the College of Forestry. Over time, as stages of the Murrelet project are completed, the College/FRL will engage in an open process with the Institute Board to recalibrate and apply the research funds to new areas of inquiry based on the same screen – to produce credible, timely research that is highly relevant to Oregon. This is a core mission for the Forestry Research Laboratory and the College of Forestry, and the funds included in the pending Statewides request will directly support these objectives.

I will be pleased to answer any questions that may arise as this legislation is considered. Please feel free to contact me at any time.

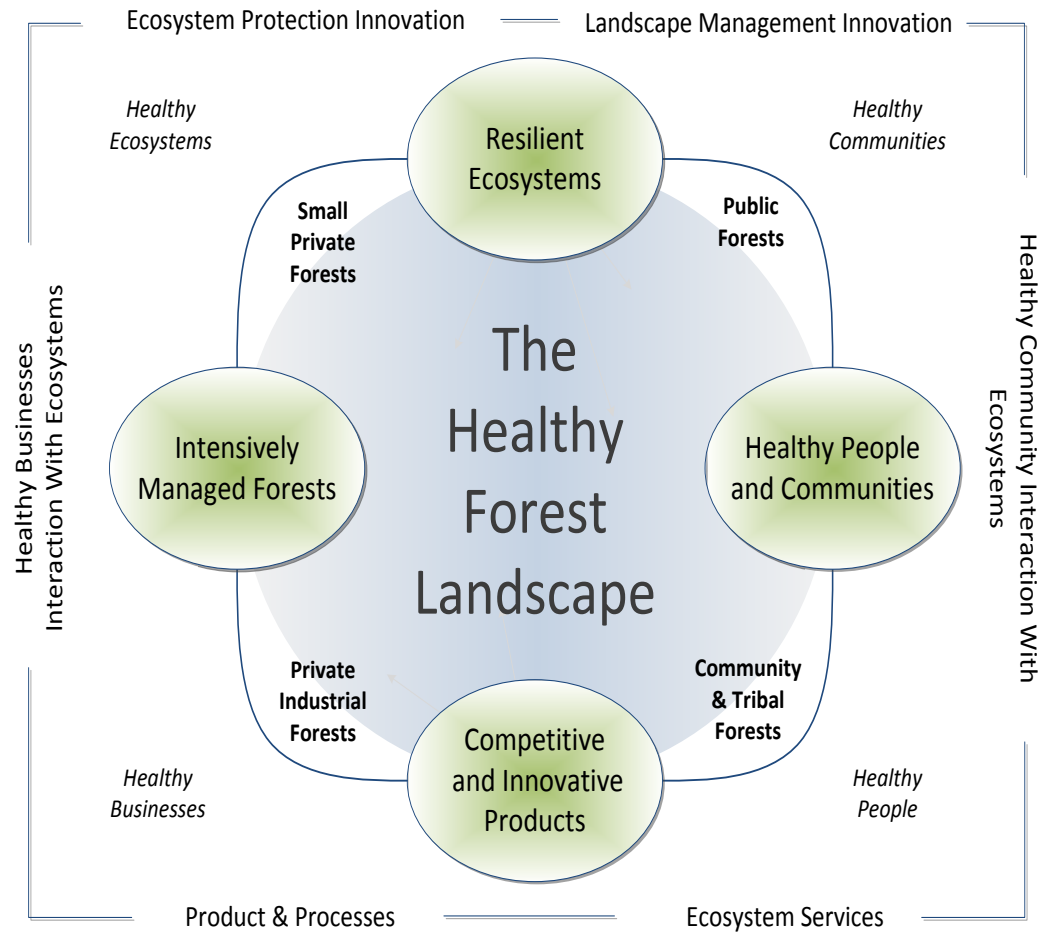
Sincerely,



Thomas Maness
Cheryl Ramberg-Ford and Allyn C. Ford Dean

Institute for Working Forest Landscapes

A World-Class Research and Outreach Center for Healthy Landscapes



OSU College of Forestry**Forest Research Laboratory Strategic Research Program Priorities****Statewide Program Funding Proposal: Predictors of Space Use and Reproductive Success in the Marbled Murrelet****Background and Initiative Description**

Several significant knowledge gaps exist regarding the spatial scale(s) at which Marbled Murrelets select nesting sites, how behaviors indicative of occupancy are linked to active nests, and which factors limit nesting success. This knowledge gap creates biological and economic uncertainty for managers of private and state forestlands in the face of increased protections for the murrelet, which is listed as “threatened” under the federal Endangered Species Act (ESA). To address this uncertainty and inform public and private land management decisions in the future, a comprehensive initiative is needed to assess the potential interactions between murrelet nesting ecology and timber harvest on actively managed forests. Investment now will provide key data for making informed policy and management decisions that balance the needs of biodiversity conservation with the economic benefits of timber harvest in western Oregon, and in so doing will increase the opportunity for greater collaboration on acceptable pathways forward than the region has experienced following previous listing decisions under the federal ESA.

This initiative must include elements that range from labor-intensive, population-based field investigations that directly measure nest success, to retrospective studies that synthesize and assess existing information and data. The significant logistical challenges associated with finding active murrelet nests requires a multi-year approach to collecting data that is sufficiently large enough to provide strong inference. The results from both parts of this study can be expected to provide information necessary for helping develop a comprehensive forest management strategy that will make significant progress toward a balanced approach to conserving murrelets while allowing for timber harvest in western Oregon.

Expected Outcomes

This Initiative aims to produce positive outcomes in six important and connected areas, which include:

1. Quantify the degree to which occurrence can be used to predict nesting activity and reproductive success.
2. Determine the efficacy of at-sea captures of murrelets for attaching tracking devices to locate active murrelet nests.
3. Determine the spatial scale(s) that predict murrelet occurrence and nesting.
4. Quantify the extent to which murrelet nests are clustered in space (reflecting colonial tendencies) and the scale at which co-occurrence exists.
5. Quantify space use by murrelet nest predators and determine how nest success and predator abundance and behavior respond to timber management practices.
6. Assess whether vocalization playbacks and artificial nest platforms can be used to encourage nesting behavior and potentially restore murrelet nesting habitat.

Initiative Elements: Summary

We will undertake a four-pronged approach to addressing questions related to forest management and murrelet nesting behavior and space use that includes: (1) landscape-scale habitat modeling with existing occurrence and nest location data, (2) intensive demographic monitoring that will require finding a relatively large sample size of murrelet nests, (3) a forest management experiment that tests murrelet sensitivity to adjacent harvest operations and predator movements, and (4) a test of a potential restoration approach for murrelets.

1. **Landscape-level modeling with existing data.** We will use existing data on nest locations and murrelet occurrences to provide an initial test of outcomes #1, 3, and 4.
2. **Intensive demographic monitoring.** We will locate active murrelet nest by using ground-based surveys and by attaching radio-telemetry or satellite tracking devices to birds that are captured at sea (outcomes #1, 2, 3, 4, and 5).
3. **Forest management experiment.** We will undertake an experiment to manipulate states to test how forest management practices influence murrelet nest success, site fidelity, and nest predators (outcome #5).
4. **Conspecific attraction experiment.** We will use a combination of recorded call playback and erection of nesting platforms to determine whether murrelets can be attracted to artificial nesting platforms in unoccupied stands (outcome #6).

Initiative Partners and Coordination Points

Element #1:

- OSU, USFS, BLM, ODF, forest industry, NCASI, NWFP Effectiveness Monitoring Team, Avian Knowledge Network/data acquisition and sharing, GIS, threshold viability

Element #2:

- OSU, USFS, BLM, ODF, forest industry, NCASI/capturing and tracking individuals, monitoring nests

Elements #3 and 4:

- OSU, USFS, BLM, ODF, forest industry, NCASI, Cornell Laboratory of Ornithology/identifying sites, land access, predator assessment

Budget Summary

The science team will consist of an OSU College of Forestry project lead, principle investigators from OSU and beyond with complementary expertise, a statistical modeler, GIS specialist, graduate student researchers, and seasonal field technicians. Although the cost of the study elements can be segregated as set forth below, but will be implemented simultaneously.

Budget Elements (biennium)	
Element #1	\$600,000.00
Element #2	\$2,700,000.00
Element #3	\$1,100,000.00
Element #4	\$500,000.00
Total Biennial Cost	\$4,900,000.00