April 15, 2019

Co-chairs Frederick and McLain and members of the committee,

My name is Victoria Avery. My husband and I own Atherton Lamb, a family farm, located in Polk County abutting the town of Falls City. We are producers for and members of Umpqua Valley Lamb and Mountain States Lamb and provide grazing services to farmers in Polk and Yamhill Counties.

The city of Falls City faces challenges typical to a small rural community of infrastructure maintenance and upgrades amid revenue shortfall. As the community continued to develop, we saw increasing water diversion from the city all directed toward our farm. It was clear that flooding would only increase as the city continued to infill, putting our business at risk. We asked the city council to address a plan to mitigate run off and, at the request of the council, became involved with Todd Jarvis of the Institute for Water and Watersheds (a part of the Institute for Natural Resources).

Todd enlisted the help of graduate students, and, through their involvement, a partnership developed between us and members of the community. Meetings were sometimes contentious but respectful with their leadership. Groundwater research was conducted and data was collected through grant funding as a result of an application made by IWW. It became evident that the high water events were exacerbated by ground water saturation and upward percolation. A developed overlay of the area now provides a clear picture of where the water comes from and gives the city clear scientific information on which to build their wastewater master plan. The availability of their expertise continues to provide valuable guidance.

Both the Institute for Water and Watersheds and the Institute for Natural Resources provide direction and advice based on sound scientific principles to communities challenged by knowledge and funding. It is **critical that support be continued** for the IWW and INR. I appreciate your time and attention to this matter.

Untoria T. avery

Victoria Avery Atherton Lamb 5130 Waymire Rd. Dallas, OR 97338



Geography and Geospatial Sciences College of Earth, Ocean, and Atmospheric Sciences Oregon State University 104 CEOAS Administration Building Corvallis, Oregon 97331 541-737-3504 www.ceoas.oregonstate.edu

## Letter in support of the Institute for Natural Resources Submitted to the Joint Committee on Ways and Means Subcommittee on Education

4/16/2019

Co-chairs Frederick and McLain,

I write to you in support of the Institute for Natural Resources. It is important for our work that INR, and its staff, services, and products continue to be supported by the State of Oregon.

I am a faculty member in the Geography and Geospatial Sciences program within the College of Earth, Ocean and Atmospheric Sciences (CEOAS) at Oregon State University. Since INR's creation in 2001, the Geography program at OSU has worked with and benefitted from the mandate of INR to serve as an organizing entity to integrate and disseminate science-based information for natural resource management.

Currently the development and collection of digital data with respect to both natural and human systems is exploding as more sensors and data collection techniques are developed. The organization and synthesis of these data is paramount to the natural resource management decisions that must be made within our state as pressures for population growth increase and the climate changes. INR serves a crucial role as an organization mandated to organize and disseminate these data as information for decision makers and citizens alike. Especially in the era of citizen science and increased need for local public participation in building resilient communities, access to organized geospatial data is even more important.

In the Geography program here at Oregon State University, we have valued our close relationship with INR and have used the products that INR has produced extensively within our courses and research. Students within our Geospatial Science courses use the GIS data and tools, such as the Oregon Explorer and Imagery Explorer as well as the focused Thematic data and tools, to become GIS practitioners and future decision makers. The ability to access these data and tools in an organized and consistent format is an incredible learning tool for all our students, at both the undergraduate and graduate level.

Our students have become knowledgeable GIS professionals by also working directly with INR on several projects including the Atlas of the Pacific Northwest and the Oregon Water Atlas.

We, in the University community, need the Legislature to continue to support the Institute for Natural Resources as its crucial role in synthesizing and disseminating timely geospatial data becomes even more urgent.

Thank you for your time and attention. Sincerely,

Loune Hokozama Becker

Lorene Yokoyama Becker

Lorene Yokoyama Becker Senior Instructor I Geography and Geospatial Science College of Earth, Ocean, and Atmospheric Sciences Oregon State University



United States Department of the Interior

BUREAU OF LAND MANAGEMENT Coos Bay District Office 1300 Airport Lane, North Bend, OR 97459 Web Address: http://www.blm.gov/or/districts/coosbay E-mail: BLM\_OR\_CB\_Mail@blm.gov



IN REPLY REFER TO 6840 (ORC040)

APR 1 5 2019

Dear Co-chairs Federick and McLain:

Subject: Letter in support of the Institute for Natural Resources Submitted to the Joint Committee on Ways and Means Subcommittee on Education

I am writing to you in support of the Institute for Natural Resources. It is important for our work that INR, and its staff and products continue to be supported by the State of Oregon.

The Coos Bay District Bureau of Land Management has partnered with Portland State University Department of Natural Resources, Oregon Biodiversity Information Center (ORBIC) for over 20 years to monitor the federally threatened Western Snowy Plover.

Our district, along with a long list of partner agencies and entities, have partnered with ORBIC to monitor and research the Western Snowy Plover along the entire coast of Oregon. The information ORBIC is able to collect and analyze has influenced Western Snowy Plover management and guided the species towards recovery. Our agency has greatly benefited from the expertise provided by your organization that has helped to guide our land management actions for the benefit of the species and their recovery.

Thank you for your time and attention.

hangeland

Jeffrey K. Davis Myrtlewood Field Manager



April 9, 2019

The Honorable Lew Frederick S-419, Salem, Oregon

The Honorable Susan McLain H-477, Salem, Oregon

**RE:** Letter in support of the Institute for Natural Resources Submitted to the Joint Committee on Ways and Means Subcommittee on Education

Dear Senator Frederick and Representative McLain:

My name is Lisa DeBruyckere, and I am President of Creative Resource Strategies, LLC, a small woman-owned business that has been providing consulting services to natural resource organizations in the western states and Canada since 2001.

I am writing to you today to share my strong support for the role the Institute for Natural Resources plays in advancing science-based natural resource information for the state of Oregon.

My company (<u>www.createstrat.com</u>) has provided services to federal, state, and local governments, nonprofit organizations, academic institutions, and tribal sovereign nations to advance science-based conservation that enhances the quality of life for all Oregonians. The Institute for Natural Resources has played a pivotal role advancing science and information on numerous important projects. For example:

- They manage *iMap*Invasives, the state's invasive species database, which tracks the existence and management of invasive species statewide. The existence of this tool has allowed land managers to share invasive species across jurisdictions, and has advanced the state's ability to manage invasive species in an adaptive management context. The *iMap*Invasives database was integral to the success of many initiatives of the Oregon Invasive Species Council during my 7-year tenure as their contract coordinator.
- INR administers the Historical Vegetation Mapping Project, which allows land managers to understand the composition of past landscapes to better understand our changing ecosystems. This project has been integral to a variety of projects I have worked on with natural resource partners.

INR administers the Integrated Landscape Management Project, which creates science and knowledge delivery modules to advanced understanding of watershed-level prioritization of fuel treatments, integral to addressing stressors associated with climate change, such as water supply and drought conditions. Integrating economics with science in a systematic way allows land managers to operate using an optimized decision support system, which results in better, timely, strategic management decisions.

INR has worked on many other projects and databases other than the three I have listed above. Their staff are helpful and knowledgeable, and are highly regarded among the western states and provinces.

I strongly encourage you to support continued funding of the Institute for Natural Resources to ensure that sound science is available to inform the challenging management issues land management and agencies face, particularly in light of emerging climate change stressors and other threats to Oregon.

Thank you for your continued service to the citizens of Oregon.

Sincerely,

Lisa A. DeBruyckere, President Creative Resource Strategies, LLC 6159 Rosemeadow Lane NE Salem, OR 97317 (503) 371-5939 cell (503) 704-2884 www.createstrat.com lisad@createstrat.com

#### Letter in support of the Institute for Natural Resources

#### Submitted to the Joint Committee on Ways and Means Subcommittee on Education

April 10, 2019

Co-chairs Senator Frederick and Representative McLain,

I write to you in strong support of the Institute for Natural Resources (INR). It is important that INR, and its staff, services and products, continue to be supported by the State of Oregon.

In 2001, the Oregon Legislature established the INR to help link the science-based knowledge and expertise of Oregon's universities with natural resource decision making; and, to provide access to integrated information, data, tools, and knowledge to inform natural resource decision making. I was part of that process working closely with Gail Achterman whose visionary leadership helped create INR. The vision, shared by legislative leaders, was to connect natural resource research with policy development. Gail's vision was to utilize data-driven evidence to make objective interpretations of what the science actually says and thus, help inform the natural resource policy decision-making process.

I have been actively involved with INR since it's inception in 2001, and currently serve on the advisory board. The benefits of INR projects are vast in that they link science to decision making, manage data and information, provide technical assistance and analysis, and coordinate research.

In these challenging times with climate change, reoccurring droughts, extensive wildfires, invasive species, and groundwater shortages, I believe it is important for elected officials and natural resource decision makers to be equipped with the best possible science to make informed decisions. I urge the Joint Committee to continue funding for INR to continue this important work.

Thank you for your time and attention.

Sincerely,

Jackie Dingfilder

Former State Senator and Natural Resources Committee Chair Jackie Dingfelder



#### Letter in support of the Institute for Natural Resources

Submitted to the Joint Committee on Ways and Means Subcommittee on Education

April 11, 2019

Co-chairs Frederick and McLain,

I write to you in support of the Institute for Natural Resources (INR). It is important for all of Oregon that INR via its staff, services, and products continue to be supported by the State of Oregon.

I am the current Chair of the Oregon Geographic Information Council (OGIC). The legislature formed OGIC and charged it with promoting geospatial data sharing across all Oregon public bodies. Since 2000 my Council has worked closely with the Institute for Natural Resources to ensure that geospatial Framework data in the public domain is accessible to both the public and to all government agencies state-wide so they can achieve their missions for all Oregonians.

The Institute for Natural Resources maintains and administers the Oregon Spatial Data Library, a publicfacing web portal for geospatial data. That Library receives over 150 million hits annually. The Library is a vital part of the mission of the Oregon Geographic Information Council, as specified in ORS 276A.506. As such, the Council very strongly supports the Institute receiving the funding it needs to continue its work.

Thank you for your time and attention.

Left Jorkonja

Jeff Frkonja, Chair Oregon Geographic Information Council



Geography and Geospatial Science College of Earth, Ocean, and Atmospheric Sciences Oregon State University 104 CEOAS Administration Building Corvallis, Oregon 97331 541-737-3504 www.ceoas.oregonstate.edu

4/11/19

#### Letter in support of the Institute for Natural Resources Submitted to the Joint Committee on Ways and Means Subcommittee on Education

Co-chairs Frederick and McLain,

I am writing to you in support of the Institute for Natural Resources (INR). INR, its staff, services, and products are a cornerstone of natural resource management in Oregon and it is essential that its many activities and services continue to be financially supported by the state of Oregon.

My name is Dr. Michael Harte and I am a Professor in the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University in Corvallis. I am an economist and physical geographer by training. As well as working in academia, I have worked around the world for primary industry, environmental non-governmental organizations and also as a senior manager in government agencies. I have worked with INR for 14 years on outreach, research and educational initiatives and have found their assistance, productivity, quality and value to be unparalleled. In 2017, I participated as a member of an external team reviewing INR's performance over the prior decade.

I and many others throughout the state are impressed by the breadth and depth of expertise, contributions to science and policy, public engagement, education, and leadership in regional natural resource and water issues demonstrated by INR. Stakeholders regularly laud INR's responsiveness, professionalism, and product quality—contracts were completed on time and on budget—and there is a broad perception of unbiased, high-value or value-added products produced by INR.

INR provides a critical links between Oregon's public universities, state agencies, industry and natural resource stakeholders. Its closure resulting from defunding, together with the loss of expertise and staff, would be a tragedy for the state. The same amount of state funding would still be spent on obtaining natural resources-related services and products but with greater risk to agencies and stakeholders from biased, lower quality and poor value products and services.

Thank you for your time and attention.

n.Mat

Michael Harte (PhD) Professor Geography and Geospatial Science College of Earth, Ocean, and Atmospheric Sciences Oregon State University



# **Hoopa Valley Tribal Council**



Natural Resources Department Forestry Division

P.O. Box 368 Hoopa, CA 95546 Ph. (530) 625-4284, Fax (530) 625-4230

April 12, 2019

Joint Committee on Ways and Means Subcommittee on Education:

I am writing this letter of support for the Institute for Natural Resources (INR) as a stakeholder representing Hoopa Tribal Forestry. I am a wildlife biologist working for Hoopa Tribal Forestry on a number of conservation issues involving applied research. I have been working for the Tribe for 28 years and have accumulated a great deal of data on a variety of species and conservation issues.

I have worked very closely with Dr. Sean Matthews of INR for many years. He and Dr. David Green (also of INR) have been working on publishing data from projects that Hoopa Tribal Forestry-Wildlife have initiated over the last 2 decades. In particular we have a lot of habitat use and demographic data for Pacific fisher and Dr. Matthews and Green have been collaborating with us to get our information published using cutting edge analysis methods.

We have also discussed potentially working on black bear and mountain lion data sets as well. The data that we have collected on black bear foraging behavior in regards to conifer damage is substantial and would be a very good contribution to the literature if we were able to work together on this project in the near future. Without outside expertise we simply cannot pursue publication on a timely basis.

J. Mark Higley Wildlife Biologist



April 11, 2019

Conserving native species and habitats through restoration, research, and education

563 SW Jefferson Ave Corvallis, OR 97333-4602 541.753.3099 1850 Old Pecos Trail, Suite I Santa Fe, NM 87505 541.753.3099 x 710

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Subject: Support of the Institute for Natural Resources Submitted to: Joint Committee on Ways and Means Subcommittee on Education

Dear Co-chairs Frederick and McLain,

Today I write in support of continued funding for the Institute for Natural Resources. My organization, the Institute for Applied Ecology (IAE), works frequently with the Institute for Natural Resources programs and staff to support environmental conservation in Oregon. The Institute for Natural Resources provides essential services for the citizens of Oregon and many agencies and organizations.

To support the conservation of threatened and endangered species in our state, my staff routinely use data on population locations for planning and project implementation. The data housed in INR's Oregon Biodiversity Information Center (ORBIC) is the most stable and comprehensive source for these data and we rely on their availability and accuracy. In addition, we collect substantial amounts of information on many of these populations and we in turn share these data with other agencies and conservationists through the ORBIC data base. Without this data center, the long term protection and viability of Oregon's natural heritage would be seriously weakened.

We also interact with and use several other resources provided by Institute for Natural Resources. For example, INR makes available iMapInvasives, an interactive online database that helps land managers report and control the spread of invasive species to protect or natural resources. We frequently contribute to and use data from this platform. INR also manages Oregon's Natural Areas Program, which is the single most important effort to identify, register and protect representative parcels that represent Oregon's iconic natural landscape. Finally, INR hosts Oregon Explorer, a premier online tool that makes Oregon's natural features accessible to all citizens, and helps Oregonians understand and assess the risks of wildfire to their homes, watersheds and state.

INR staff are recognized experts and provide technical assistance and analysis to the governor, legislature, state agencies and citizens of Oregon. We support the mission and staff of INR and wish to lend our support for the continued funding of this program.

Yours,

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Thomas N Kaye Executive Director

#### Letter in support of the Institute for Natural Resources

#### Submitted to the Joint Committee on Ways and Means Subcommittee on Education

April 17, 2019

Co-chairs Frederick and McLain,

I write to you in support of the Institute for Natural Resources. It is important for our work that INR, and its staff, services, and products continue to be supported by the State of Oregon.

My name is Ron Lyons. I am an amateur entomologist and entomology researcher with a special interest in insects and their arthropod relatives as well as some additional invertebrate fauna. I am a member of the Dragonfly Society of the Americas and the Orthopterists' Society. I am a contributor to the Xerces Society. I am also listed as a curatorial associate at the Oregon State Arthropod Collection (OSAC) in Corvallis. Since 2011, I have been the content editor of the Bulletin of the Oregon Entomological Society, an online, freely available, quarterly publication with around 100 people, mostly in the Pacific Northwest, on the direct mailing list.

I have received annual notifications from Eleanor Gaines at the Oregon Biodiversity Information Center of the Institute for Natural Resources (INR) concerning the US Fish and Wildlife's available funding for species of concern in Oregon, and published these in the Bulletin. The INR receives applications for funding and organizes these for presentation. Recently, in response to another notice, I made people aware of forthcoming revisions to the INR's publication *Rare, Threatened, and Endangered Species of Oregon*, and a call for comments. This publication is available over the internet. The notices published in the Bulletin have concerned the invertebrate program.

I, personally, do not generally work on the various invertebrate species that would be classified as rare, threatened or endangered, but, some years ago, I did assist Xerces Society researchers in their efforts to document a sensitive tiger beetle that I had some knowledge of, and one of my images of that tiger beetle made it into a federal report on sand dune endemic species in the Oregon Dunes National Recreation Area. I have also worked on species that simply lack sufficient information to be classified.

As a researcher, I am very aware of the time and effort it takes to consolidate information available from numerous diverse sources. I am also aware of the time and effort it takes to maintain, update and interpret such data. It is not glamorous work, but it is necessary. Having it done by a group of people with specialized areas of knowledge and support resources not widely available is a great help to many researchers. Basic information is an important starting point for many research projects, but is often unappreciated by the general public. The INR provides basic information regarding rare, threatened

and endangered species in Oregon.

There are a lot of native invertebrate species in Oregon and relatively few researchers. Much work remains to be done on our native species, so efforts by the INR to assist in this effort are not only greatly appreciated but considered essential.

I strongly support funding of the INR to ensure science-based biodiversity information is available to decision-makers, landowners, and all Oregonians.

Sincerely,

Ron Lyons PO Box 127 Bandon, Oregon 97411



### **Department of Forestry**

Eastern Oregon Area PO Box 670 3501 NE 3<sup>rd</sup> St. Prineville, OR 97754 PHONE: 541-447-5658 FAX: 541-447-1469 www.ODFcentraloregon.com

April 12, 2019



## Letter in support of the Institute for Natural Resources Submitted to the Joint Committee on Ways and Means Subcommittee on Education

Co-chairs Frederick and McLain,

I write to you in support of the Institute for Natural Resources. It is important for our work that INR, and its staff, services, and products continue to be supported by the State of Oregon.

My name is Cassie Marshall and I work with the Oregon Department of Forestry as the Rangeland Fire Protection Association Administrative Specialist but for the last four months I have been doing a developmental into the National Fire Plan Coordinator position.

While in the developmental and in my RFPA position I have worked with INR products, one product here recently I have worked with was the Oregon Wildfire Risk Explorer (OWRE). I have used the OWRE to help create the risk assessment portion in the RFPA Fire Prevention plans, and here recently to help Counties update their CWPP's.

Working with INR has been a long-term partnership; through this partnership we have made the wildfire risk data accessible for use by homeowners, communities and planners throughout Oregon. We made the 2006 data available through the Oregon Wildfire Risk Explorer, and then updated with the 2018 data once it was compiled.

I look forward to working in the Institute for Natural Resources in the future.

Thank you for your time and attention. Sincerely,

Cassie Marshall Oregon Department of Forestry



# **United States Department of the Interior**



FISH AND WILDLIFE SERVICE La Grande Field Office 3502 Highway 30 La Grande, Oregon 97850 Phone: (541) 962-8584 FAX: (541) 962-8581

File Name: INR Letter of Support\_FWS\_Ways\_and\_Means\_Subcommittee.docx TS Number:

APR 1 5 2019

Senator Lew Frederick, Co-Chair Representative Susan McLain, Co-Chair Join Committee on Ways and Means Subcommittee on Education Oregon State Legislature 900 Court Street, NE Salem, Oregon 97301

Subject:

Letter of support for Institute for Natural Resources submitted to the Joint Committee on Ways and Means Subcommittee on Education

Dear Senator Frederick and Representative McLain:

I write to you in support of the Institute for Natural Resources. It is important for our work that INR, and its staff, services, and products continue to be supported by the State of Oregon. The U.S. Fish and Wildlife Service (Service) and our partners engaged in sage-grouse conservation have relied heavily on the essential work conducted by the Institute of Natural Resources (INR) to characterize sage-grouse habitat in Oregon using geospatial products derived from satellite data and processed using a variety of highly specific and technical methods. For example, the Service and our partners use the INR-developed SE Oregon Nearest Neighbor Vegetation Composition Map that provides wall-to-wall estimates of tree, shrub, and native and invasive grass cover throughout Oregon's sage-grouse habitat. These map products inform habitat improvement work designed to restore and/or protect critical sage-grouse habitat. The high degree of accuracy of INR's products often exceeds other publically available data and allows us to confidently make informed decisions regarding conservation planning. In addition, INR has used actual sage-grouse locations and vegetation information to model seasonal habitat for the species in SE Oregon. These maps have filled a knowledge gap in the areas used by sage-grouse during the breeding, brood-rearing, and over-wintering stages. Prior to development of these maps, biologists and land managers had little information to guide habitat management decisions specific to the seasonal habitat needs for the species.

INR's data were foundational to quantifying the threats to sage-grouse in the State of Oregon's range-wide Sage-Grouse Action Plan (Sage-Grouse Conservation Partnership 2015) and have been useful in the development of locally-based strategic plans, such as the Baker Sage-grouse Local Implementation Team Comprehensive Threat Reduction Plan (Baker Sage-grouse Local Implementation Team 2017). Further, INR's products are included in a GIS toolbox that the Service developed to aid Soil and Water Conservation District (SWCD) staff in developing site-specific plans for private landowners enrolling into Candidate Conservation Agreements with Assurances between SWCDs and the Service. These data have also been reviewed as a part of

Causal Factor Analyses led by the Bureau of Land Management and conducted by an interagency team to assess potential indicators responsible for sage-grouse declines within Priority Areas for Conservation in Oregon.

INR also employs the Technical Coordinator for the Sage-grouse Conservation (SageCon) Partnership. SageCon's overarching goal is to advance policies and actions that reduce threats to sage-grouse and Oregon's sagebrush ecosystem as well as promote rural community and economic health, according to the goals, approaches and strategies adopted in the state's Sage-Grouse Action Plan. The Technical Coordinator fulfills an essential role in guiding and aligning federal, state, and local agencies to implement, monitor, and report sage-grouse conservation efforts occurring throughout the state. This position is key to ensuring statewide partners are implementing the conservation strategies to which they committed in the 2015 Action Plan and for summarizing these achievements to inform the FWS 2020 status review of the species. The Technical Coordinator has also worked with partners to deliver important web-based geospatial tools (as specified in the Sage-grouse Action Plan) including a Habitat Quantification Tool needed for the state's Sage-grouse Mitigation Program, the Development Registry Tool needed to track developments per the state's Sage-grouse Mitigation Administrative Rules (OAR 660-023-0115), and a Conservation Planning Tool to help prioritize efforts.

Our interactions with INR staff have been exceptionally positive, with researchers and project leaders willing to provide assistance in a thorough and timely manner. We support the ongoing work of INR and look forward to incorporating new and improved products as they become available. Based on our work with INR and the use of their products, we strongly support their continued funding from the State of Oregon.

If you have any questions or if we can be of any assistance, please contact please contact Jackie Cupples or myself at 541-962-8584.

Sincerely,

Il pyr Marisa Meyer

Field Supervisor

Citations:

Baker Sage-grouse Local Implementation Team. 2017. Draft - Baker Priority Area for Conservation comprehensive threat reduction plan. Baker City, Oregon, USA.
Sage-Grouse Conservation Partnership. 2015. The Oregon sage-grouse action plan. Salem, Oregon, USA.



Letter in support of the Institute for Natural Resources Submitted to the Joint Committee on Ways and Means Subcommittee on Education

April 17, 2019

Co-chairs Frederick and McLain,

I write to you in support of the Institute for Natural Resources. It is important for our work that INR, and its staff, services, and products continue to be supported by the State of Oregon.

I am a graduate student in Marine Resource Management at OSU, in the College of Earth, Ocean, and Atmospheric Sciences. I have found the Oregon Explorer website to be a useful tool in my professional work, as well as for my personal interests. Its primary power lies in its position as a portal to many sources of information, resources, publications, and tools, that have been vetted as reliable, relevant, and worthwhile. I have great confidence in the INR team's ability to curate these resources for its users.

As a scientist, I have utilized the Oregon Explorer as an easy place to locate specific tools or resources relevant to my research. I deal with ocean acidification and other coastal issues and frequently need to reference environmental datasets which come from a variety of sampling efforts such as PISCO, OOI, NANOOS, and others. I don't always remember all the tools that are at my disposal, but the Oregon Explorer helps me by providing a platter of resources, as well as access to additional information such as articles, publications, and other media. I have found publications useful for my master's thesis through the Oregon Explorer, that I did not find in my searches elsewhere. In writing my capstone project for my Graduate Certificate in Fisheries Management, I frequently referenced the databases of invasive and threatened & endangered species. For my personal interests, it is my primary resource when looking for data about my home state of Oregon.

The Oregon Explorer is a useful and necessary resource for Oregonians, who want and deserve to be educated about our home using the best available information. This helps us to be informed citizens and stay connected with our environment and resources, as well as across sectors of industry, science, and education. Above all, Oregonians value connections to our land and connections to each other, and the Oregon Explorer plays a valuable role in facilitating those relationships.

Thank you for your time and attention.

Sincerely,

Michael L. Moses

104 CEOAS Admin Bldg Corvallis, OR 97331 503.621.8721 mosesm@oregonstate.edu



Department of Fish and Wildlife Rogue Watershed District 1495 East Gregory Road Central Point, OR 97502 VOICE (541) 826-8774 FAX (541) 826-8776

April 17, 2019

Co-chairs Frederick and McLain,

I am writing in support of the Institute of Natural Resources. Without strong partnerships, like we have developed with INR's Sean Mathews and David Green, ODFW would not be able to fulfill our mission. As a resource management agency we often rely on external researchers and partners to provide us with the best information possible to make decisions.

As the acting Supervising District Biologist for the Oregon Department of Fish and Wildlife's Rogue Watershed, and former Conservation Strategy Biologist for southwest Oregon I have personally utilized research conducted by INR. In particular their work on Pacific Fisher has informed my understanding of the species' distribution, population size, response to disturbance such as forest fire, interactions with other competing carnivores, and the effect of relocation efforts on source populations. This academic research will translate into practical applications as ODFW and our partners consider forest resiliency projects and, perhaps someday, possible movement of fisher from the Klamath Mountains to the Cascades.

On a personal note, we have recently collaborated directly with INR on one of their fisher research projects, and they have been wonderful to work with. In my opinion, INR uses innovative techniques and takes advantage of unique circumstances to ask interesting and novel questions whose answers can directly inform management decisions.

iemeta

Steve Niemela District Wildlife Biologist



Pudding River Watershed Council 190 Garfield Street Woodburn, Oregon 97071 (503) 548-7159 Mobile (503) 982-5387 Office

April 15, 2019

Re: Letter in support of the Institute for Natural Resources Submitted to the Joint Committee on Ways and Means Subcommittee on Education

Co-chairs Frederick and McLain,

I write to you in support of the Institute for Natural Resources. It is important for our work that INR, and its staff, services, and products continue to be supported by the State of Oregon.

Over the past four years while servings as the executive director of the Pudding River Watershed Council, I have often consulted with experts at the INR for guidance in matters affecting the watershed. Todd Jarvis has given the Council direction regarding environmental conflict management and about the potential for aquifer storage and recharge in the Mt. Angel area. In 2018, Dr. Jarvis presented at the PRWC annual meeting.

During the summer of 2018, the Council was provided an intern from INR. With her support, the Council was able to complete a significant outreach project and distributed approximately 2,000 native trees to landowners. With the INR's support, the Council was able to bridge the gap where we lacked capacity to implement this project.

The Pudding River Watershed Council has an abundance of opportunities to provide the INR students with work-study experience. The environmental and social problems in Pudding River Watershed stand a far greater chance of being resolved with the support of a well-trained, committed team of individuals, such as the students and staff at the INR.

Thank you for your time and attention.

Anna Rankin

Anna Rankin Executive Director

#### Letter in support of the Institute for Natural Resources

#### Submitted to the Joint Committee on Ways and Means Subcommittee on Education

April 17, 2019

Co-chairs Federick and McLain,

I write to you in support of the Institute for Natural Resources. It is important for our work that INR, and its staff and products continue to be supported by the State of Oregon.

My name is Madeline Robin. I graduated from Reed College in 2017 and am enrolled as a Post-Baccalaureate student at PSU. I am interested in wildlife biology and animal behavior. At the INR, I intern for Eleanor Gaines, helping her to organize photos from the Snowy Plover Depredation project. I worked with Eleanor, along with some help from Sean, to figure out how to organize years' worth of camera trap photo data. I learned how to use new programs such as digicam and gained great experience in working with camera traps and the data they produce. Camera traps are common in the field of wildlife biology and being familiar with them is a great asset.

Working with Eleanor has been great. Not only is she an amazing boss, but she is also an amazing advisor. No professor at PSU has helped me as much as Eleanor has in pursuing my future. She has provided me with contacts, ideas, and recommendations for how to move forward with a graduate degree in Wildlife Biology. She has provided me with information on job opportunities and connected me with people in the field with interest similar to mine. If it was not for her, I would be lost. She guided me in directions and to resources I did not know were available to me. She goes out of her way to me aware any opportunity she comes across that she thinks would interest me.

Although I only worked with Eleanor, I feel that everyone at the INR is on my team. If another member overheard me talking about something I was interested in and knew about a person I could contact, they would always chime in. Although Eleanor and Sean are working on very different projects, I was able to collaborate with Sean because we had both decided to use the same program for data organization. Sean helped me too when he was around and was open to all of my questions. Everyone who works there is very supportive and interested in helping all of the students find out what they want to do in environmental science and how they can achieve that. The INR is an amazing place, it offers a safe work environment that encourages questions and collaboration, I always look forward to going to the office.

In conclusion, interning at the INR provided me with not only valuable experience, but also became a jumping off point for my career in Wildlife Biology. Without the INR I would not have the opportunities or the contacts I have now that are allowing me to take the next steps. Eleanor is a great advisor, she helped me broaden my programing and research experience while also helping me look towards my future and the steps I need to take to make that I reality. She is an amazing boss that cares not just about the work I am doing for her right now, but also about the work I want to and could do in the future with others. She is actively interested in helping me pursue my future. The INR is an important asset for PSU because of

the research it does and also the resources it provides for the students that work there to further their careers and help them gain experience needed to pursue anything in environmental science in a way the Environmental Science Department of Biology can't or hasn't been able to.

Thank you for your time and attention.

Sincerely,

Madeline Robin



# TESTIMONY REGARDING APPROPRIATIONS TO THE INSTITUTE FOR NATURAL RESOURCES:

#### JOINT COMMITTEE ON WAYS AND MEANS SUBCOMMITTEE ON EDUCATION

April 17, 2019

#### MEMBERS

Co-Chair Senator Lew Frederick Co-Chair Representative Susan McLain Member Senator Arnie Roblan Member Senator Chuck Thomsen Member Representative Teresa Alonso Leon Member Representative Christine Drazan Member Representative Mark Meek Member Representative Mike Nearman

Distinguished Co-Chairs Frederick and McLain,

The Clackamas Soil and Water Conservation District welcomes the opportunity to provide written testimony in regard to ongoing appropriations to the *Institute for Natural Resources*. The services and products provided by the *Institute for Natural Resources* serve a vital role in supporting the conservation efforts of our district and others across the state.

As an organization that works directly on conservation related issues in Clackamas County, we are familiar with the need to manage these issues at the landscape and regional scale. The *Institute for Natural Resources* serves an important and unique role within the state by managing sensitive data pertaining to rare, threatened, and endangered species. The services provided by the *Institute for Natural Resources* help ensure that our organization complies with state and federal laws and regulations related to these sensitive species, and allow us to be more thoughtful and strategic in our local conservation efforts.

The *Institute for Natural Resources* also maintains observations related to invasive species through its *Oregon iMapInvasives* data platform. The Clackamas Soil and Water Conservation District relies heavily upon this data to help prioritize our invasive weed management efforts across Clackamas County. The services provided by the *Institute for Natural Resources* has allowed our district to be much more effective in our work and more efficient in the use of our local tax dollars.

Invasive species threaten the livability of our communities and adversely impact our social, economic, and natural resources. One study entitled the *Economic Impact from Selected Noxious Weeds in Oregon* looked at just 25 of our 128 designated noxious weeds and found that these 25 species alone cost Oregonians "\$83.5 million in *personal income to the State's economy*" per year<sup>i</sup>. Without active management these losses are predicted to rise

to **1.8 billion annually**. These damages are disproportionately felt by our agricultural and natural resource-based producers.

Invasive species impact the livability of our communities. Many invasive species pose a threat to human health and property. Some invasive species like giant hogweed are known to cause severe burns and possibly blindness to people. Other invasives plants are known to be poisonous and threaten pets, livestock, and wildlife. Invasive pests like sudden oak death or spotted-wing drosophila threaten entire industries. These invasive species degrade the quality of life we Oregonians enjoy and alter the way we interact with our surroundings.

Oregon's wild lands and natural areas are also adversely impacted by invasive species. Invasive species displace our native plants and animals, degrade the quality of our natural resources, and result in a landscape that is less Oregon-like. This disruption of our local ecology leads to the continued degradation of our natural systems and the viability of our tourism-based economy. Oregon's natural areas generate millions of dollars of revenue from tourism each year and is a vital component influencing the livability of our communities.

The *Institute for Natural Resources* serves a vital role to land managers across Oregon. The services provided by the *Institute for Natural Resources* have proven to be an invaluable resource that empowers local entities like the Clackamas Soil and Water Conservation District. The loss or reduction of financial support to the *Institute for Natural Resources* would adversely impact our district and others across the state. Ongoing support of the *Institute for Natural Resources* will continue to improve the coordination of invasive species management and help to protect Oregon's natural resources.

We sincerely thank you for the opportunity to provide testimony on an issue of such importance to Oregonians.

Respectfully,

10m Saler

Tom Salzer,

General Manager

Samuel Leininger

WeedWise Program Manager

<sup>&</sup>lt;sup>i</sup> The Research Group, LLC. 2014. *Economic Impact from Selected Noxious Weeds in Oregon*. Prepared for Oregon Department of Agriculture Noxious Weed Control Program.



#### Letter in support of the Institute for Natural Resources

Submitted to the Joint Committee on Ways and Means Subcommittee on Education

April 15, 2019

Co-chairs Frederick and McLain,

I write to you in support of the Institute for Natural Resources. It is important for our work that INR, and its staff, services, and products continue to be supported by the State of Oregon.

I am currently a senior at Portland State University perusing a major in Biology. After graduation I hope to obtain a job doing restoration and conservation work with a government agency or in a non-profit organization. I know that part of my success at finding employment in this highly competitive sector is finding a place to obtain experience.

I have been fortunate to volunteer for the Institute for Natural Resources since December 2018. During this time I have been able to assist in the Klamath-Siskiyou Carnivore Project. As a volunteer researcher I identify species photographed by remote cameras in the field and record the species identified or "tagging." As part of the team Wildlife Ecologists Sean Matthews and David Green has met with me to first, help me understand the process of coming up with research question and second, to help me understand how a project like the Klamath-Siskiyou Carnivore Project can help in the conservation of wildlife as well as their habitat.

The experience that I have gained up till now has been invaluable. I have had the opportunity to learn how to use a program called DigiCam (a program used to retrieve the pictures for the remote cameras), how to identify and electronically record species, and have gotten a foot in the door toward a career in conservation. I truly believe that my current and continued experience at INR along with the guide from the knowledgeable staff of the INR will help me get the career of my dreams. I hope that you will see how invaluable the INR is not only to me but to future students who can also get experiences such as I have while at working for the INR.

Thank you for your time and attention.

Sincerely,

Noemi Sarabia-Feria



Christopher A. Sirakowski 1336 NE 72<sup>nd</sup> Ave. Portland, Oregon 97213 sirakowski@gmail.com

#### Letter in support of the Institute for Natural Resources

#### Submitted to the Joint Committee on Ways and Means Subcommittee on Education

April 17, 2019

Co-chairs Frederick and McLain,

I write to you in support of the Institute for Natural Resources. It is important for our work that INR, and its staff, services, and products continue to be supported by the State of Oregon.

Seven years ago, I moved to the Pacific Northwest from Texas, and I found myself immediately in awe of the natural beauty of this region of our country. After living in Portland for a couple years I was inspired to return to school to pursue an education that would help me preserve the natural beauty of Oregon, its neighboring states, and any other areas of the world that face anthropogenic dangers. I needed the knowledge found in higher education to have my voice heard and to be relevant; I attend Portland State University where I am finishing up my bachelor's degree in biology with a minor in geographic information systems (GIS).

I was introduced to the Institute for Natural Resources by my adviser in the Louis Stokes Alliance for Minority Participation (LSAMP) in February of 2019. LSAMP is a STEM program which guides first-generation, non-traditional, minority students like me in the ways of academia and showing us how to overcome hurdles we may encounter. My adviser's goal was to bridge the gap between the undergraduate student's educational experience and the graduate/career world by having us meet with a professional in our trajectory field; in my case that professional was Dr. David S. Green, a faculty member at INR. Prior to this meetup I had the privilege to attend Dr. Green's talk at Portland State University's biology seminar, which is held every Thursday during the school term; he spoke to us about his role as a conservation biologist at a Kenyan wildlife preserve and his ecological work with hyenas. His studies resonated with me and other students who were attending this talk due to our shared interests. Three of us were fortunate enough to sit down and speak with Dr. Green and ask all the questions that couldn't be answered after his seminar presentation. He informed us of his current research with INR and his work with fishers (*Pekania pennanti*) and other mesocarnivores. At the end of this inciteful meet-up, he extended an invitation to the three of us to join the effort; a week later I emailed Dr. Green expressing my interest in working with INR. Since my initial meeting with Dr. Green, I have seen other undergraduate students, the majority being women and members of various minority communities, benefit from the work experience and mentorship found at INR; they understand the importance of diversity in sustainability and conservation work.

Over the past year I have continued with my studies at PSU while volunteering at INR. During my time there I learned about the various projects the staff contribute to and their integral roles that they play. Listening to these faculty members collaborating in the office helps me to understand the importance of their connections with each other and their partnerships with other agencies that are necessary in the conservation effort. My experience at INR, which involves collecting and recording data, has also afforded me the opportunity to create an independent research project looking at small mammal occupancy in southern Oregon and northern California; with my work at INR I was able to proudly present my research at the 66<sup>th</sup> Annual Meeting of the Western Section of The Wildlife Society down in Yosemite, CA back in February. I spoke to professionals in my field and learned about the many opportunities for future studies and career paths. Attending that conference was highly impactful and motivational in maintaining the momentum to continue to graduate school and pursue a Ph.D.

As a student pursuing a career in conservation work, I feel it is paramount to preserve programs such as INR. Not only do they devote their time and passion to their work, but they are able to communicate the science and the importance of their work in order to preserve a future for generations to come. I know that I will confidently continue this path conducting critical ecological research due to the mentorship that I received and my experiences at INR.

Thank you for your time and attention.

Sincerely,

Christopher A. Sirakowski



#### Department of Forest Engineering, Resources, & Management

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#### Letter in support of the Institute for Natural Resources

#### Submitted to the Joint Committee on Ways and Means Subcommittee on Education

April 17, 2019

Co-chairs Frederick and McLain,

I write to you in support of the Institute for Natural Resources (INR). It is important for our work that INR, and its staff, services, and products continue to be supported by the State of Oregon.

I have worked with, and benefitted from, INR's programs since its founding, almost 20 years ago. They provide an invaluable source of unbiased and neutral information that support Oregon's citizens and businesses. Over the past three years since I joined the OSU faculty, I've pleasure of moving from a consumer to a producer through two INR science reviews that provide critical information needed for prudent management of natural resources.

With colleagues in Oregon Sea Grant, and funding from the Oregon Watershed Enhancement Board, I led a science review of the effects of tide gates on anadromous fish and water quality. Tide gates provide vital infrastructure for coastal communities, farmers, and ranchers. Many are at, or beyond, their useful life; however, permitting replacements is challenging due to the presence of ESA-listed fish, and ODFW fish passage requirements. The INR science review provides a foundation for the continuing discussions among stakeholders, funder, and regulators on the best path forward. The authors of the report are currently preparing outreach publications to extend the impact of INR's work.

The second science review hosted by INR evaluates the effects of active forest management on source water quality for community water supplies. When the Oregon Forest Resources Institute (OFRI) approached the College about conducting the study, and I signed on as Principal Investigator (PI), my first thought was to have INR serve as the home given its reputation and standing; it was important that the review process be open and transparent in order to be credible. With the assistance and support of INR and their highly experienced staff, we convened a broadly based Steering Committee and are well on our way to completing the project. The expertise that INR staff provided for the structured literature review was a critical first step. While it's unlikely that the INR science review will resolve all the disputes over active forest management in Oregon, I am convinced that it will provide a credible source of facts regarding impacts.

Thank you for your time and attention. I hope you see the wisdom in continuing support for INR.

for a. Souder

Jon A. Souder, PhD Assistant Professor & Specialist Forest Watershed Extension



# Letter in support of the Institute for Natural Resources (INR-OSU) Submitted to the Joint Committee on Ways and Means Subcommittee on Education

April 10th, 2019

Dear Co-chairs Frederick and McLain,

As a 10-yr staff member across four departments within Benton County, I can attest that our elected officials and staff have gained vital support from the Institute for Natural Resources. The support they provide including Willamette Explorer and Wetlands Explorer, in addition to the numerous publications on current natural resources issues, have provided key information to our managers making decisions that affect local families. It is important for our work that INR, and its staff and products continue to be supported by the State of Oregon. We will continue to have an ongoing relationship with INR to support a range of natural resources work that is vital to the Oregon economy and well-being of our citizens. Our citizen's highest values for the future are rooted in the local environment that INR-OSU work supports, and in turn supports a highly profitable private sector dependent on natural resources.

Thank you for taking the time to grasp the importance of supporting INR at Oregon State University

Sincerely,

Adam Stellies

Natural Resources Coordinator Benton County Natural Areas and Parks Department adam.stebbins@co.benton.or.us (541) 766-6085 (office) (541) 250-6209 (cell) 360 SW Avery Ave. Corvallis, OR 97333



Department of Fish and Wildlife Office of the Director 4034 Fairview Industrial Drive SE Salem, OR 97302 (503) 947-6044 FAX (503) 947-6202 odfw.com

April 15, 2019



Senator Lew Frederick, Co-Chair Representative Susan McLain, Co-Chair Joint Committee on Ways and Means Subcommittee on Education 900 Court Street NE Room H-170 Salem, OR 97301

Dear Co-Chairs,

Thank you for your consideration of further funding for the Institute for Natural Resources. The Oregon Department of Fish and Wildlife (ODFW) has partnered with the Institute of Natural Resources (INR) for the purpose of developing further science and information on Oregon's wildlife and their habitats.

## **Oregon Conservation Strategy**

The Oregon Conservation Strategy (OCS) is the state's action plan for protecting and conserving sensitive and nongame species. There are several important services provided by the INR related to management of wildlife information and the OCS that ODFW utilizes on a frequent basis. Those services include Oregon Biodiversity Information Center (ORBIC), Wildlife Viewer, Oregon Explorer and the Wetland Restoration Planning Tool.

ORBIC maintains a statewide compiled database of fish and wildlife observations, which integrates data from various organizations across the state, including federal and state agencies, non-governmental organizations, and universities. ORBIC also models these data into an Element Occurrences (EO) dataset, which portrays the likely occurrences of rare, threatened, and endangered species in any given location statewide. Additionally, ODFW and ORBIC have partnered to produce Oregon Conservation Strategy Habitat maps, which provide the most current and accurate portrayal of the 11 habitats of greatest conservation need statewide. ODFW relies on ORBIC's species and habitats datasets to make informed decisions on species status assessments, species and habitat conservation actions, and land-use permitting and development recommendations on potential wildlife impacts. These species and habitat data are vital resources for ODFW when undergoing statewide natural resource assessments, such as the 2016 Oregon Conservation Strategy Conservation Opportunity Area (COA) revision. Focusing investments in COAs can increase the likelihood of long-term success, maximize effectiveness over larger landscapes, improve funding efficiency, and promote cooperative efforts across ownership boundaries. These data are also incorporated into ODFW's Compass mapping platform, which provides staff, partners, and the general public with easy access to these important sources of data.

ODFW\_INR Funding Letter for Ways and Means Senator Lew Frederick, Co-Chair Representative Susan McLain, Co-Chair Joint Committee on Ways and Means Subcommittee on Education April 15, 2019 Page 2 ODFW staff frequently use species habitat distribution maps developed by ORBIC and displayed in Wildlife Viewer in planning for species surveying and data collection. ODFW also uses various maps, tools, and datasets maintained within the Oregon Explorer program. The Wetland Restoration Planning Tool, hosted within Oregon Explorer, is yet another dataset used within ODFW to highlight important wetland areas and habitats.

#### **Greater Sage-Grouse**

INR has been an integral component of the SageCon group working to recover and protect Greater Sage-Grouse in Oregon. Within that capacity, INR has been an important member of the Mitigation Technical Team which helped review and provide technical assistance on the Sage-grouse Mitigation Program's Mitigation Manual and other components of the program.

INR was instrumental in helping the Department conceptualize, organize, develop, and test the Greater Sage-grouse Development Siting Tool (DST). The DST is a web application that's available on the Oregon Explorer website to help project proponents appropriately site development in sage-grouse habitat. It provides a relative impact assessment for project specific data and other customized information relevant to the overall permitting process including; applicable OARS, description of mitigation hierarchy requirements, project considerations, and contact information. The DST is extremely functional and would not have achieved its current quality if it were not for INRs technical support.

INR has had a major hand in developing and testing ODFW's Habitat Quantification Tool (HQT) for assessing development impacts to sage-grouse habitat. Additionally, they have provided technical assistance in drafting and review of the HQT User Guide and Science Rational documents.

#### West Coast Population of Fisher

Wildfires and forest management change habitats in ways that can threaten at-risk wildlife species and alter the population dynamics and interspecific interactions of the forest carnivore community. Conservation concern for fishers (*Pekania pennanti*), a Species of Greatest Conservation Need (SGCN) in California and Oregon, include the combined threats of small population sizes and the potential impacts of landscape-scale disturbance, including uncharacteristically-severe wildfire and post-fire management

INR assisted with developing a project to investigate possible explanations for observed decreases in fisher density in a post-fire landscape in the Klamath-Siskiyou Ecoregion of southern Oregon and northern California. This project will also evaluate the responses of known fisher predators, competitors, and prey species and their influence on fisher density.

INR has partnered with ODFW on identifying sound forest management strategies that will improve outcomes for species of conservation need, help prevent the need to list them, inform the balancing of federal regulations, and support local communities that are

ODFW\_INR Funding Letter for Ways and Means Senator Lew Frederick, Co-Chair Representative Susan McLain, Co-Chair Joint Committee on Ways and Means Subcommittee on Education April 15, 2019 Page 3 reliant on forest industries. Understanding the mechanisms for observed fisher decreases in a post-fire landscape will lead to more informed and defensible forest management practices as wildfire size and total annual area burned continue to increase in western North America.

I understand the Legislature has tough decisions to make in regards to funding programs in the 2019 Legislative Session. I would just like to stress how important for our work that INR, and its staff, services, and products are available to the State of Oregon.

Thank you for your time and attention.

Shannon Hurn Deputy Director for Fish and Wildlife Programs



United States Forest Department of Service Southwestern Region Regional Office

333 Broadway SE Albuquerque, NM 87102 505-842-3292 Fax: 505-842-3800

File Code: 1900 Date: APR 1 2 2019

Senator Lew Frederick Representative Susan McLain Education Subcommittee of the Joint Legislative Ways and Means Committee State of Oregon 900 Court St. NE Salem, OR 97301

Dear Senator Frederick and Representative McLain:

This letter is in support of the Oregon State University Institute for Natural Resources (INR). The Southwestern Region of the USDA Forest Service has been working in partnership with INR for over a decade. The origin of the partnership was the Region's need for ecological data and analysis tools for use in Forest Plan assessments across Arizona and New Mexico, and the availability of these information resources from the INR Integrated Landscape Assessment Project. Over the years the Southwestern Region has utilized INR data and experts to help create a multi-state vegetation map, across all ownerships, along with vegetation models for forecasting future conditions in all ecosystems in the Region. This has been a highly successful collaborative effort which supported the successful completion of Forest Plan assessments on 11 National Forests in the Region. These Forest Plans establish the agency's management goals for the next 15+ years, across 21 million acres of land in Arizona and New Mexico. The science that INR's staff has provided to this effort has been foundational and critical.

More recently, the INR has been engaged by the Region to help analyze ecological information for large landscape restoration projects. INR provided the ecological data analysis for the recently released South Sacramento Restoration Project Draft Environmental Impact Statement, a high profile and important project covering a half a million acres of beetle infested forest on the Lincoln National Forest. INR accomplished the ecological analysis in around three months and at a low cost, probably less than a third of what it would have cost without their support, and in a significantly reduced timeframe. INR also produced an updated vegetation coverage for the entire Region, again at low cost and in a timely manner. Current projects that will utilize their support are the Santa Fe National Forest Landscape Resiliency and Fireshed projects designed to reduce fire risk in the Santa Fe municipal watershed and surrounding areas. We also see a great potential for the INR to support Shared Stewardship projects under the Good Neighbor Authority of the Farm Bill. To that end, the Southwestern Region is joining the Pacific Northwest Region and the Intermountain Region in an agreement that will fund INR to continue to deliver the unique expertise and capacity they can provide to plan, analyze, accomplish and monitor large landscape restoration projects throughout the Western United States.





Senator Lew Frederick

For more information please contact Jennifer Ruyle, USDA Forest Service Southwestern Region, Deputy Director of Watershed and Planning, (505) 842-3886.

-CALVIN N. JOYNER Regional Forester





775 Summer Street NE, Suite 360 Salem OR 97301-1290 www.oregon.gov/oweb (503) 986-0178

April 15, 2019

Senator Frederick, Co-chair Representative McLain, Co-chair Joint Committee on Ways and Means, Subcommittee on Education

Co-chairs Frederick and McLain,

The Oregon Watershed Enhancement Board supports continued funding for the Institute for Natural Resources (INR). While we recognize that this is a challenging budget year and tough decisions need to be made, the small amount of funding provided to support the work of the INR provides benefits well beyond the scale of the state's investment.

OWEB and its partners have utilized the expertise of INR in a variety of ways over many years. INR hosts the Oregon Explorer website, which OWEB leverages to serve out data and information about its grant-making. Reports on all of OWEB's over 9,000 grants are housed on that website, along with more than 18,000 records from the Oregon Watershed Restoration Inventory. The tools serving these data provide transparent, accountable, public access to the state's investments in native fish and wildlife habitat and water quality.

In addition, we utilize the staff at INR to support critical work related to sage grouse conservation (SageCon) work in eastern Oregon. INR staff have developed data and information to support sound processes for local communities to better understand the impacts of the decisions they make in sage steppe habitats.

Most recently, INR has provided technical support for our work with the Tide Gate Partnership, which is exploring options to address the challenges caused by failing tide gate infrastructure along Oregon's coast. INR is helping to develop a statewide inventory of tide gates using existing data and incorporating new approaches to identify tide gates where inventories have not been completed. This work will help to better understand the scale of the issue and develop strategies to address tide gate repair and replacement needs up and down the coast.

These are just a few examples of INR's strong partnership in support of watershed health in Oregon. We value their expertise. This unique model is critical to move watershed health issues forward across the state.

Thank you for your time and attention.

Sincerely,

Meta Loftsgaarden Executive Director



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Parks and Recreation Department 725 Summer Street NE, Suite C Salem, OR 97301-1266 (503) 986-0980 FAX (503) 986-0792 www.oregonstateparks.org



Letter in support of the Institute for Natural Resources Submitted to the Joint Committee on Ways and Means Subcommittee on Education

April 10, 2019

Co-chairs Frederick and McLain,

I write to you in support of the Institute for Natural Resources. It is important for our work that INR, and its staff, services, and products continue to be supported by the State of Oregon.

As the Oregon Parks and Recreation Department (OPRD) stewardship manager, my program and staff frequently work with INR and rely on its support. INR supplies OPRD with a variety of products and services that are vital to our natural resource program – including its service in support of the management of the States Natural Areas Program and Plan, information on the locations and habitats of endangered plant and animal species, expert advice on ecological priorities and rankings, and assessment of species conservation needs. Some of these products and services are available nowhere else, and provide a basis for the informed natural resource management prioritization and planning that supports OPRD's mission of providing and protecting outstanding natural sites. Without dedicated and coordinated statewide vision towards species, habitat, and ecological preservation, each land management agency would lose effectiveness and cohesive strategy – potentially requiring duplication of effort and incomplete view towards the statewide and nationwide multi-agency, multi-landowner perspective that is so important to effective, holistic strategies.

OPRD's mission is well served by INR's continued ability to provide data and services to natural resource agencies. INR is an essential source of resources we need to appropriately manage the natural heritage of the Oregon State Parks system.

Thank you for your time and attention. Sincerely,

Trevor Taylor Stewardship Manager Oregon Parks and Recreation Department



Letter in support of the Institute for Natural Resources Submitted to the Joint Committee on Ways and Means Subcommittee on Education

April 17, 2019

Co-chairs Federick and McLain:

I am writing to you to seek your continued support for the Institute of Natural Resources at Oregon State. INR has been an important part of OSU's ability to respond to a wide variety of environmental policy issues in the State.

I was Director of the Institute for Water Resources at Oregon State when Gail Achterman create INR in the early 1990s. I have since retired from OSU and am employed at Clean Water Services, a special wastewater utility district in Washington County. The two institutes worked in collaboration on several issues that were critical at the time. One specific issue was related to gravel mining in streams, a long time controversy in Oregon because of the potential negative impacts on salmon spawning. We were able to develop some rules that were adopted by the Department of State Lands which satisfied both conservation groups and instream gravel miners.

The second project involved conflicts between the Farm Bureau and gravel operations near the Willamette River. This was a much more difficult issue which ultimately was resolved by restrictions being placed upon new gravel operations. Meetings with affected stakeholder were facilitated by INR for over a year and avoided legal actions by both stakeholders.

In both these cases, INR played a critical role in bring good science and engineering to difficult policy issues. INR has the unique ability to defuse such situation and to promote dialogue and value sharing.

I write to you in support of the Institute for Natural Resources. It is important that INR, and its staff continue to be supported by the State of Oregon. Such work will be needed continually in the future as Oregon attempts to grow its economy and yet maintain its many natural resources without conflicts.

UEmatt Wallie

Kenneth J. Williamson Director, Regulatory Affairs Clean Water Services Hillsboro, OR 97123