



# **Institute for Natural Resources**

## **Strategic Plan 2008**

**February 2008**

## Mission

*The Institute for Natural Resources (INR) provides Oregonians with ready access to current, relevant science-based information, methods, and tools for better understanding natural resource management challenges and developing solutions.*

## Purpose

As part of the same 2001 legislation that created the Oregon Sustainability Board, the Institute for Natural Resources (INR) was created to utilize the resources of the Oregon University System (OUS) to:

- ***assure science*** is used appropriately to measure resource use, environmental health, and environmental and economic costs;
- ***convene policy forums*** to guide state efforts toward establishing clear, measurable sustainability goals and targets; and,
- ***be the “go to” place*** for citizens to access the best scientific information and empower citizen involvement in resource policymaking.

Designated as the lead university to administer INR, Oregon State University (OSU) established INR as a research institute within OSU to help decision-makers identify and use relevant science in making policy choices. At INR’s foundation is the land grant mission – building bridges between theory and practice and effectively communicating knowledge to decision-makers. As such, INR seeks to:

- break down barriers between and among various academic disciplines, corresponding state and federal agencies, community-based organizations, and practitioners using natural resources;
- provide timely information for public understanding and informed policy decision-making;
- increase the utility of integrated, science-based information in the development and understanding of natural resource and environmental policy;
- identify and investigate – in a clearly neutral way – controversial natural resource issues that challenge resource management and/or governance; and,
- identify opportunities for *applied* policy-related research that benefits Oregon’s natural resources and environment.

INR can benefit both science and policymaking in many ways, such as bringing multiple parties together to address complex natural resource issues, providing organizational support to interdisciplinary research, collating information and evidence from a wide

variety of disciplinary sources, interpreting and making accessible complex scientific knowledge, and bridging the gap between scientific and policy cultures.

## Products and Services

Partnerships are fundamental to INR's ability to carry out its mission and stated goals, and to deliver its value-added products and services. Rather than duplicating on-going work or replacing the functions of existing organizations, INR builds links between information producers and information users. To operate effectively, INR builds partnerships with faculty throughout the OUS system; federal, state, tribal, and local governments; businesses; concerned citizen groups; and, NGOs to develop and promote applied interdisciplinary research targeted to both existing and anticipated natural resource challenges. INR provides value to natural resource and environmental decision-making by providing the following services:

**Information.** INR manages and maintains readily accessible datasets related to natural resources and the environment, particularly information on at-risk species and habitats. INR develops and coordinates natural resource monitoring systems. INR collects and manages information necessary to support statewide natural resource performance benchmarks and the *State of the Environment Report*.

**Public Service.** INR organizes and manages interdisciplinary faculty teams to address natural resource and environmental policy questions, providing the science element to inform policymaking and dispute resolution. INR represents Oregon State University (OSU) and the Oregon University System (OUS) in natural resource and environmental policy initiatives undertaken by state government and others.

**Research.** INR organizes and hosts policy dialogues on emerging natural resource and environment issues. INR conducts policy-related applied research projects for government agencies and others to develop new policy tools and methods. INR convenes, supports, and develops new interdisciplinary research initiatives on natural resource and environmental policy, incubating new research centers and institutes.

## Values and Principles

Integration of science, technology, public understanding, and policy is essential to address the natural resource and environmental issues we face. INR must ensure its independence and objectivity, build credibility, and establish its institutional integrity if it

is to meet its promise. INR's success depends upon a clear sense of our values and principles:

**Ensuring Integrity and Objectivity.** Too often natural resource and environmental issues polarize participants and observers. INR must assure its impartiality and objectivity. Conflicts of interest and the appearance of conflict must be avoided.

**Building Partnerships.** The only way to address today's resource management challenges is by working together, tapping the broad range of talents and abilities available from research scientists, public officials, the private sector, and interested citizens. INR will not only be interdisciplinary and multi-institutional, it will be collaborative in all it does. INR will steer work that does not fit INR's unique niche to appropriate units and organizations with the requisite expertise.

**Maintaining Relevance.** INR's work must relate to problems facing Oregonians. Our work will make a difference, address issues, and add value by integrating complex and sometimes contradictory information with the goal of stimulating positive change. INR must provide its products and services in useful, accessible forms so that decision-makers, private businesses, consultants, and interested citizens can understand the findings and recommendations and use them in meaningful ways.

**Providing Service.** INR must serve decision-makers, researchers, and the public. This requires understanding our clients' needs and meeting them with cost effective and timely products and services. INR must demonstrate that it adds value by identifying, obtaining, and equitably sharing new revenues for higher education in Oregon

**Creating Excellence.** INR services and products will be peer-reviewed to assure that they meet the highest professional and academic standards. INR seeks to build a reputation for quality and objectivity.

## Strengths

**Personnel.** INR's Director and staff are highly regarded. The Director is well-connected to policymakers and the Associate Director and other senior staff are well-connected within Oregon State University. INR personnel are capable of mediating between policy and academia.

**University Affiliation.** INR's presence within Oregon State University and the Oregon University System is essential to its credibility and provides access to a broad range of expertise and resources.

**Collaboration.** INR is known for its ability and willingness to collaborate with a wide range of government, academic, and private organizations and institutions.

## Challenges

***Lack of Necessary Financial Support.*** Core support from the Legislature is inadequate to cover the salaries of the Director and basic support staff and related costs needed to operate. Additional unrestricted income is vital for INR to achieve its mission.

***Lack of Name Recognition, Public Awareness and Visibility.*** Few people within the university system or externally know what INR is and the products and services it offers. It is overly identified with the current Director.

***Deepening and Broadening Partnerships within the Oregon University System and Externally.*** INR has developed solid relationships with several state agencies and non-governmental organizations; however, it has not done so with the federal government, local government and private organizations. Faculty participation in INR projects has been limited, in part due to financial disincentives at OSU.

## Imperatives for Change

***Timely Access to Useful Information.*** Citizens and policymakers are drowning in data. University scientists and government agencies invest millions of dollars to gather data about natural resources and the environment. Rapidly evolving information technology makes it easier than ever to access the data. The problem today is finding high quality information to answer specific questions when the questions arise. People want to easily find “the best available scientific information” presented in ways they can understand. This requires synthesis of research results, particularly on issues of public concern, and translation into language understandable to non-specialists. “Turning information into knowledge.”

***Polarization of Public Dialogue.*** Public discussion of our increasingly complex natural resource and environmental issues has become increasingly polarized with warring scientists offering competing views of what is and is not known about the matter. Few places exist where people can come together to seek solutions with access to the best minds from diverse scientific disciplines.

***Relevance of the Academy.*** Today’s pressing natural resource and environmental problems do not match traditional academic disciplines. Collaborative teams of researchers from throughout the universities are needed to solve these complex problems. New institutions and methods are needed to connect university researchers to decision-makers and assure that the talents of the universities are brought to bear on critical problems.

## Goals

At the center of this strategic plan are the goals INR will pursue to fulfill its mission. The first set of goals focuses on the capacity and performance of INR's Information Program. The second set pertains to the efforts and performance of INR's Policy Research Program. The third, and final, set of goals focuses on INR's internal operations. Each goal is accompanied by implementation strategies. Action plans will be developed each fiscal year (see Appendix A for list of key natural resource issue priorities).

# INR Information Program

The mission of the Institute of Natural Resources' Information Program is to efficiently integrate and provide comprehensive information about Oregon's natural resources and environment to support decision-making at local, state, and regional levels. The general concept for the Information Program is to improve access to information, tools, and expertise related to natural resource management in Oregon.

**Goal 1. Provide access to comprehensive natural resource information via the Natural Resources Digital Library and the Oregon Explorer.**

The Oregon Explorer and Natural Resources Digital Library empower communities to actively engage in creating and sharing knowledge and taking action. Through the Oregon Explorer, Oregonians will have a single web access point to learn about Oregon's natural resources and environment. Natural resource decision-makers and practitioners, researchers and scientists, educators and students will be able to use and share integrated information and tools to analyze and solve problems.

The Oregon Explorer is a collaborative project between OSU Libraries and the Institute for Natural Resources (INR). It provides access to integrated natural resources information with content both onsite and offsite, place-based, where most information is geo-referenced, with value-free, neutral information, maintained over the long-term. INR works to identify new information and develop decision support tools while the OSU Libraries manages the digital library and the portal.

The Natural Resource Digital Library will also catalogue, archive, and integrate data with appropriate state and regional databases to increase their usability. This will require working in close cooperation with other state agencies to assure that all efforts complement a shared strategy for natural resources information access. We will work with state agencies to secure legacy data and use this information to better identify long-term trends occurring in the environment.

### **Strategies**

- Work with the Oregon Geographic Information Council, the Department of Administrative Services and state agencies to create a shared, integrated web-accessible digital library supported by state funds.

- Work with regional federal agencies and neighboring states to build regional information system.
- Identify needs and develop decision support tools to assist in decision-making for high priority natural resource and environmental issues.
- Develop a community of contributors to the digital library.

**Goal 2. Support biodiversity conservation through data collection, access and dissemination about the identification and occurrence of plant, animal, and ecological community resources of Oregon.**

Agencies, businesses, organizations and citizens require up-to-date information on species, habitat and conservation activities in Oregon. The Oregon Natural Heritage Information Center (ORNHIC) was created by the Oregon Legislature to provide this information. Most critical are data on the biology and distribution of at-risk species in the state, of habitats and vegetation, and on conservation lands and actions. In order to gather and maintain this information is it necessary to continuously evaluate sources of information. Critical biodiversity planning databases must be updated regularly and continually refined and improved—including data on managed and protected area covers, vegetation maps, coverages and exotic species distributions and information; and, areas without known endangered species or potentially occupied habitat for endangered species. Field work to inventory and map species and habitat and monitor them over time is vital.

**Strategies**

- Develop tools and partnerships to expand participation in the development and maintenance of this data, and decision support tools to promote long-term biodiversity planning, and short-term biodiversity conservation.
- Work with NatureServe and the U.S. Geological Survey to build the national network of biological information providers and standards for such information.
- Support and work with the Natural Heritage Advisory Council, the Oregon Department of Fish and Wildlife and others to develop and implement a biodiversity conservation plan for Oregon.
- Expand the work of the snowy plover project to inventory and monitor the status of other at risk species requiring coordination of effort by multiple state and federal agencies.

**Goal 3. Develop systems for the monitoring, benchmarking, and reporting of long-term natural resource and the environment trends and indicators**

INR will identify information from a wide variety of sources about Oregon's physical, biological, social, and economic features to inform critical decision-making processes identified through the policy research program. Through the data compilation process, missing information critical for decisions and areas of data duplication and inefficiencies

will be identified. The focus will be on natural resource data coordination and promotion of data standards to support statewide and regional assessments.

**Strategies**

- Work with the Oregon Progress Board and state agencies to provide data and information needed to monitor natural resource and environmental Performance Benchmarks and develop new benchmarks and indicators of the health of Oregon's Environment.
- Build an update of the 2000 *State of the Environment Report* into all updates of *Oregon Shines*.

# INR Policy Research Program

The INR Policy Research Program brings the capacities of Oregon University System to Oregonians who need policy analysis, research, and evaluation about complex, interdisciplinary natural resource issues. More specifically, the purpose of the INR Policy Research Program is to identify or clarify policy issues and provide relevant, science-based information analysis to policy-makers to support and improve their decision making; to develop, test, and implement new policymaking methods and tools; and, to convene interdisciplinary research teams to address resource and management challenges.

INR's key clients are state level policy-makers who need assistance understanding complex natural resource issues, including but not limited to the Governor and his advisors, agency heads, legislators, and board and commission members. INR is able to provide its customers state-of-the-knowledge research findings, either already existing, or through research and analysis by OUS faculty. INR does have competitors for this service and those mainly consist of industry and private consultants who do not have the immediate access offered by INR to faculty and their research.

INR seeks to *anticipate* natural resource issues of concern, to help policymakers avoid operating in crisis mode. INR strives to demonstrate explicitly that its research and communications are policy neutral. INR also seeks to improve on existing alternatives by looking at issues from different angles—an aim that can be transformative and useful to natural resource and environmental decision-making.

## **Goal 1. Improve capacity for responding promptly to local, state, and federal needs.**

The faculties at OUS institutions are the heart of INR's success. The Legislature intended INR to tap the expertise of all universities in the OUS system, not just OSU. As INR undertakes projects, it will seek to identify and market faculty talent throughout the system and avoid duplicating functions and services provided at other institutes.

Essentially INR is marketing faculty talent and acting as a catalyst for faculty engagement in responsive, relevant research and policy analysis. INR acts as a “broker” with most projects carried out by existing university faculty, not INR staff. INR engages faculty to prepare and provide timely independent analyses of environmental and natural resource issues based upon expert evaluation and synthesis of existing data, and, where appropriate, developing new data. INR will support participating faculty members

through administrative tasks associated with obtaining and maintaining grants, coordinating interdisciplinary teams and assuring responsiveness to public questions.

### **Strategies**

- Participate regularly in Governor's Natural Resource Cabinet meetings in order to monitor evolving issues and challenges.
- Develop relationships with Association of Oregon Counties and League of Oregon Cities and identify ways to monitor their issues and challenges.
- Meet regularly with government policymakers to ascertain their needs and identify potential areas where university faculty expertise could be of assistance.
- Seek broadly across OUS for best collaborators, mixing seasoned researchers with new and energetic faculty.
- Review existing systems for tracking on-going research within Oregon higher education and specific faculty research interests.
- Communicate successes and achievements rapidly, strategically, and broadly.

## **Goal 2. Create a neutral civic space where policy-makers and citizens can join scientists to seek solutions to pressing natural resource problems.**

Many models for promoting public dialogue and understanding exist. Society needs places, like universities, where complex natural resource and environmental issues can be discussed and debated outside typical political forums. Community leaders, whether policy-makers, non-governmental organizations or foundations, need time and space to think about the major challenges of the future in order to anticipate and tackle them early. Some issues will be highly politicized even before they are addressed, others may only have vague form in the minds of policymakers. Anticipating and helping develop policy for difficult eventualities will become a hallmark of INR.

### **Strategies**

- Regularly canvass leading thinkers from *all* sectors and geographic areas and social groups to identify major upcoming challenges.
- Develop formal agreements with Oregon Solutions and other existing organizations within the Oregon University System to cooperate on policy forums.
- Convene forums on critical issues already facing Oregon in order to link scientific research, interested citizens, and public policymakers using intensive, short-term focus efforts wherever feasible.
- Try out and analyze results from web-based discussion groups focused on particular issues, to reduce time and expense.
- Develop and incubate interdisciplinary research teams to investigate critical issues identified through forums and other information sources.

**Goal 3. Build strength in targeted interdisciplinary research areas by adding value and impact to education and outreach efforts.**

Research about current or impending natural resource problems is of no value as technical data. If academic research is to benefit the public, it must be translated into information policymakers and citizens can understand. INR will seek, where possible, to plan communications that target key audiences, translate findings, and help design and implement new ideas in the field.

**Strategies**

- Identify university research proposals that would be strengthened by strong outreach and education components.
- Provide communication planning services to researchers.
- Work with other research centers in the OUS system to challenge researchers to help move data into applied service.
- Collaborate with the INR Information Program to develop best formats and outlets.

# INR Operations

**Goal 1. Increase and diversify INR's funding base to promote and develop a self-sustaining organization.**

INR relies on a large number of different sources of funding to support its mission. Base support from the Legislature only covers 15 percent of operational costs. In order to carry out its mission, funds are needed to support INR beyond those available from grants and contracts for specific projects. INR needs new partners and funding sources to increase and diversify its base of support.

**Strategies**

- Develop and secure funding through the OSU capital campaign.
- Develop and pursue funding from the 2009 legislative session to (1) support an effective, sustainable natural heritage program; and (2) to support the *Oregon Explorer* project.
- Assure regular and continuing communications with potential funders such as foundations, state and federal agencies, and non-governmental organizations.
- Prepare a comprehensive development plan.

**Goal 2. Communicate various types and levels of information about INR's efforts and developments to broad audiences.**

The INR will develop a public identity and presence for its primary audiences of the OUS faculties, Oregon public policy-makers, and potential funders. This requires an emphasis on substantive communications to raise awareness of INR and its capabilities. It will be critical to position INR so that it is associated not only with OSU, but with the Oregon University System generally.

**Strategies**

- Upgrade website content.
- Develop comprehensive contact database.
- Quarterly electronic newsletter with news alerts as warranted.
- PowerPoint presentation on INR suitable for general audiences and professional groups.
- Printed general brochure for handout at presentations and other events.

**Goal 3. Assess and secure office space in Corvallis and Portland.**

INR operates from two facilities: the main office in Strand Agricultural Hall on OSU's Corvallis campus; and, two buildings leased from The Nature Conservancy on Southeast Morrison Street in Portland which house ORNHIC. INR will work with other units within OSU to develop OSU's Portland strategy and identify suitable space in the Portland area for all INR Portland area operations. INR will also require additional space in Corvallis as staff grows.

**Strategies**

- Assess space needs for current and future INR staff in Corvallis and Portland.
- Secure new facilities for INR Portland staff.

**Goal 4. Benchmark other multi-disciplinary natural resource institutes.**

There are a few interdisciplinary research and policy centers at universities around the United States that INR can use as "benchmark programs." Many of these programs were developed in the late 1980's – early 1990's, so they have a few years of experience in delivering policy relevant science products.

**Strategies**

- Examine in more detail and communicate with directors of the various policy centers around the country to identify and characterize best practices for (a) supporting interdisciplinary policy centers; (b) involving faculty in policy-related projects; and (c) creating partnerships with the private and public sector. These best practices will be integrated into INR operations as appropriate.

## **APPENDIX A: Advisory Board Selected Priority List for INR**

*From 17 January 2008 Advisory Board Meeting*

### **Operational Priorities**

- Core funding to allow INR to focus on key needs
- Having multiple places to support the institute
- A system that makes INR tied to other OUS and OSU colleges, centers, and programs

### **Key Natural Resource Issue Priorities**

- **Ecosystem Services Marketplaces**
- **Economic Development and Job opportunities in Natural Resources & Rural areas**
- **Setting and Integrating Conservation Priorities**
  - Reducing duplicity, creating a single vision
  - Better conservation planning
- **Climate Change**
  - How it affects natural resources and conservation planning
  - Address adaptation to climate change
  - Social issue dealing with climate change
- **Integrated System of Monitoring (including interpretation)**
  - The ability to look at status and trends.
  - Generating information should be assigned to INR
  - Integrating ideas, issues, and concepts of the economy and environment;
  - Integrating databases
- **Land-use and Water**
  - Land-use effectiveness, planning, laws
  - Integration of land-use and water policy
  - Long-term planning (especially for rural areas)