Institute for Applied Ecology

Strategic Plan 2018–2023

Institute for Applied Ecology

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Institute for Applied Ecology
STRATEGIC PLAN 2018–2023

Background

Our natural landscape faces complex challenges that require innovative solutions. Habitat loss, invasive species, population growth, climate change and other factors put much of our biological heritage at risk. Engaging people of all ages and backgrounds in developing and implementing solutions to these issues is vital to conserving our natural world. The Institute for Applied Ecology fills a unique niche among nonprofit organizations and agencies because of its multi-faceted approach to addressing these challenges through restoration, research and education. Located in Corvallis, Oregon and Santa Fe, New Mexico, we work with a diverse group of partners to accomplish our mission. This Strategic Plan identifies a solid set of goals, objectives and tasks to guide our activities over the next five years. Our board and staff are working together to achieve the four key goals laid out in this plan: restoring resilient ecosystems, conserving species, connecting people and nature, and growing a sustainable and diverse organization. The intent is to implement the critical elements of this plan while at the same time treating it as a living document that can adapt to changing circumstances and unforeseen opportunities.

Fender's blue butterfly and Kincaid's lupine

This document contains our updated mission and vision, a summary of a SWOT (strengths, weaknesses, opportunities and threats) analysis and priority strategies for the next five years.

If you have any questions about the Institute for Applied Ecology, please contact us:

- Phone: (541)753-3099
- Email: info@appliedeco.org; or
- Visit us on the web at www.appliedeco.org

Mission

The mission of the Institute for Applied Ecology is to conserve native species and habitats through restoration, research and education.

Vision

Our vision is a world where all people and wildlands are healthy and interact positively, biological diversity flourishes, and environmental challenges are met with a social commitment to solving problems using scientific principles.

Values

Our values represent the core principles of our organization, and describe who we are and how we intend to engage with the natural world and our communities.

- **Nature**. The natural world and wildness have intrinsic value.
- **Integrity**. We approach our mission, partners and community with integrity, honesty, civility, and accountability, using science to solve real world problems.
- **Leadership**. We are willing to lead as a voice for nature and science in our community.
- **Collaboration**. Our challenges are best approached through joint action with others; we collaborate wherever possible to accomplish our goals.
- **Diversity**. We respect and value people of all identities and ages and work to create an environment in which all are prosperous, healthy and safe.
- **Action**. We recognize that the preservation and improvement of our natural world requires taking action, and we prioritize on-the-ground, intentional, and practical steps forward.

Diversity Statement

Diversity makes us strong. Equality is in our nature.
We are passionate about inclusion across gender, race, age, religion, identity, and experience. We know that people enrich our organization and accomplish our mission. Just as biological diversity makes ecosystems resilient, human diversity gives us power, creativity, and adaptability. We empower everyone to bring their authentic selves to work, and we strive for a workplace that reflects our communities.

Conducting estuary research

Strengths, Weaknesses, Opportunities, and Threats

An analysis of internal and external factors that affect our programs

Strengths

IAE is an independent organization conducting field-based research to advance the science of resource conservation and restoration, and disseminating the results as guidance to other organizations, practitioners and educators. IAE's scientific focus and independent status allow great flexibility and efficiency, often leading to rapid advances in management practices. IAE's leadership as an independent science-based nonprofit sets it apart from many other nonprofit organizations which focus on advocacy rather than scientific decision support and on-the-ground implementation.

Our staff is passionate, knowledgeable, and enthusiastic, with diverse skill sets that create opportunities to contribute to long-range management plans on federal lands, scientific research, on-the-ground restoration work, and community interaction. Members of our staff creatively solve problems, using its skills and technological know-how to further the goals of the organization with the support and trust of the organization's leadership.

IAE is well-positioned among the environmental, conservation-minded communities of the Pacific Northwest and Southwest, and its reach extends nationally. IAE has an established regional and national reputation and record of accomplishment in the natural resource community and is sought out to coordinate and collaborate with diverse resource management entities.

IAE has a strong, diverse, highly engaged, skilled, and active board, whose shared perspectives provide staff and the organization with policy guidance and effective governance.

IAE has a diversity of public and private funding and is not burdened by excessive overhead. It has exemplary nonprofit accounting practices. IAE has the potential to expand and become diverse in the types of research and educational opportunities it provides. Existing strong partnerships create opportunities for funding as well as the potential to consider new ideas. An increasingly diverse portfolio of funding sources has improved the financial strength of IAE over time.

IAE has successfully established a financial reserve including a strategic rainy day fund, and built a development program to grow private donations to support the organization's mission.

Weaknesses

Although IAE has made progress in securing new sources of private funding through its development program, funds from private sources still remain a very small percentage of our annual budget. The organization remains financially vulnerable without a more diversified and balanced funding portfolio. That vulnerability may be aggravated with potential reductions in budgets and changes in funding practices in federal natural resource agencies, which are a key source of support for IAE.

IAE is outgrowing its facilities and fleet resources. Staff experience chronic crowding in our offices. Although this is partially alleviated in seasons when field work pulls staff away from work stations, close working quarters remain a strain in some rooms in the old house that we currently call home. The vehicles in IAE's fleet are typically old and have frequent maintenance and repair needs, and parking is limited to a few private and on-street spaces. IT support is sparse in our organization, and often falls to one or a few staff, and improvements to offsite backup and server maintenance are needed.

Our organization needs stable funding for program directors that is not linked to individual projects. Current funding for IAE's programs is tied to short-term projects, which limits the overall growth and sustainability of the organization.

IAE sometimes struggles to communicate our story to the general public, especially to people who are not already involved in the world of conservation, resulting in a lack of public understanding of who we are and what we accomplish. In addition, IAE has been challenged by a lack of bilingual staff who can communicate with diverse communities, in particular Latino communities in Oregon and New Mexico.

Although the size of the board has increased over time, the need remains to enhance diversity and business connectivity to attract new sources of funding to IAE.

Threats

The loss in confidence in science in some sectors of the public has created alarm among researchers and practitioners because land conservation decisions by leaders may be influenced by nonfactual reasoning. Reduction in funding for natural resource management appears to be a potential result. In addition, the pace of news and high anxiety over many issues distracts public focus from environmental needs. Simultaneously, agencies are increasing paperwork requirements for funding projects and scrutinizing proposals in new ways, delaying and reducing natural resource conservation funding despite escalations in the need for habitat conservation, post-fire rehabilitation, and endangered species recovery.

Staff turnover and retirement within key partner agencies can result in a loss of institutional knowledge, strong relationships and support for projects that achieve mutual goals. We also experience "funder fatigue" from organizations that have funded projects for several years, and at times struggle to sustain longer-term projects through to their successful completion.

Opportunities

Collaboration and diversity are core values of IAE. Working with other local nonprofits and agencies in the Corvallis area creates the opportunity for shared space for our Oregon office, synergistic collaborations, and sustainable improvements in diversity, equity and inclusion. IAE is actively involved in this partnership and as a result anticipates improvements in our workspace and facilities, efficiency of operations, organizational sustainability, impacts of our projects, and organizational diversity.

The need for native plant materials for habitat restoration in the United States and elsewhere is growing due to wildfires, climate change, conservation on private lands and other needs. IAE is in a strong position to help with this seed supply in both the Pacific Northwest and Southwest regions, as well as nationally and internationally through our Native Seed Network conferences, research capacity, and ability to share information and support partnerships. The National Seed Strategy released by twelve federal agencies underscores the scale of this need, and IAE is an important partner in this initiative.

Climate change presents major, widely-recognized challenges to conservation and restoration activities. IAE has the expertise and experience to provide guidance to other organizations working to adapt to climate change. The Estuary Technical Group's Landward Migration Zones project is an example of IAE activities that provide direct, action-oriented guidance to help address climate change challenges.

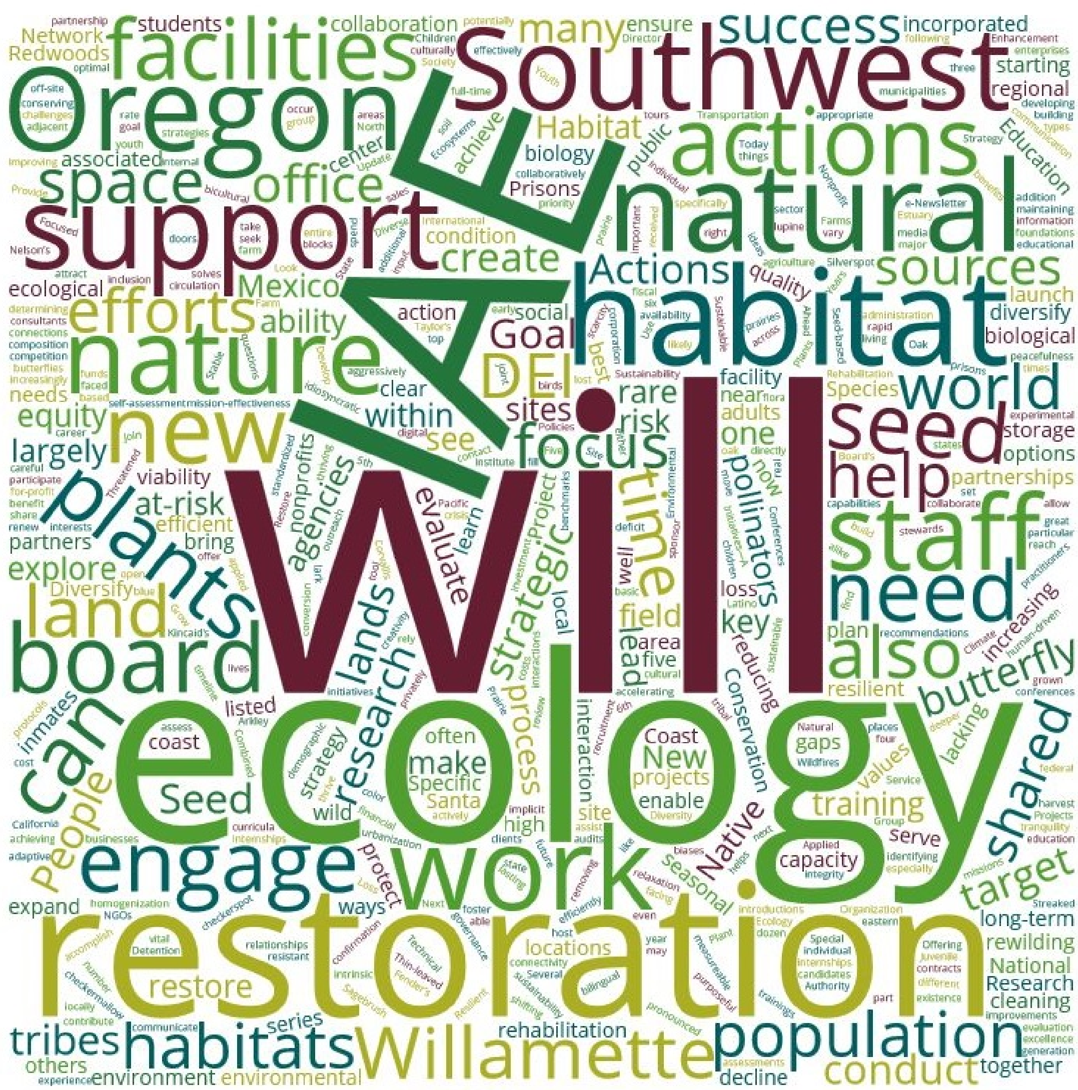
Working lands are significant opportunities for conservation in our region. We see potential for connecting to private land owners to assist them with habitat restoration and improved management practices to promote habitat values and at-risk species conservation on their lands. We also see opportunities to acquire and manage lands for conservation as a landowner.

Our community is a major asset to our organization, and we look to our partners, collaborators, funders, and people we serve to support our mission in the long-term. We have opportunity to hone our message about who we are, our passion for our mission, what we do, and how others can participate and promote this message through social media, newsletters, events, our website, and other methods. Connecting to donors and volunteers has clear potential to help us implement our mission.

Our Strategic Initiatives: A Look Ahead at the Next Five Years

The Institute for Applied Ecology was incorporated in 1999 and received formal confirmation as a 501(c) 3 organization from the Internal Revenue Service in 2001. We have grown from one full-time staff and three seasonal employees in 2000 to 24 regular staff and 15 seasonal employees in 2018. During this time, IAE has developed five key focus areas to achieve its mission: Habitat Restoration, Ecological Education, Conservation Research, the Native Seed Network, and the Estuary Technical Group. In addition, the IAE Executive Director manages a Special Projects Program, which serves as an incubator to help IAE launch new projects and respond to new and often unforeseen opportunities. In 2016, IAE opened a second office in Santa Fe New Mexico to bring additional capacity for natural resource conservation to the southwestern United States.

Moving forward, we see our most important strategic initiatives focusing on four goals: 1) restoring resilient ecosystems, 2) conserving species, 3) connecting people with nature, and 4) growing a sustainable and diverse organization. These goals overlap and interact in positive ways. This plan outlines our strategies for achieving each of these goals.



A Word Map of our Strategic Plan.

Goal 1: Restore Resilient Ecosystems

Habitat for wildlife, plants and people is of vital importance for maintaining ecosystem functions, biological diversity, and human health. However, habitats and wildlands are in decline both locally and globally. The spread of invasive species degrades habitat quality and diversity. Climate change is also playing a part in these trends, and many species are losing their ability to thrive in place. Combined with urbanization, development, human population growth, and land conversion to agriculture, invasive species and climate change are threatening the ability of many ecosystems to provide the services on which the natural world and people rely.

To address this crisis of habitat loss and degradation, we will focus on strategic actions that restore lands in great need of rehabilitation, as well as those with high promise of success. These actions will create functioning ecosystems that support plants, pollinators, wildlife, human interaction with nature, local economies, and rewilding of lost or at-risk species.

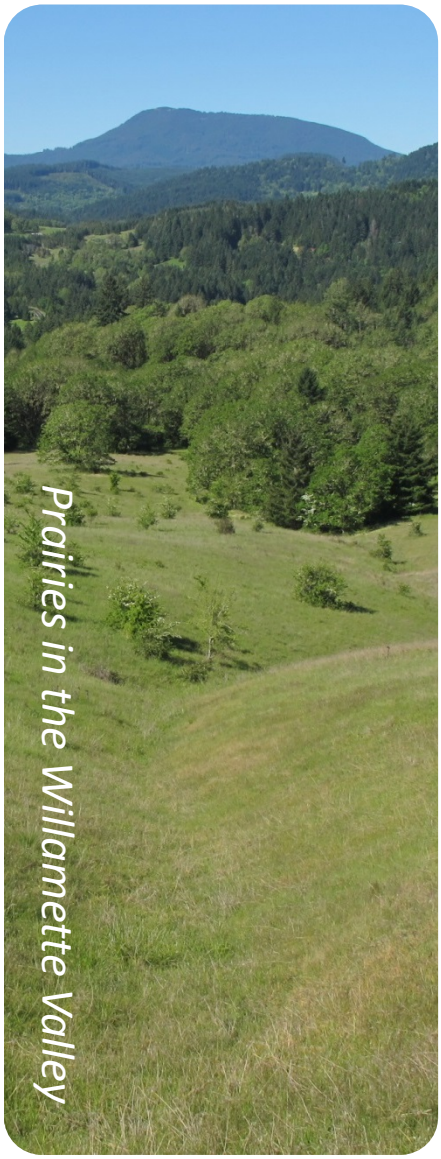
Strategic Actions:

- Engage in restoration of prairies and other wildlands in the Willamette Valley, and Oregon coast, and the arid west in partnership with agencies, tribes, NGOs and private land owners. These actions will support improvements in ecosystem function, land rehabilitation, biological diversity, landscape connectivity, and habitat quality for pollinators and wildlife.

- Lead the development of native seed markets to support seed availability for habitat restoration. Specific actions to support this will include collaborative seed production efforts such as the Willamette Valley Native Plant Partnership, the Southwest Seed Partnership, and possibly other partnerships in western North America. IAE will also fill seed production gaps in the Willamette Valley by developing and expanding the IAE Farms, including the Arkley Farm and other locations. Our efforts will directly support the *National Seed Strategy for Rehabilitation and Restoration*. IAE will also host the 2019 and 2021 National Native Seed Conferences, the 5th and 6th conferences in the series, and participate in leadership of the International Network for Seed-based Restoration thematic group of the Society for Ecological Restoration.

- Work with partners to ensure that our highest priority sites receive restoration and protection. Effective habitat restoration requires careful planning and collaboration to ensure resources are targeted at the right places, times and communities. One example of this is the active role IAE plays in the Willamette Valley Oak and Prairie Partnership, working with a suite of partners to achieve clear and measureable increases in the quantity and quality of prairie and oak habitat in this region.

- Conduct research to develop the best practices for grassland habitat restoration in the Pacific Northwest and Southwest. For example, IAE staff will lead and launch RestoreNet, a collaborative experimental network open to all restoration practitioners designed to improve the success rate of habitat restoration and answer key ecological questions. IAE will work with the New Mexico Department of Transportation to evaluate various sources of native plants for habitat restoration and soil retention near highways.
- Develop and deploy efficient, effective, and standardized site assessment protocols that allow IAE and our partners to assess wildland site conditions, identify restoration and management needs of individual sites, and document the success of restoration efforts. Site assessment and monitoring are key steps in adaptive management for habitat restoration, and the creation of widely-useful, flexible, cost-effective protocols that track site conditions and treatment results will improve habitat restoration success throughout our focus regions and habitats.
- Respond to sea level rise and climate change and by developing data and decision support tools for estuary restoration and conservation. IAE's Estuary Technical Group will continue its active and effective partnerships with agencies and other organizations to efficiently gather information and provide accessible interpretations.


Prairies in the Willamette Valley

Goal 2: Conserve Species

Individual species are the building blocks of ecosystems and provide the diversity that make these ecosystems resilient to climate change and resistant to invasive species. Species have intrinsic and aesthetic value, and may also provide economic and medicinal benefits to people. However, many species are now at risk of disappearing and the rate of extinction is accelerating. About 940 of the plants in the U.S. (5% of our country's flora) are listed as Threatened or Endangered. Loss of habitats, competition from invasive species, and shifting climates are together reducing the viability of many species. Today the need is urgent to protect species from extinction, including managing their habitats and rewilding species that have become so rare that they are now largely absent from the landscape. Techniques for successful introductions of populations are largely idiosyncratic across species and habitats, so research is needed to develop methods that are efficient and effective for each species. For some species, information on their basic biology is lacking, and assessments of optimal methods for habitat management to support population growth are unavailable. Our strategic actions will focus on reducing extinction risk and promoting population expansion of at-risk species.

Golden paintbrush and Taylor's checkerspot butterfly

Strategic Actions:

- We will pursue a five-point approach to species conservation:
  1. Conduct regional planning to identify species condition and priorities for species conservation.
  2. Manage habitat of existing populations to promote population growth of target species.
  3. Augment small populations and create new populations to support species viability. For listed species, our goal is to move them toward recovery through removing threats to their existence.
  4. Conduct the research necessary to enable the success of these goals.
  5. Provide opportunities for our community to interact with these rare and vulnerable species.
- IAE will focus on regional planning and on-the-ground species conservation for at-risk plants, butterflies, birds, pollinators and other wildlife.
  - In the Willamette Valley of Oregon we will target these species: Nelson's checkermallow, Willamette Daisy, Golden paintbrush, Thin-leaved peavine, Shaggy horkelia, Kincaid's lupine and Fender's blue butterfly, Taylor's checkerspot butterfly, and Streaked horned lark.
  - In the arid west we will focus on species that rely on sagebrush, such as the Greater Sage Grouse, and work with prisons to grow sagebrush in support of wildland restoration.

- On the Oregon Coast we will target habitat restoration and species management for Oregon Silverspot butterfly on the Oregon coast.
- In eastern Oregon and Washington we will focus on conservation of Northern wormwood, Mulford's milkvetch and other species of the Great Basin.
- In the Southwestern US we will focus on Monarch butterfly, rare cacti, and other species.
- On the Pacific Northwest coast we will collaborate with other organizations to protect, restore and enhance estuarine habitat for at-risk salmonids.
- We will conduct research on population biology, develop best management practices, and assess climate impacts on vulnerable species.
- Coast Redwoods are at high risk of loss in Oregon, where they occur in only one county adjacent to California. Wildfires, harvest, and climate change are major threats to the persistence of this species and its ecosystem in Oregon. IAE will work with partners to develop a conservation strategy for Redwoods and associated rare species in Oregon.

Goal 3: Connect People and Nature

People and nature need one another. People benefit measurably from nature, especially when they spend time out of doors where they can interact with the natural world. The impacts of nature on human health and wellbeing are well documented. Research shows that people viewing natural landscape settings report "feelings of tranquility, peacefulness, or relaxation," and spending time in nature has positive health impacts. The threats facing nature are largely human-driven, and connecting people with nature provides educational opportunities and enhances community ownership of wild spaces and the natural world. Engaging the public in land conservation is crucial because so much land is in private management. For example, in Oregon's Willamette Valley, 97% of lands are privately owned. As people learn more about the natural environment, they are more likely to engage with it and protect it. But opportunities to interact with nature are in decline in our increasingly digital lives, and resources to support conservation practices by private landowners are often lacking. Children and adults alike experience a scarcity of exposure to wild living things, and in communities of diversity this deficit is even more pronounced. Our strategy addresses the need for human interaction with nature by identifying opportunities for community engagement and improved equity and diversity of the natural resources field.

Strategic Actions:

- Engage underserved communities in conservation and science. For example, we will actively maintain and expand the Sustainability in Prisons Project, including the Sagebrush in Prisons Project, connecting inmates with natural resource conservation at over a dozen prisons in six western states. We will also engage youth inmates in Youth Authority and Juvenile Detention facilities.
- Develop relationships with tribal communities to support cultural connections to significant sites and plants. For example, we will work collaboratively on habitat restoration projects with tribes to ensure that culturally significant plants are incorporated into restoration actions, such as through our Plants for People Project. We will also collaborate on nursery production of native plants with tribes.
- Expand our natural resource conservation internship program to recruit more aggressively from communities of diversity, and to include internships that are specifically allocated for minority groups.
- Our Ecological Education Program will engage school students and teachers in conservation science, develop curricula for students, and foster the next generation of land stewards in our communities through place based education. We will include dual immersion schools and engage Spanish speaking volunteers.
- Conduct a series of field tours of restoration sites and wildlands each

year to provide opportunities for our communities to interact with the natural world, see the changes that happen during restoration, and learn about ecological interactions in the habitats around them.

- Renew efforts to provide training workshops for private landowners in prairie and oak habitat restoration, endangered species conservation, and management of private lands, enabling them to restore their lands on their own or in collaboration with IAE or others.
- Improve circulation of our e-Newsletter and frequency of social media posts, and improve content of our messages to better communicate the success stories of our work and the ways our community can help address the challenges faced by the natural world.

Goal 4: Grow a Sustainable and Diverse Organization

Nonprofit organizations like ours can accomplish significant and lasting change for our environment and our community. IAE in particular has several strengths that make us able to help species, habitats and people simultaneously through on-the-ground restoration, applied science that solves real world problems, and community engagement with children and adults. But funding from many sources can be unstable and vary through time, our office workspace is cramped, and some types of diversity in our organization underrepresent our community. Stable funding from multiple sources, adequate facilities and equipment, clear and complete policies and procedures, and a thriving, diverse staff and board are needed to create a positive future for our organization.

Strategic Actions:

- Diversify our funding sources: We will diversify our funding over time by growing our development efforts to increase funding from private donors, businesses, and create new partnerships with foundations. IAE will evaluate the costs and benefits of starting a subsidiary for-profit corporation to allow the organization to compete for different sources of funds and support our social enterprises (such as native seed sales). At the same time, IAE will continue to work with federal and state agencies and explore new funding opportunities (including more contracts) and mechanisms within the public sector. We recognize that our most effective marketing tool will be to complete our work with excellence and integrity, but we also need to advertise our capabilities better to potential clients.
- Upgrade facilities and shared space: IAE will join together with other local environmental conservation nonprofits and

municipalities in the Corvallis, Oregon area to explore options for a nonprofit center in which we share space, facilities, equipment, and ideas. Combining our work spaces can help all of us implement our missions, reach our communities better, and find synergy in joint creativity. We will create a governance structure, engage consultants, and develop a timeline for occupying a shared facility.

  - IAE will seek a new facility or facilities for its SW office in Santa Fe New Mexico, either in a shared space or a separate leased office. These facilities will need to have adequate work stations, meeting room(s), equipment storage, parking, and space for seed cleaning. Options can include property leased from others or shared with government agencies.
  - We will also evaluate and explore our existing and new options for native seed production, including farm land and associated equipment and facilities, seed cleaning facilities, and potentially off-site office space and equipment storage.

- Update policies and procedures: Several of our policies and procedures are in need of updating. We will work with our administration staff to review our existing documents, recommendations from financial audits, and input from staff and board. These changes will be implemented as needed and appropriate for the health of our organization. Policies that enable us to more effectively and efficiently serve as a fiscal sponsor for other organizations will be implemented.

- Diversify our organization: Improving diversity, equity and inclusion (DEI) within our organization and outwardly toward the communities we serve will increase our mission-effectiveness and long-term sustainability. We see diversity in our staff and on our board as adding strength to our organization and our ability to implement our mission. The 2014 State of Diversity in Environmental Organizations' Report indicates that although people of color are 36% of the US population, they are only 13% of the workforce and 5% of the board leadership of environmental nonprofit organizations.

  The following strategic actions will improve DEI at IAE in the near- and long-term:

  - DEI planning, training and policies.

    IAE will conduct a self-assessment of demographic diversity within our staff and board so we have a better understanding of where we are starting from in our process.

    We will engage in a collaborative DEI assessment, planning and training process with other nonprofits in our area, including those involved in our shared space center. During this collaborative process we will:

    - Develop a deeper understanding of the residents in our service regions and help us identify gaps in our outreach and organizational composition so that we can better address the entire community's needs, interests, and values.
    - Use trainings to build leadership capacity that helps us implement DEI actions and changes in our organizational cultures.
    - We will develop comprehensive DEI action plans including evaluation of existing policies, develop new organizational equity policies as needed, and set benchmarks and a communication plan.

        - Confront our own implicit biases and engage in purposeful work to make personal change.
    - Increase diversity on our staff and board. IAE will take action to diversify our organization. Specific actions for this will include increasing the diversity of our staff and board members by, for example, increasing the number of bilingual and/or bicultural individuals. Offering opportunities to early career individuals to attract them to the field of natural resource management will help us bring new individuals into our organization, so we will offer Natural Resource Conservation Internships to members of tribes or Latino communities. Our board recruitment committee will contact communities of diversity to identify candidates for board membership.

Measuring Our Impact

Measuring the outcomes and impacts of these initiatives will take focus on the part of our staff and board.

- We will develop in a separate document a set of milestones and measures to document our progress toward achieving our goals. This will allow us to demonstrate in a concrete way to others and to ourselves the impact IAE has on the conservation of native species and habitats. Specifically, we will develop formative assessments (e.g., rubrics) that demonstrate and improve the effectiveness of IAE's programs on our mission.