DEFENDERS OF WILDLIFE
PRESIDENTIAL TRANSITION WHITE PAPER

ENCOURAGING WILDLIFE CONSERVATION ON PRIVATE, STATE, AND TRIBAL LANDS

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CHALLENGE

The American landscape is a patchwork of federal, tribal, state, local and private lands. These lands support our economic prosperity, provide abundant natural resources, shelter a unique diversity of plant and animal species, and continue to inspire generation upon generation of Americans who call this land home. But America has failed to protect our natural capital: those rivers and lakes, hills and valleys, prairies and forestland and the living creatures that support the ecosystem services we depend on. These life-sustaining services, such as clean water, pollination, and carbon sequestration, are tied to the nation's biodiversity. Today, despite having comprehensive national legislation to protect endangered species and an extensive holding of protected areas, the U.S. continues to suffer biodiversity loss. As of 2008, federally threatened and endangered species in the U.S. numbered 609 animal species and 744 plant species[1] and estimates indicate that only 40 percent of native vegetation remains in the U.S[2]. To preserve this rich natural heritage we must reconstruct our fragmented landscape by piecing together a national network of conservation lands and waters that will support ecosystem services, sustain biodiversity and ensure the health and prosperity of future generations.

Building a national conservation network will require us to work strategically across traditional jurisdictions and land ownership boundaries. The threats to biodiversity permeate borders and are not confined to certain land use types or jurisdictions. These threats include habitat conversion, fragmentation and degradation, the introduction of non-native species, pollution, direct exploitation, disruption of ecological processes, industrial scale agriculture

[1] U.S. Fish and Wildlife Service. 2008. http://www.fws.gov/endangered/
[2] Bryer, M.T., K. Maybury, J.S. Adams, D.H. Grossman. 2000. More than the sum of the parts: Diversity and status of ecological systems. Pp 201-238 in B.A. Stein, L.S. Kutner, J.S. Adams eds. Precious Heritage: The Status of Biodiversity conservation in the United States. New York: Oxford University Press.

and forestry, and climate change.[3] Habitat destruction continues to be the leading threat to biodiversity, endangering some 85% of imperiled species[4]. By 2050 the U.S. population is expected to grow by at least 135 million people to approximately 420 million people which will result in a substantial increase in development across the country.[5] While development will occur mainly on private lands, lands already protected will be affected by encroaching development, isolation from other large habitat areas, and degraded natural resources.

In the contiguous United States about 6 percent of our land area is federally managed for the purpose of wildlife conservation, and another 25 percent of our land area is federally owned for other natural resource and military purposes.[6] While these lands are among our most treasured natural assets they alone cannot provide the geographic range and connectivity necessary to conserve the complete fabric of biological diversity and ecosystem services on which our country depends. Forty percent of the species that are listed as imperiled, threatened, or endangered are not known to inhabit federal lands. Less than one-tenth of listed and imperiled species are on federal lands afforded the highest levels of protection, including national parks, wildlife refuges, and wilderness areas.[7] The majority of all species occur on multi-use lands, or lands with intensive management regimes and no biodiversity protections. Many of these lands are in private or local ownership.

The borders of our federal conservation lands are also closing in. By 2030 some 21.7 million acres of rural private lands (8 percent of all U.S. private lands) located within 10 miles of the National Forest System boundaries will experience significant increases in housing density.[8] A similar situation exists on other federal lands, including military lands which harbor a large percentage of endangered and imperiled species. All species need to move about the landscape freely in order to maintain viable populations, and increasing fragmentation will isolate national forests and other federal lands, turning these areas into small habitat islands that lack connections to other areas of intact habitat. (Recommendations for reforming the management of federal lands and waters are included in a separate Defenders of Wildlife whitepaper.)

The Importance of Private Land

Nearly 70% of the contiguous United States is privately held as agricultural land, rangeland, private forests, developed areas and open space. In some states, such as Illinois and Texas,

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[3] Vitousek, P.M., H.A. Mooney, J. Lubchenco, & J.M. Melillo. 1997. Human domination of Earth's ecosystems. Science 277(5325): 494-499.

[4] Wilcove, D.S., D. Rothstein, J. Dubow, A. Philips, & E. Losos. 1998. Quantifying threats to imperiled species in the United States. Bioscience 48(8): 617-615.

[5] Alig, R.J., J.D. Kline, M. Lichtenstein. 2004. Urbanization on the U.S. landscape: looking ahead in the 21st century. Landscape and Urban Planning 69: 219-234.

[6] Shaffer, M.L., J. M. Scott, & F. Casey. 2002. Noah's options: Initial cost estimates of a national system of habitat conservation areas in the United States. Bioscience 52(5): 439-443.

[7] Groves, C.R., L.S. Kutner, D.M. Stoms, M.P. Murray, J.M. Scott, M. Schafale, A.S. Weakley, and R.L. Pressey. 2000. Owning up to our responsibilities: Who owns lands important for biodiversity? Pp. 275-300 in B.A. Stein, L.S. Kutner, J.S. Adams eds. Precious Heritage: The Status of Biodiversity conservation in the United States. New York: Oxford University Press.

[8] Stein, S.M., R.E. McRoberts, R.J. Alig, M.D. Nelson, D.M. Theobald, M. Eley, M. Decter, and M. Carr. 2005. Forests on the edge: Housing development on America's private forests. Gen. Tech. Rep. PNW-GTR-636. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 16p.

private land accounts for more than 90 percent of the total land area, with protected areas scattered inconsistently throughout.[9] Extremely important for wildlife and ecosystem conservation, private lands support more than two-thirds of the species listed under the Endangered Species Act - with ten percent of listed species occurring only on private lands.[10] These lands also disproportionately support the last relicts of imperiled ecosystems -- tall and shortgrass prairie, longleaf pine forests, shrub lands, and bottomland hardwood forests.

Private lands tend to coincide with high levels of species diversity because they often occur on more productive soils and at lower elevations than do nature reserves. Many federal lands were established in areas with a relative lack of value for commercial use or human habitation, or because of scenic attributes or recreational value. Consequently areas of low elevation with higher productivity and greater levels of species diversity are almost always underrepresented in nature reserves.[11] These richly productive private lands are also home to the nation's agricultural industry. Croplands, livestock production, and forestlands account for over 86 percent of private lands.[12] As rising food prices and demand for biofuel shift more land into high-intensity agriculture and development continues to convert millions of acres of private land, a concerted effort must be made to provide significant economic incentives for landowners to keep land out of production and development and in conservation. Just as markets have rewarded landowners who produce food and fiber or sell land to developers, so should there be incentives to landowners who actively "produce" conservation benefits.

States and Tribes

The states have a special role in regards to wildlife. Under the "public trust doctrine," wildlife can be owned by no individual but is held by the state in trust for all the people, and the states have an affirmative duty to fulfill this trust responsibility. With the exception of federal laws providing the federal government with authority over certain wildlife, particularly migratory wildlife that extend over state lines, the states have the fundamental authority to regulate the use of wildlife regardless of land ownership. States, thus, have an important role to play in managing wildlife populations on private lands.

States also own and manage land. Excluding Alaska, state lands cover just over 90 million acres and support at least one example of 43% of imperiled species and 58% of federally listed species.[13] The size of state land holdings varies across the nation as do management

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[9] Bean, M., R.Bonnie, T. Male and T. Searchinger. 2003. The Private Lands Opportunity: The Case for Conservation Incentives. Washington, DC. Environmental Defense: 14.

[10] Groves, C.R., L.S. Kutner, D.M. Stoms, M.P. Murray, J.M. Scott, M. Schafale, A.S. Weakley, and R.L. Pressey. 2000. Owning up to our responsibilities: Who owns lands important for biodiversity? Pp. 275-300 in B.A. Stein, L.S. Kutner, J.S. Adams eds. Precious Heritage: The Status of Biodiversity conservation in the United States. New York: Oxford University Press.

[11] Scott, J.M., F.W. Davis, R.G. McGhie, R.G. Wright, C.R. Groves, J. Estes. 2001. Nature reserves: Do they capture the full range of America's biological diversity? Ecological Applications 11(4): 999-1007.

[12] 2003. United States Department of Agriculture. 2003 Natural Resources Inventory. Available at http://www.nrcs.usda.gov/technical/NRI/2003/nri03landuse-mrb.html

[13] Groves, C.R., L.S. Kutner, D.M. Stoms, M.P. Murray, J.M. Scott, M. Schafale, A.S. Weakley, and R.L. Pressey. 2000. Owning up to our responsibilities: Who owns lands important for biodiversity? Pp. 275-300 in

practices on state lands. State governments have historically had limited roles in land use planning decisions, although state forest practices acts and state wetlands regulations affect biodiversity management at the state level. In some states such as Florida, state agencies are carrying out aggressive natural area conservation programs and are having success in protecting critical biodiversity and not just scenic areas. At the same time, significant numbers of imperiled species or listed species occur on state lands that are unprotected yet could be managed in a way that would benefit these species. Increasing coordination with federal and private lands and providing guidance to state and tribal lands will help them to become an important part of a national conservation network.

While smaller in acreage than federal lands and not often managed for biodiversity, State and tribal lands are an important component of a national conservation network. Tribal lands cover over 55 million acres of the United States, mostly in the American West. There is currently little information about biodiversity on these lands, but there is reason to believe tribal lands support a rich assemblage of species and ecosystems. Unlike many federal lands which were established to manage certain natural resources or preserve scenic vistas, tribal lands are heterogeneous lands with a fairly comprehensive representation of natural ecosystems.[14] Although conservation efforts and funding opportunities exist on tribal lands, little has been done to coordinate efforts on these lands with other conservation action across the nation and there is increasing enthusiasm from the tribes to start managing these lands for conservation as well as cultural goals.

ACTION

The new administration will face the impending challenges of climate change, ongoing biodiversity loss, and the degradation of land and natural resources. Given these significant threats, and the importance of states, tribes, and private lands, Defenders urges the administration to take the following actions:

I. Promote revisions of the state wildlife action plans to improve their use as strategies for wildlife conservation and require that these plans be revised to include wildlife adaptation strategies for climate change.

The state wildlife action plans represent considerable progress towards creating a successful framework for statewide conservation. However, there are a number of significant improvements that need to be incorporated into the plans in order to turn them into strategic documents that can be used to allocate limited conservation funds.[15] As the next administration steps forward to meet the environmental challenges facing our lands, waters and wildlife we encourage them to bring fresh vision and renewed energy to this critical revision process. To help meet our national conservation goals, the next administration should promote revisions of the plans that improve their use as strategies for wildlife

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B.A. Stein, L.S. Kutner, J.S. Adams eds. Precious Heritage: The Status of Biodiversity conservation in the United States. New York: Oxford University Press.

[14] Czech, B. 1995. American Indians and wildlife conservation. Wildlife Society Bulletin. 23(4) 568-573.

[15] Lerner, J., B. Cochran, and J. Michalak. 2006. Conservation Across the Landscape: A Review of the State Wildlife Action Plans. Washington, DC: Defenders of Wildlife.

conservation and require that these plans be revised to include wildlife adaptation strategies for climate change. Our recommendations for plan revisions are outlined below.

First year:

The new administration should request increased funding during annual appropriations for the State and Tribal Wildlife Grants program to be used for the specific purpose of plan revisions for climate change.

States will need information and guidance on what the plans should include in regards to climate change and increased funding will allow the states to fully invest in the revision process. States may need to hire additional personal, conduct workshops and conferences, meet with experts, expand departmental resources, and retrain staff in preparation for this type of revision.

First term:

The new administration should support climate change and wildlife adaptation legislation that requires state wildlife action plans to address climate change.

Legislation has been proposed that requires the action plans to address the impacts of climate change in order to receive funding for wildlife adaptation. The most prominent such legislation, the Climate Security Act (S. 2191), included detailed provisions for planning for and funding wildlife adaptation activities, and would have required states to create adaptation strategies as supplements to their State Wildlife Action Plans to receive such funding. The Climate Security Act was brought to the Senate floor in June (as S. 3036) but was not brought up for a final vote for passage. The new administration should support inclusion in climate change legislation of provisions requiring state wildlife action plans to address climate change as a condition of receiving funding.

The Secretary of the Interior should require that states include specific goals, map priority areas, standardize methodology, include connectivity, prioritize conservation actions, and cover all species in the revisions of the state wildlife action plans.

Plans should cover all species and community types, set clear goals, prioritize conservation actions, and identify locations on the landscape where conservation is most critical. Goals should be specific, measurable, and have timelines associated with their achievement.[16] Goals can also help to prioritize actions. Plans should also prioritize explicit locations on the landscape in order to target limited funds to the areas most critical for habitat conservation. States with mapped priority areas are better able to communicate the needs of wildlife in the state and better able to coordinate conservation and mitigation efforts with other state and federal agencies, non-profits, and landowners. Establishing guidelines for plan revisions that include detailed methodology for selecting and prioritizing conservation opportunity areas is something that could greatly strengthen the compatibility of the plans, help states that have not yet started this crucial mapping process, and begin to tie these plans together into a national strategy for conservation.

[16] Margules, C.R. and R.L. PRessey. 2000. Systematic conservation planning. Nature 405: 243-253.

The Secretary of the Interior should require that all states begin the process of addressing climate change in wildlife action plan revisions in order to receive federal funding.

It is imperative that the state wildlife action plans address climate change and habitat connectivity. There is currently no guidance from Congress or the Department of the Interior requiring states to address global warming in their revisions, leaving states directionless and without incentive to update their plans. Given the scientific consensus that climate change is occurring and will have significant effects on the fundamental biological processes affecting wildlife[17] states must begin to address this significant threat. Revised plans should describe the impacts of climate change on wildlife populations, describe and prioritize proposed actions to help wildlife adapt to climate change, establish monitoring programs to determine the impacts of climate change on wildlife, include strategies and a timeline for plan implementation, and provide methods for measuring the effectiveness of the conservation actions. Plan revisions should also assess the connectivity of priority lands and the vulnerability of ecosystems, habitats, and species to anticipated climate changes.

II. Promote strategic conservation through private lands programs by supporting legislation that links federal incentive program funding to the goals and objectives of state, regional and national conservation initiatives, including the State Wildlife Action Plans.

To preserve habitat and species on private agricultural and forest lands conservation incentive programs should strategically utilize funds to limit further conversion of native landscapes, restore some converted lands to habitat, and implement more ecologically sustainable management practices on acres in active production of harvest. Because conservation funding is limited, investments must be made in a coordinated, strategic manner that ensures that the most critical landscapes for biodiversity protection and ecosystem function are given priority. The state wildlife action plans and other regional and local conservation plans that identify priority areas for conservation, that prioritize conservation actions and that outline specific goals can be used as guides to target funding toward the design of a conservation network that allows wildlife to adapt and respond to a changing climate. Coordination with the action plans will help to ensure that wildlife conservation activities undertaken under the Farm Bill conservation and forestry programs produce meaningful, strategically-considered conservation benefits for wildlife.

First term:

The new administration should support future legislation that links conservation incentive programs in the farm bill to the state wildlife action plans.

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[17] Fisclin, A., G.F. Midgley, J.T. Price, R. Leemans, B. Gopal, C. Turley, M.D.A. Rousevell, O.P. Dube, J. Tarazona, A.A. Velichko. 2007. Ecosystems, their properties, goods and services. Climate Change 2007: *Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change,* M.L. Parry, O.F. Canziana, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, 211-272

Language included in the 2008 Farm Bill as part of the Grassland Reserve Program (GRP), the Wildlife Habitat Incentives Program (WHIP), the Conservation Reserve Program (CRP), the Conservation Stewardship Program (CSP), and the Cooperative Conservation Partnership Initiative (CCPI) allows the Secretary of Agriculture to grant priority or eligibility to projects that address issues raised by state, regional, or national conservation initiatives including the state wildlife action plans. Congress expects the Secretary to consider the goals and objectives identified in these plans when establishing State and national program priorities, scoring criteria, focus areas or other special initiatives and expects the Department to work with conservation partners and state and federal agencies to complement the goals and objectives of these plans through USDA programs. The language provides an opportunity for the state Natural Resources Conservation Service (NRCS) offices to implement their conservation programs with the aid of established conservation priorities. Adopting the wildlife action plans as a template will allow NRCS to set clearer goals and objectives for their programs, identify priority areas for program implementation, and work at a landscape scale where conservation actions will be most effective. It will also give state NRCS offices the chance to plan partnerships with other state agencies and non-profits with a stake in habitat conservation.

The Cooperative Forestry programs offered through the division of State and Private Forestry in the U.S. Forest Service also have the opportunity to become more strategic in the future. The 2008 farm bill requires that each state complete a State-Wide Assessment and Strategies for Forest Resources plan to address threats to forest resources in order to receive funding from Cooperative Forestry programs. These assessments will outline the conditions and trends associated with forest resources, identify the threats to forest lands and resources, locate priority areas within and between states, and provide strategies for addressing threats to forest resources. These efforts are required to be coordinated with other state and federal agencies and plans. In sum, the State-Wide Assessments and Strategies for Forest Resources have the potential to help strategically target limited conservation dollars towards the forest lands in greatest need.

The new administration should support these provisions in the Farm Bill and forestry programs that allow certain conservation programs to employ the state wildlife action plans and other conservation plans to determine eligibility, rank offers, and define focus areas. The administration should also direct the Secretary of Agriculture to require State NRCS and Farm Services Administration (FSA) offices to meet with state wildlife agencies to work towards incorporating the wildlife action plans into farm bill conservation programs.

The new administration should support a bill authorizing the Landowner Incentives Program and provide necessary appropriations through the annual Interior Appropriations bill in order to much needed funds towards state wildlife action plan implementation.

Incentive programs that directly support the goals of the state wildlife action plans are needed. The current system of conservation incentive programs fails to address the need for strategic conservation of fish and wildlife habitat on private lands. Existing programs are

widely acknowledged as being overly-specialized, fragmented, under-funded, and inflexible.[18] For example, the incentive programs contained within the Farm Bill are limited to encouraging a few select management alternatives and often apply only to agricultural or forestry lands. Because they do not address strategic, landscape-scale goals, implementation is haphazard and cannot be targeted toward the lands that are most important for habitat conservation. Many other public and private incentive programs exist, but with no overarching framework for prioritization and implementation, it is difficult for landowners interested in conserving fish and wildlife habitat to access relevant programs.

The Landowner Incentive Program, established in 2002, represented a notable exception to these problems. Under this program, the U.S. Fish and Wildlife Service provided funding to state wildlife agencies for conservation work on private lands to restore and maintain habitat for at-risk species.[19] This program promised to direct a reliable source of funding for conservation and restoration of fish and wildlife habitat. By routing funding through state wildlife agencies, it offered flexibility and the ability to target funding toward state-level conservation priorities. At the same time, funding was also provided for staffing these agencies, so that the time and resources were available to effectively administer the program and target incentives toward priority habitat. As such, the Landowner Incentive Program provided an unprecedented tool in promoting habitat conservation on private lands. With completion of state wildlife action plans nationwide in 2005, all states now have a mechanism to promote more strategic investment of funding made available through the Landowner Incentive Program.

The 2007 and 2008 Interior appropriations bills did not provide funding for the Landowner Incentive Program, and the program is expected to effectively end as soon as prior funds are fully disbursed. Meanwhile, the states are facing an ever-increasing need for habitat conservation on private lands as the effects of global climate change become apparent. Because the effects of climate change on fish and wildlife species cannot be managed on public lands alone, the need for a flexible but strategic incentive program for habitat conservation has never been greater. Refunding and fully implementing the Landowner Incentive Program would represent a critical first step in addressing this need.

In order to maximize the accessibility and effectiveness of this program, incentives should continue to be available to any private landowner whose project proposal provides verifiable ecological benefits and should not be targeted to particular economic or land use groups. Because the program is administered by state wildlife agencies, it is easily accessible to landowners and may encourage applicants to consider other available incentive programs. With sufficient resources, state wildlife agencies could eventually provide "one-stop shopping" for private landowners looking to fund habitat conservation projects.

The new administration should require coordination, mapping, and consideration of climate change in the State-Wide Assessment and Strategies for Forest Resources.

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[18] Casey, F., S. Vickerman, C. Hummon, and B. Taylor. 2006. Incentives for Biodiversity Conservation: An ecological and economic assessment.

[19] Male, T. 2005. The Landowner Incentive Program: Strategies for Long-term Effectiveness. Environmental Defense Center for Conservation Incentives.

In developing and updating state-wide assessments and strategies for forest resources, states are required to coordinate with the state wildlife agency and the state wildlife action plans, as well as applicable federal land management agencies. Much can be gained from exchange of information among these agencies and all plans should improve as a result of coordination. We urge the new administration to continue to require strong coordination as a fundamental component of developing, updating, and implementing these new assessments. Additionally, plans should be required to map priority areas or regions. Mapping priority areas provides the most effective means of communicating conservation needs, targeting limited funding and tracking progress. Any revisions to these plans should include a detailed mapping component. Finally, in future farm bills the new administration should require that these assessments explicitly include climate change in their strategy to address serious threats to forest resources. Conservation plans that do not address this significant threat can no longer be considered strategic if they do not address what promises to be the most significant threat to biodiversity we have faced.

III. Secure appropriations to fully fund voluntary U.S. Department of Agriculture conservation and forestry programs authorized through the Farm Bill.

Developing and implementing the right incentive programs can encourage landowners to become better stewards of their working lands. As stated previously, the vast majority of private land in the contiguous United States is used for rangeland, cropland, forestry or livestock production[20] and provides important ecosystem services. But modern-day, industrialized agriculture has led to soil erosion and degradation, pesticide and herbicide pollution, sedimentation, and habitat loss. Agricultural practices continue to be a leading cause of species endangerment, affecting 38 percent of listed species with impacts ranging from reproductive disorders to habitat elimination.[21] Yet agriculture and areas of high biodiversity and endemism often coincide on the most productive lands and despite the negative impacts of agriculture on wildlife U.S. farm lands still harbor a substantial portion of native plant and animal species.

The Farm Bill Conservation programs are the nation's largest source of incentives for conservation stewardship on agricultural and private forestry lands and provide benefits to wildlife through habitat conservation and improved stewardship practices. The major conservation programs in the Farm Bill include the Conservation Reserve Program (CRP), the Grassland Reserve Program (GRP), the Wetland Reserve Program (WRP), the Farm and Ranchland Protection Program (FPP), the Environmental Quality Incentives Program (EQIP), the Conservation Stewardship Program (CSP), and the Wildlife Habitat Incentives Program (WHIP). WRP, GRP and FPP provide incentives for conservation easements as well as cost-share incentives, EQIP provide cost-share payments for implementation of environmental practices, WHIP provides cost-share to create wildlife habitat on farm and forestland, and CSP pays producers who are already implementing environmentally sound practices on their land. CRP, the oldest conservation program, pays rental rates to

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[20] Casey, F., S. Vickerman, C. Hummon, and B. Taylor. 2006. Incentives for Biodiversity Conservation: An ecological and economic assessment.

[21] Groves, C.R., L.S. Kutner, D.M. Stoms, M.P. Murray, J.M. Scott, M. Schafale, A.S. Weakley, and R.L. Pressey. 2000. Owning up to our responsibilities: Who owns lands important for biodiversity? Pp. 275-300 in B.A. Stein, L.S. Kutner, J.S. Adams eds. Precious Heritage: The Status of Biodiversity conservation in the United States. New York: Oxford University Press..

landowners who remove marginal land from production and provides cost-share dollars to implement conservation practices. All programs also provide some degree of technical assistance.

Conservation and environmental stewardship on forest land is also essential. Family forest owners account for 92 percent of private forest owners and control 35 percent of all forestland in the United States.[22] The decisions these private landowners make with regard to their forests – how they manage their forests and whether or not they decide to convert their land to non-forest uses – will ultimately impact wildlife and other ecological values important to Americans. Surveys show that family forest owners rank beauty and scenery, family heritage, privacy and nature protection as their top reasons for owning family forests. These owners expressed concern about insects and disease, keeping land intact for future generations, wildfire, trespassing, and other issues including development.[23] But despite their best intentions, private forest owners often lack the resources or knowledge to conserve and manage forest for conservation values. In fact, less than 4 percent of family forest owners have a management plan for their forest lands and only 14 percent have received advice about their land. To halt the conversion of private forestland federal policies need to provide incentive programs that enable landowners to conserve and manage their forest lands for conservation value.

The U.S. Forest Service division of State and Private Forestry administers most of the incentives available for state and private forest land and help private landowners sustain healthy forests, protect wildlife habitat, and reduce the risk of wildfire. The primary incentive programs for conservation on private and tribal forest land include the Forest Legacy Program, the Forest Stewardship Program, the new Community Forest and Open Space Conservation Program, the Urban and Community Forestry Program and the Healthy Forest Reserve Program. Programs that help the states and private landowners manage their forest resources include the Forest Health Management and Monitoring programs and State Fire Assistance. Farm bill conservation programs such as the Environmental Quality Incentives Program and the Wildlife Habitat Incentives Program also provide cost-share assistance on forest lands.

First year:

The new administration should support full funding of Farm Bill conservation programs in annual appropriations requests.

Demand for Farm Bill Conservation programs consistently outstrips available funding for implementation. For example, following the passage of the 2002 farm bill, congressional and administrative actions have shortchanged promised conservation title funding for programs administered by the National Resource Conservation Service (NRCS) by $1.444 billion over FY 2003 through FY 2006. Over this same time period the WRP program was unable to enroll 260,523 acres authorized in the 2002 Farm Bill due to appropriations

[22] Butler, B.J. 2008. Family forest owners of the United States, 2006. Gen. Tech. Rep. NRS-27. Newton Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 72 p.
[23] Butler, B.J. 2008. Family forest owners of the United States, 2006. Gen. Tech. Rep. NRS-27. Newton Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 72 p.

shortages. In 2007 there were 40,535 unfunded applications in the widely popular EQIP program for a total of $864,849,270 dollars and many other conservation programs experienced similar shortfalls. Despite application backlogs, annual appropriations continue to be lower than the mandatory amount outlined in the farm bill.

Funding must be increased in order to enroll more landowners in these important conservation programs. While budgets are always tight, funding for conservation programs could be increased if the new administration reformed environmentally destructive and trade distorting commodity program payments. Commodity payments were instituted during the New Deal era of the 1930s as a mechanism to control commodity supply, increase collapsing agricultural prices and sustain rural communities devastated by the Great Depression. Today commodity program payments include direct price support, crop insurance and disaster assistance payments for a limited number of crops including corn, soybeans, and wheat. Many argue that these programs are no longer meeting the goals they were intended to achieve, that they are unfairly distributed amongst a limited set of crop producers, and that they tend to provide the most benefit to large and mid-sized farm owners who make well above the average U.S. wage. Of great concern for international trade relations, these programs continue to violate World Trade Organization compliance requirements and may hamper the United States' ability to develop mutually beneficial trade agreements.[24]

The new administration should request increased appropriations for State and Private Forestry programs.

In addition to traditional agricultural land, the Farm Bill also includes programs to conserve working forest lands. Two-thirds of the U.S. forestland is in the hands of state and private landowners, including Indian tribes.[25] These private and state owned forests provide important public benefits such as air and water quality, forest resources, forestry jobs, wildlife habitat, carbon storage, and renewable energy. Recent estimates indicate that two-thirds of watersheds in the lower 48 states contain at-risk species that live on private forest land,[26] much of which is increasingly threatened by conversion. While private forests in the Eastern United States, parts of California and the Pacific Northwest are projected to experience the most significant increases in land development, by 2030 some 44.2 million acres (over 11 percent) of private forests across the country will be threatened by conversion resulting from increased housing densities.[27] The new administration should, in particular, increase funding for the Cooperative Forestry Programs including the Forest Legacy Program, the Forest Stewardship Program, and the Urban and Community Forestry Program.

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[24] Sumner, D.A., K. Arha, and T. Josling. 2007. Commodity policy and the 2007 farm bill. Pp. 5-24 in K. Arha, T. Josling, D.A. Sumner and B. H. Thompson U.S. Agricultural Policy and the 2007 Farm Bill. Stanford, CA: Woods Institute of the Environment.

[25] Butler, B.J. 2008. Family forest owners of the United States, 2006. Gen. Tech. Rep. NRS-27. Newton Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 72 p.

[26] Robles, M.D., C.H. Flather, S.M. Stein, M.D. Nelson. 2008. The geography of private forests that support at-risk species in the conterminous United States. Frontiers in Ecology and the Environment 6(6): 301-307.

[27] Stein, S.M., R.E. McRoberts, R.J. Alig, M.D. Nelson, D.M. Theobald, M. Eley, M. Decter, and M. Carr. 2005. Forests on the edge: Housing development on America's private forests. Gen. Tech. Rep. PNW-GTR-636

The new administration should begin studying how to reform agricultural commodity programs.

Commodity program payments have significant environmental impacts and raise questions about the use of public tax dollars and the equity of fund distribution. Commodity program payments can lead to conversion of scarce grassland acreage for agriculture. In South Dakota counties with significantly higher crop insurance payments to producers had correspondingly high rates of grassland conversion. Further analysis confirmed that farm program payments provide significant incentive to convert grassland to cropland because these payments increased the expected profitability of farming on marginal grassland acreage while removing the associated risks.[28]

Consensus is building around the need to reform commodity programs[29] though the manner and timing of change is still debated. When and how to phase out commodity programs is complex. The administration should begin studying this effort within the first year of service so that at the time of the next farm bill authorization in 2012 there is consensus and strong Congressional support for moving forward on commodity program reform.

First term:

The new administration should support increased conservation funding and reduced subsidy payments in the 2012 Farm Bill.

When the Farm Bill comes up for reauthorization in 2012, we hope the new administration will consider increasing the funding for conservation programs, while reducing the amount of funding for environmentally destructive and trade-distorting commodity payments. The United States needs to make a transition from directly subsidizing agricultural production to a system in which payments are delivered directly to landowners for providing "ecosystem services" including fish and wildlife habitat, to the public. We also urge the new administration to use some of the money saved from these reforms to put towards conservation programs in the farm bill. This increased funding will enable the American people to repair some of the damage commodity programs have done to the environment.

The new administration should support legislation to restore the "Sodaver" provision of the 2008 Farm Bill.

Significant damage was done to the "Sodsaver" provision in the 2008 Farm Bill. As conceived, the Sodsaver provision was intended to prevent native prairie from being plowed for commodity payments and crop insurance benefits. Critically important habitat for ducks, shorebirds, grassland songbirds, and a number of rare plants, grasslands in the U.S. are disappearing at an alarming rate. The pressure to convert these lands into cropland is intense, especially as subsidies available to producers and newly increased disaster assistance

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[28] United States Government Accountability Office. 2007. Agricultural Conservation: Farm Program Payments Are an Important Factor in Landowners' Decisions to Convert Grassland to Cropland. GAO-07-1054. September 10, 2007

[29] Sumner, D.A., K. Arha, and T. Josling. 2007. Commodity policy and the 2007 farm bill. Pp. 5-24 in K. Arha, T. Josling, D.A. Sumner and B. H. Thompson U.S. Agricultural Policy and the 2007 Farm Bill. Stanford, CA: Woods Institute of the Environment.

funding encourage production on marginal land. Proposed legislation in the 2008 Farm Bill would have eliminated subsidy and crop insurance payments to those producers who cleared native prairie land. However, in the final hours of conference deliberations the provision was significantly altered and will now do little if anything to prevent the destruction of grassland ecosystems. The new administration should support legislation that would prohibit commodity, conservation, or crop insurance payments to anyone who brings these native grasslands into production and we hope that this provision will be added as a part of the next Farm Bill.

The new administration should request dedicated funding to address the 2007 farm bill requirement for developing technical guidelines for environmental (or ecosystem) services markets.

Guidelines should outline scientific measurements of ecosystem services from conservation and land management activities in order to facilitate the participation of farmers, ranchers, and forest landowners in emerging ecosystem service markets. An ecosystem marketplace is a system for buying and selling ecosystem services, including clean water, clean air, fish and wildlife habitat, wetlands, pollination, carbon sequestration, and soil productivity. These services are expensive to replace, and it is easier and cheaper to protect ecosystem services than recreate them. An ecosystem marketplace must be guided by clear goals and monitoring, address multiple values, make strategic investments, provide transparency and credibility, and be accessible to participants, with low transaction costs. Establishing the scientific and economic basis for an ecosystem marketplace based on farm bill conservation programs would compensate producers for the production of ecosystem services and could replace the existing commodity payment structure while bringing the U.S. into compliance with World Trade Organization regulations.

IV. Secure increased funding for technical assistance delivery and monitoring programs that quantify the environmental benefits of conservation incentive programs.

In an era of limited of conservation funds, escalating environmental threats and increasing requirements for government accountability, successful conservation incentives must be implemented efficiently, monitored for biological and economic benefits, and improved on an ongoing basis. These goals can be accomplished with increased funding to provide sufficient technical assistance and improved outreach to landowners, and a sophisticated monitoring program that establishes the biological and economic benefits of conservation incentive programs.

Most landowners do not have the time or knowledge to manage land for natural resource values, and consequently, economic incentives by themselves may be of little use unless landowners have access to skilled experts who can provide technical assistance.[30] Landowners may also lack knowledge of financial and tax incentive programs that are available to them that would help them make the best land management decisions.

[30] Bean, M., R. Bonnie, T. Male, and T. Searchinger. 2003. The private lands opportunity: The case for conservation incentives. Environmental Defense Fund, Washington, DC.

Education, outreach and technical assistance can transfer conservation information from conservationists and natural resource professionals to landowners to improve their decision making and to facilitate the adoption and use of stewardship practices. Research has shown that technical assistance and management planning assistance when combined with cost-share practices consistently leads to elevated levels of stewardship.[31]

Lack of landowner knowledge about incentive programs is also an impediment to program implementation. Research has consistently shown that many landowners lack an understanding the benefits of incentive programs, or are simply unaware of the existing opportunities.[32] The burden of sifting through information on program websites or completing complex applications may be one of the reasons that some programs are under-utilized. Agency staff at the USDA Natural Resource Conservation Service report that they have little time or resources to actively recruit landowners for these programs. This problem is tied directly to mandatory restrictions on the percentage of a program's funding that can be spent on technical assistance, which leaves little opportunity for outreach. As a result, applications are funded opportunistically from a pool of landowners already familiar with the programs while less knowledgeable landowners must either navigate the myriad of programs, eligibility requirements and application processes, or elect not to participate.

Finally, monitoring and evaluation is a key component of successful incentive programs. Today monitoring data is limited and only a few programs exist to measure the effects of conservation incentives. With billions of dollars spent each year on managing natural resources, accountability is more important that ever and monitoring data is needed to determine the biological impacts of incentive programs. A nationally implemented monitoring program that measures the biological benefits of all conservation programs across the landscape will improve conservation program design, increase spending efficiency, and help to establish a baseline for current ecological conditions on working lands.

First year:

The new administration should increase funding for technical assistance through programs including the USDA Conservation Technical Assistance program, the Forest Stewardship Program, the Landowner Incentives Program and the Partners for Fish and Wildlife Programs.

Demand for conservation planning and technical assistance by private landowners continues to rise while funding for assistance programs remains chronically low. The congressional funding pattern in recent years has been to appropriate money for incentive programs without corresponding funding increases for field and administrative personnel. From 1996-2006 technical assistance funding for farm bill conservation programs actually declined. This deficit reduced staff numbers and led to long wait times for producers who

[31] Kilgore, M.A., J.L. Greene, M.G. Jacobson, T.J. Straka, S.E. Daniels. 2007. The influence of financial incentive programs in promoting sustainable forestry on the nation's family forests. Journal of Forestry: 184-191.

[32] Kilgore, M.A., J.L. Greene, M.G. Jacobson, T.J. Straka, S.E. Daniels. 2007. The influence of financial incentive programs in promoting sustainable forestry on the nation's family forests. Journal of Forestry: 184-191.

wished to participate in a growing number of conservation programs.[33] In order to help landowners implement successful stewardship practices, technical assistance programs need increased funding and new outreach programs to recruit technical service providers. This will help ensure that farmers, ranchers and other private landowners have the resources they need to effectively manage and restore their land for wildlife.

The new administration should support fully funding the provision in the Farm Bill that allows eligible third parties to become certified technical service providers.

Certification of providers outside of NRCS will increase the overall capacity of NRCS to provide technical assistance without exhausting its employee reserves and may lead to benefits beyond technical assistance. Outside service providers, such as employees of local land trusts, often have strong ties within the community, know many local landowners and can act strategically. Land trusts and other local groups may also be able to serve in an outreach and recruitment role, explaining the conservation incentive programs and encouraging landowners to enroll in additional conservation programs. The establishment of community conservation assistance networks and outreach efforts could also be improved by providing funding to establish local conservation groups or cooperatives to share information about different conservation programs and practices.

First term:

The new administration should support establishment and funding of an outreach unit within state agencies that provide information on all available incentive programs and conservation options available in the states.

A separate funding source for outreach units would eliminate some of the conflicts over technical assistance money, leaving more funds available for program implementation and other aspects of technical assistance. These units would provide both on the ground landowner recruitment and assistance, as well as online access to all conservation programs. The units would also be responsible for the development of an online tool, that would allow landowners to access information about conservation programs through a single point of entry. The tool would be developed nationally to provide uniformity and then could be customized to include state and local programs. Using this tool, landowners could investigate different programs, link to program websites, and most importantly, determine their eligibility for different programs based on simple information about their land and their needs. Currently there is no single resource for landowners to navigate the complicated matrix of state and federal conservation programs. This tool would fill this gap by providing a centralized information source for landowners.

The new administration should support establishing a dedicated funding source for a new national monitoring program in the 2012 Farm Bill to cover all conservation incentive programs.

[33] Casey, F., S. Vickerman, C. Hummon, and B. Taylor. 2006. Incentives for Biodiversity Conservation: An ecological and economic assessment.

The new Conservation Effects Assessment Program (CEAP) is currently being implemented to measure the environmental benefits derived from different conservation practices nationally and within selected watersheds, and the new administration should support efforts to build on this program and to go beyond the measurement of conservation practices. A comprehensive monitoring program should be administered by the USDA and should be geared towards managing land adaptively, improving existing incentive programs, encouraging innovation amongst landowners, and compiling biological and economic data. This program should inform and guide incentive program management by measuring the biological impacts of incentive programs over time. Monitoring should focus on outcome-based measurements rather than implementation-based measurements. Greater emphasis on conservation benefits achieved rather than a focus on the number of practices implemented will encourage innovation amongst participants. Monitoring should be conducted at the landscape scale in order to track the cumulative effectiveness of conservation efforts. Separate economic analysis based on monitoring results should be employed to determine the cost-effectiveness of different conservation programs.

The new administration should support establishing a clearinghouse of assessment data and information that is widely accessible.

Data from monitoring programs should be publicly available. The clearinghouse should also include geospatial data for downloading so that conservation efforts can be tracked and mapped across the landscape. Collecting this type of data on the benefits of conservation incentive programs will not only aid in program improvement, but will begin the process of developing incentive programs that are based on the provision of ecosystem services.

V. Promote legislation to make the temporary tax incentive for donating conservation easements permanent.

Throughout the U.S., development is progressing at a rapid rate, chewing up farmland and other rural areas and transforming our rural landscapes into strip malls and subdivisions. Every year we lose 2 million acres of natural and agricultural land[34] at a staggering rate of 2 acres a minute. While the pace of development is sobering, Americans have a strong land ethos and a deep desire to preserve their land and cultural heritage. Conservation easements were developed to allow private landowners to maintain the open space and current use of their land in the face of competing land interests, such as development.

Conservation easements are legally binding agreements whereby the landowner retains ownership of their land while selling or donating the development rights to a land trust or government agency. Given the high cost of purchasing and managing land, easements are becoming a more attractive conservation tool because they offer permanent protection, cost less to acquire and manage, and prove an alternative approach for landowners who are not willing to sell their land. Unfortunately, even the reduced cost of purchasing development rights is often prohibitive for local governments and land trusts, forcing them to rely heavily on donated conservation easements and hampering their ability to be strategic in their land

[34] Aldrich, R. and J. Wyerman. 2005. 2005 National Land Trust Census Report. Land Trust Alliance. Washington, DC.

protection efforts because they cannot provide sufficient incentives to attract landowners who may have the most biologically valuable land.

To maximize the effectiveness of conservation easements and increase landowner participation, Congress enacted a temporary federal tax incentive for donating a conservation easement in 2006. The incentive raises the maximum deduction a donor can take for donating a permanent conservation easement from 30 percent of their adjusted gross income in any year to 50 percent and increases the number of years over which a donor can take deductions from six 6 year to 16 years. Qualified farmers and ranchers can deduct 100 percent of their adjusted gross income over 16 years. This incentive makes conservation easement donations a competitive option with land sales, and allows farmers, ranchers, and other moderate-income landowners whose wealth lies mainly in their land to choose conservation as an option.

First year:

The new administration should propose legislation that will make the improved tax incentive for conservation easements permanent.

The conservation tax incentive has increased the pace of land conservation by an estimated one million acres a year. In many areas, the incentive has doubled, tripled, or even quadrupled the number of landowners donating conservation easements in many areas, permanently protecting thousands of acres of wildlife habitat.[35] The results are clear – the tax incentive works. And given the tremendous values of private lands in sustaining our nation's wildlife and ecosystem services and the pace of natural area conversion, the conservation easement is one of our most valuable tools. By making this incentive permanent, the new administration will help ensure that the current pace of land conservation continues and that conservation remains an affordable option for farmers, ranchers and other rural landowners.

VI. Support the integration of federal land management with state, tribal and private lands to create a national network of conservation lands, with particular emphasis on assisting wildlife adaptation to global warming.

The continuing loss of biodiversity at all scales and the burgeoning threat from climate change requires coordinated conservation action to integrate the existing system of federally protected and managed lands with private, state, and tribal lands. It is clear that wildlife conservation can no longer be accomplished within the boundaries of national parks or national wildlife refuges alone. Federal lands provide some of the last large blocks of habitat left in the country but increasing development pressure has fragmented the open lands around these reserves, isolating national parks, wildlife refuges, and other protected areas. Today only 16 percent of the remaining national forests are in tracts greater than 500 acres

[35]Garnet, A. 2008. Tax incentive benefits communities across America. Exchange: The National Journal of Land Conservation. Land Trust Alliance. Winter 2008 27(1) pp. 10-13.

and many of the areas outside of these forests are rapidly developing.[36] To preserve natural resources, buffer protected lands and help wildlife adapt to climate change, the U.S. needs to build a national network of conservation lands that includes federally protected areas, private conservation easements, state and tribal holdings, and private working lands managed for greater conservation benefits.

Coordinated conservation planning across jurisdictions will improve the administration of federal, state, local, tribal and private conservation efforts. The state wildlife action plans can form the basis for this type of landscape-level coordination and serve as the beginnings of a blueprint for a national conservation network that buffers and links protected areas with adequately managed habitat on private, state, and tribal lands. The State and Tribal Wildlife Grants Program required states to coordinate with federal, state and local agencies that manage significant land and water in their state. While many states did not sufficiently address this component in their plans,[37] opportunities exist to increase coordination. Federal programs should consider state wildlife action plans in federal land management, federal land acquisition and easement programs, and federal conservation program implementation. Private, state and tribal land conservation should also be informed by the plans. Incentive programs can use the action plans to set priorities, determine eligibility criteria, and coordinate the conservation actions of multiple landowners. Land trusts and other local conservation groups, often without resources to complete strategic conservation plans, can use the information in the action plans to set their own priorities for land acquisition.

[36] Stein, S.M., R.E. McRoberts, R.J. Alig, M.D. Nelson, D.M. Theobald, M. Eley, M. Decter, and M. Carr. 2005. Forests on the edge: Housing development on America's private forests. Gen. Tech. Rep. PNW-GTR-636

[37] Lerner, J., B. Cochran, and J. Michalak. 2006. Conservation Across the Landscape: A Review of the State Wildlife Action Plans. Washington, DC: Defenders of Wildlife.

First year:

The new administration should seek increased funding for the State and Tribal Wildlife Grants program in annual appropriations.

For the State Wildlife Action Plans to guide the development of a national network of conservation lands the State and Tribal Wildlife Grants Program must have sufficient and consistent funding to support both planning and conservation actions. Currently, funding for the program is nationally about $70 million dollars each year -- only enough to scratch the surface of conservation efforts in each state. The program provides an upstream solution to wildlife conservation by protecting species before they require listing under the Endangered Species Act. Protecting species before they become endangered is less expensive and represents an efficient use of resources. Program funding should be increased to encourage plan implementation, ensure thorough plan revision, and accelerate the pace of conservation.

Additionally, the tribes continue to express interest in conservation on tribal lands, and have utilized the Tribal Wildlife Grants (TWG) program for a number of reintroduction, planning, and land protection projects. Increased funding for TWG projects could be used to help tribes develop comprehensive conservation plans that are specific to their tribal lands, but are informed by the state wildlife action plans.

First term:

The new administration should require all federal land management agencies including the U.S. Fish and Wildlife Service, the U.S. Forest Service, and the Bureau of Land Management to consider the state wildlife action plans in their management activities in order to best manage wildlife habitat on these lands.

The organic acts under which federal land management agencies operate outline planning processes associated with virtually all activities that require consideration of wildlife on federal lands. Integrating information from the state wildlife action plans would provide a large step towards coordination at the state level. While the U.S. Fish and Wildlife Service, the U.S. Forest Service, and the Bureau of Land Management have guidance documents that require these agencies to consider the action plans in their management activities, a strong directive is needed from the new administration that all federal land management planning on all federal lands should consider the state wildlife action plans to better manage wildlife habitat on their holdings.

The new administration should support a requirement that potential land acquisition sites for the Land and Water Conservation Fund be located within state wildlife action plan or other landscape-level conservation plan priority areas.

There are numerous federal land protection programs that facilitate outright acquisition of habitat or the purchase of conservation easements that, if used strategically, could result in significant habitat conservation. Chief among these is the Land and Water Conservation Fund (LWCF). Currently under funded, the LWCF could be used more strategically to acquire lands and conservation easements that have been identified as important habitat in

the state wildlife action plans, or other landscape-level conservation plans. This would ensure that priority habitats are conserved, while encouraging coordination with state agencies.

The new administration should require that the U.S. Fish and Wildlife Service's "Strategic Habitat Conservation Initiative" be coordinated with the state wildlife action plans.

An immediate opportunity for coordination between federal and state programs exists with the U.S. Fish and Wildlife Service's new "Strategic Habitat Conservation" initiative. The initiative is designed to conduct landscape level planning, at least for federal "trust species," by assessing population goals and conducting spatial modeling to prioritize conservation efforts. The new administration should ensure that this initiative is coordinated with and complements the state wildlife action plans. The combination of Strategic Habitat Conservation with revised state wildlife action plans could truly improve the delivery of federal and state wildlife conservation programs.

The new administration should support increasing the scale and scope of joint ventures for conservation.

Habitat joint ventures provide an important opportunity for coordination. The habitat joint ventures funded through the U.S. Fish and Wildlife Service serve as the foundation for regional partnerships that have made the North American Waterfowl Management Plan one of the most successful habitat conservation strategy ever undertaken. In recent years, the joint ventures have been asked to assist with implementation of conservation strategies for all other birds as well, including songbirds, shorebirds, and other water birds. The 18 regional habitat joint ventures established over the past two decades bring together a diverse array of public and private partners involved in collaborative approaches to bird habitat conservation. Science-based conservation planning provides a common framework for targeting strategic investments in long-term habitat conservation to address the unique needs and opportunities in each region. Although joint venture habitat projects tap a variety of funding sources, partners look to the Fish and Wildlife Service to fund the joint ventures' basic operations such as coordination, communications and outreach. This base funding, which is less than $15 million annually, provides the catalyst for partnerships that have leveraged billions of dollars in conservation investments nationwide.

These projects provide an excellent example of coordination and collaboration that could be used as a model for other efforts. The new administration should seek increased funding to expand joint venture opportunities beyond the Waterfowl Management Plan program so that coordinated efforts can grow up around many conservation problems across the landscape. This could be accomplished by creating a national joint ventures division within the Fish and Wildlife Service that has dedicated funding to coordinate coalitions of federal and state agencies, conservation groups, private industry and landowners to work on conservation goals across the nation.