

Chapter Six

A Vision for Iowa's Wildlife in the Year 2030

Required Element #4: “Descriptions of conservation actions proposed to conserve the identified species and habitats and priorities for implementing such actions.”

Background

Few Iowans are aware that their state was once a land of unparalleled wildlife abundance and diversity. Early settlers discovered, however, that underneath Iowa's prairies lay the finest farmland in the world. In less than a century the prairies were plowed and with them went flocks of prairie chicken, herds of bison and elk and the cougars, gray wolves, black bear and bobcat that preyed on them. Wetlands were drained and flocks of waterfowl numbering in the millions that nested here were diminished to a tiny fraction of their former numbers. Most of the forests were cleared, the white-tailed deer and wild turkey disappeared and once-uncountable flocks of passenger pigeons became extinct. Plowing freed the prairie soil to run into once-clear waters and game fish like brook trout, northern sunfish and grass pickerel disappeared. Once a wilderness, Iowa had become home to a multitude of small family farms. Only small animals like the bobwhite quail, rabbits, squirrels and the soon-to-be-introduced ring-necked pheasant thrived.

The 20th century brought its own changes driven by the constant improvement in farming technology. Ever-larger and more powerful farm equipment; the introduction of herbicides, pesticides, plant hybrids and genetically modified crops; and Federal farm programs that have rewarded all-out production eventually made much of the state unsuitable for even farm-adapted wildlife.

Wildlife conservation programs have returned adaptable wildlife like deer and wild turkey to our forests, Canada geese and Trumpeter swans to our wetlands, bald eagles and peregrine falcons to our skies, and river otters to our streams. Land conservation efforts have restored thousands of acres of grasslands, wetlands and forest. Farm programs have placed hundreds of thousands of acres under temporary conservation practices on private land.

But after more than eight decades of conservation, one-third of all of Iowa's fish and wildlife are still considered in need of immediate conservation to stop their numbers from eventually dwindling into threatened or endangered status. A host of less-visible and specialized wildlife – songbirds, lizards and snakes, frogs and salamanders, fish, freshwater mussels and highly-fragile butterflies among others - is seriously threatened by the disappearance and degradation of their habitats. Iowa has less than 3 percent of its landscape in permanently protected wildlife habitat and managed under conservation practices. The remainder is privately held and subject to the whims of landowners as they respond to economic and social pressures. The pace of conservation efforts has not been able to keep up with the wholesale habitat destruction of the past century that still continues today. Without assistance to reverse these trends, more species will face a grim future – eventual disappearance from our state.

Iowa is farming country

Barring an environmental or economic collapse of global proportions, Iowa will remain one of the world's great agricultural regions. The most appropriate use of most of this landscape is in agricultural production. Nothing in this Plan suggests returning Iowa to its pre-settlement state on any but a small part of the land. The challenge for Iowans is to find a way to protect our remaining wildlife heritage and preserve a legacy for our heirs by creating viable and socially-acceptable wildlife environments within a landscape dominated by agriculture.

A Vision for the Future

To establish a focus for future wildlife conservation activities, the Advisory Committee to the original Iowa Wildlife Action Plan – a group of fish and wildlife professionals, educators, researchers, private conservation organizations, concerned citizens and representatives of the agricultural community - developed a vision for the status of Iowa's wildlife in 25 years. The vision statement has six elements that include benefits to fish and wildlife, the citizens who enjoy and support them, and the private landowners who must embrace them if the vision is to be realized. With each vision element the Advisory Committee developed specific conservation actions that need to be implemented to reach the Plan's goals in a 25-year framework. When the ten-year comprehensive review and revision process began, the Implementation Committee identified that the six vision elements that were initially identified by the Advisory Committee should remain in place as the cornerstone of the Plan's conservation strategy. Progress on implementation of the Visions over the first 10 years of the Plan is discussed in Chapter 11.

These vision elements, conservation strategies and conservation actions are not specifically designed to be implemented by DNR. They are designed to provide a broad framework of actions that can be undertaken by conservationists at all levels of government, by private conservation organizations and by private citizens. The conservation actions identified in the following pages will require a broad array of funding sources, skills and expertise. Extensive coordination will continue to be necessary between these stakeholders to make the vision a reality.

Defining Conservation Actions

As explained in Chapter 5, this plan categorizes both threats and conservation actions based on a taxonomy developed by the Conservation Measures Partnership (CMP). You can read more about the Partnership at their website: <http://www.conservationmeasures.org/>. In 2004, CMP developed the first edition of the "Open Standards for the Practice of Conservation" which has since been updated in 2007 and 2013.

One outcome of this partnership that is also a building block for increasing collaboration is the development of a "standard lexicon" for conservation, including a taxonomy, or hierarchy, of threats and conservation actions (Salafsky et al. 2008). Adopting the use of the standard terminology allows conservationists operating at any spatial scale to share information and experiences, facilitating learning and improvement among conservation practitioners. The 2015 revision of the IWAP makes use of this standard lexicon for the classification of threats and actions in order to increase the ability of our threats and actions to be compared across state lines or other political boundaries. This helps make clear how the IWAP fits in as one piece of regional, national, or even global efforts to conserve wildlife. The use of this taxonomy does not substantially change the actions listed in the 2012 or 2006 versions of the IWAP. Rather, this revision provides the original visions, goals, strategies and actions, and then provides a list of potential conservation actions from the CMP Actions Taxonomy that might be undertaken by any entity to implement that portion of the vision.

The *Open Standards* defines a conservation strategy as: A set of actions with a common focus that work together to achieve specific goals and objectives by targeting key intervention points, integrating opportunities, and limiting constraints. These can include a broad array of conservation actions such as habitat restoration, land protection, policy change, or education. Some of the Conservation Actions identified within this Plan are more accurately described as Strategies, so this revision identifies them as “Conservation Strategies and Actions.” The following visions and the associated conservation actions remain essentially the same as when they were originally developed in 2004, because they were designed to be 25-year strategies. For this revision, those involved with the Plan wished to maintain consistency in the overarching objectives agreed-upon originally formulated at the public forum in 2004. However, in order to make them easier to cross-walk with the Conservation Measures Partnership’s Conservation Actions Taxonomy, the plan displays each action followed by a description of where it fits within the taxonomy. For definitions of each Level I and Level II action, see Appendix 23. Table 6-1 also displays explanations and examples.

A Vision for Iowa’s Wildlife

By 2030 Iowa will have viable wildlife populations that are compatible with modern landscapes and human social tolerance.

Goals:

- Common species will continue to be common.
- Populations of species of greatest conservation need will increase to viable (self-sustaining) levels.
- The abundance and distribution of wildlife will be balanced with its impact on the economic livelihood and social tolerance of Iowans.

Conservation Strategies and Actions

1. Develop scientifically reliable knowledge on the distribution, relative abundance and ecological needs of all wildlife species, including invasive species.
 - a. Follow up with monitoring so that knowledge stays current.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	8. Research & Monitoring 8.1 Basic Research & Status Monitoring

2. Develop a balanced program of wildlife conservation by increasing the emphasis on species of greatest conservation need.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	6. Conservation Designation & Planning 6.6 Species Designation, Planning & Monitoring 7. Law & Policy 7.2 Policies & Regulations

3. Focus on protection, restoration, reconstruction, connection and enhancement of native plant communities and wildlife habitats.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	1. Land/Water Management 1.1 Site/Area Stewardship 1.2 Ecosystem & Natural Process (Re)Creation

	6. Conservation Designation & Planning 6.1 Site/Area Protection 6.2 Easements & Resource Rights
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4. Restore viable wildlife populations to suitable habitats through informed relocation and reintroduction programs.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	2. Species Management 2.1 Species Stewardship 2.2 Species Re-Introduction & Translocation

5. Develop methods to identify and reduce economic and social conflicts between wildlife and citizens.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	3. Awareness Raising 3.1 Outreach & Communications 5. Livelihood, Economic & Moral Incentives 5.2 Substitution & Alternative Livelihoods

Explanation:

Achieving this goal requires improving scientific knowledge about many species whose biology, abundance and current distribution in Iowa are poorly understood, particularly nongame. It may require population and habitat restoration and enhancement over a broad geographic range and the development of new management techniques to protect the interests of the private landowner. If successful, it will aid the long-term viability of all wildlife, increase biodiversity, promote greater access to wildlife-associated recreation, and provide economic benefits to Iowans. See Appendix 23 for definitions of each Level I and Level II Conservation Action.

A Vision for Wildlife Habitats

By 2030 Iowa will have healthy ecosystems that incorporate diverse, native habitats capable of sustaining viable wildlife populations.

Goals:

- The amount of permanently protected wildlife habitat in Iowa will be doubled to 4% of the state’s land area.
- Protected habitats will be diverse, representative, native plant communities in large and small blocks on public and privately owned land and waters.

Conservation Strategies and Actions

1. Identify habitats, landscapes and travel corridors important to species of greatest conservation need in all regions of the state.
 - a. Coordinate with all government natural resource agencies and non-governmental organizations to identify areas at regional, state, and local scales.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	6. Conservation Designation & Planning 6.3 Land/Water Use Planning & Zoning 10. Institutional Development 10.3 Alliance & Partnership Development

2. Permanently protect, restore, reconstruct and enhance large public and private areas of wildlife habitat - systems that include large core tracts, watershed and greenbelt corridors, and other associated travel corridors - that can be managed for biodiversity.
 - a. Develop a series of core habitat blocks in the range of 3,000 - 5,000 acres of permanently protected and managed habitat.
 - b. Evaluate existing permanently protected areas for potential expansion.
 - c. Work with legislators to implement *smart growth* efforts in these designated core areas.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	6. Conservation Designation & Planning 6.1 Site/Area Protection 6.2 Easements & Resource Rights 6.3 Site/Area Planning & Monitoring 7. Law & Policy 7.1 Policies & Regulations 7.3 Private Sector Standards & Codes

3. Ensure that long-term Federal and State land conservation programs meet the needs of landowners and wildlife on privately owned lands and waters.
 - a. Use existing tools and create new tools to permanently protect private lands and waters and expand outreach efforts.
 - b. Encourage Federal land conservation programs that allow existing native habitats to be enrolled.
 - c. Work to mandate Federal and state wildlife agency involvement in the prioritization, design, and implementation of the Federal programs.
 - d. Staff a state position to coordinate wildlife priorities with all Federal land conservation programs with emphasis placed on habitats for species of greatest conservation need.
 - e. Integrate this Plan with existing Federal programs.
 - f. Expand existing Federal and State programs that focus on water quality of streams and rivers but allow flexibility for local issues to be addressed.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	5. Livelihood, Economic & Moral Incentives 5.2 Substitution & Alternative Livelihoods 5.3 Market Forces 5.4 Valuation of/Payments for Ecosystem Services 6. Conservation Designation & Planning 6.2 Easements & Resource Rights 7. Law & Policy 7.1 Legislation 7.2 Policies & Regulations 10. Institutional Development 10.3 Alliance & Partnership Development 10.4 Financing Conservation

4. Provide technical guidance and supplemental cost share programs to private landowners to maximize the benefits to wildlife from Federal land conservation programs.

- a. Utilize habitat developments on private land to supplement government habitat protection programs. Use USDA farm programs to improve connectivity between habitats by targeting landowners in key areas.
- b. Expand DNR’s Private Lands Program efforts to meet the needs of SGCN outlined in this Plan.
- c. Provide for improved coordination of all Federal, state, county and non-governmental organizations private lands programs to efficiently deliver technical assistance to landowners.
- d. Provide incentives to landowners to implement practices that benefit SGCN in targeted areas. Provide additional incentives to neighboring landowners who put adjacent land into a program so larger tracts of land or corridors are created.
- e. Educate all natural resource agencies staff about the Plan.
- f. Create a central site for all resources of the Plan and make available to natural resource agencies and landowners.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	6. Conservation Designation & Planning 6.2 Easements & Resource Rights 9. Education & Training 9.2 Training & Capacity Development 10. Institutional Development 10.1 Organizational Management & Administration 10.2 Institutional & Civil Society Development 10.3 Alliance & Partnership Development

- 5. Coordinate public land acquisition and private land habitat programs to provide habitat on a landscape scale.
 - a. Use the Plan as a tool for private lands and public land natural resource protection, management and restoration efforts.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	1. Land/Water Management 1.2 Ecosystem & Natural Process (Re)Creation 3. Awareness Raising 3.1 Outreach & Communications 6. Conservation Designation & Planning 6.1 Site/Area Protection 6.2 Easements & Resource Rights 6.3 Land/Water Use Planning & Zoning 6.4 Site/Area Planning & Monitoring

Explanation:

Currently only about 2.7% of Iowa’s wildlife habitats are permanently protected – 895,000 acres by state, county, or Federal ownership and 107,000 acres on private land in permanent easements. To reach the goal of doubling the amount of permanently protected habitat by 2030, protection through acquisition or easements, restoration, reconstruction and enhancement of critical habitats must be accelerated to 29,000 acres annually (~3.5 times the current pace). Fragmentation must be minimized by developing large blocks of habitat connected by corridors for the free exchange of organisms. Landowner education and cost sharing programs must be expanded to increase the amount of permanently protected habitat on private lands and waters. Ensuring that the short term benefits provided by Federal land conservation programs are continued must be a high priority for all stakeholders as the long-term

goals are pursued. Watershed and hydrologic alterations must be restored wherever necessary and feasible to benefit all wildlife.

See Appendix 23 for definitions of each Level I and Level II Conservation Action.

A Vision for Wildlife Management

Diverse wildlife communities will be developed on public and private lands and waters through the use of adaptive ecological management principles.

Goal: Wildlife and fisheries management will be based on science.

Conservation Strategies and Actions

1. Establish wildlife population and habitat management goals for public and private lands and evaluate their effectiveness.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	6. Conservation Designation & Planning 6.2 Easements & Resource Rights 9. Education & Training 9.2 Training & Capacity Development 10. Institutional Development 10.1 Organizational Management & Administration 10.2 Institutional & Civil Society Development 10.3 Alliance & Partnership Development

2. Develop and implement management plans on public and privately owned lands and waters that promote biodiversity and improve the status of species of greatest conservation need.
 - a. Provide coordination and implement activities that involve all in-state land management agencies (state, county and Federal) across state lines and include the Missouri and Mississippi River systems.
 - b. Coordinate all Federal, state, county and NGO’s private lands programs to efficiently provide management plans to landowners.
 - c. Implement a statewide private lands management coordination committee.
 - d. Educate natural resource management staff on management needs of species of greatest conservation need.
 - e. Develop standard elements for all public and private land management plans.
 - f. Acquire tools and gather reference materials and make them easily accessible to all natural resource managers and landowners.
 - g. Expand and create local habitat working teams to implement the plans on private and public lands and waters. Provide these teams and private contractors’ incentives for equipment.
 - h. Expand the DNR’s Prairie Seed Harvest Program to meet the demand of the state’s public land managers for local eco-type prairie seed.
 - i. Develop and implement a statewide strategy to eradicate invasive species.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	6. Conservation Designation & Planning 6.4 Site/Area Planning & Monitoring 9. Education & Training 9.2 Training & Capacity Development

	10. Institutional Development 10.1 Organizational Management & Administration 10.2 Institutional & Civil Society Development 10.3 Alliance & Partnership Development
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3. Coordinate habitat management messages and objectives among all layers of conservation agencies and groups to promote goals of the plan and work toward compatible policies.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	10. Institutional Development 10.1 Organizational Management & Administration 10.2 Institutional & Civil Society Development 10.3 Alliance & Partnership Development

4. Work with legislators to address liability issues related to landowners' usage of outside contractors to implement management practices on their land.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	7. Law & Policy 7.1 Legislation 7.2 Policies & Regulations 7.3 Private Sector Standards & Codes

5. Educate other government land management and protection agencies on the Plan so it may be used in conjunction with their work activities (ex. DOT, IACCB, USFWS).

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	9. Education & Training 9.2 Training & Capacity Development 10. Institutional Development 10.1 Organizational Management & Administration 10.2 Institutional & Civil Society Development 10.3 Alliance & Partnership Development

6. Provide funding and staff positions to carry out the actions of the Plan.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	10. Institutional Development 10.1 Organizational Management & Administration 10.4 Financing Conservation

7. Protect ecosystem stability by developing invasive species management plans that provide early detection strategies to control exotic invasive species.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	1. Land/Water Management 1.2 Site/Area Stewardship 6. Conservation Designation & Planning

	6.4 Site/Area Planning & Monitoring 8. Research & Monitoring 8.1 Basic Research & Status Monitoring
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Explanation:

When the habitat goal is met, the vast majority of land in Iowa will still be in private ownership and used for agricultural purposes. Meeting the wildlife population goal will require intensive and carefully planned management on lands and waters protected for wildlife, whether in public or private ownership. Management for all species must be coordinated using ecological principles that can be evaluated and adapted if population or landowner objectives are not met. Landowners and conservationists must work in harmony so that environmentally sustainable agriculture is practiced and all land is managed using sound conservation practices.

See Appendix 23 for definitions of each Level I and Level II Conservation Action.

A Vision for Wildlife-Associated Recreation

More Iowans will participate in wildlife-associated recreation, and all Iowans will have access to publicly owned recreation areas to enjoy wildlife in its many forms.

Goals:

- The number of Iowans participating in wildlife-associated recreation (wildlife viewing, photography, hiking, outdoor classrooms, hunting, fishing etc.) should increase 50 percent by 2030;
- Wildlife-associated recreation will be available to all Iowans on public lands near their home;

Conservation Strategies and Actions

1. Understand market-based research to determine the wildlife-associated recreational interests of all Iowans, especially non-traditional users like minority and ethnic groups and citizens with disabilities.
 - a. Gather information from Statewide Comprehensive Outdoor Recreation Plan (SCORP) survey

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	8. Research & Monitoring 8.1 Basic Research & Status Monitoring 8.2 Effectiveness Monitoring/Adaptive Management

2. Expand training programs in wildlife-associated recreation skills to increase citizen participation and improve public health.
 - a. Work with the DNR outdoor skills committee and associated partners to complete the development of outdoor skills modules,
 - b. Create a network of lending sites for recreation equipment to teach programs,
 - c. Provide training for interested teachers, youth leaders, and other educators through formal and non-formal venues.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	9. Education & Training 9.2 Training & Capacity Development 10. Institutional Development 10.1 Organizational Management & Administration 10.2 Institutional & Civil Society Development

	10.3 Alliance & Partnership Development
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- Coordinate wildlife population, habitat and management goals for public lands with potential recreational uses to assure that all recreation is compatible with sound wildlife management, minimizes conflicts between users and protects critical habitat from overuse.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	6. Conservation Designation & Planning 6.3 Land/Water Use Planning & Zoning 6.4 Site/Area Planning & Monitoring 7. Law & Policy 7.2 Policies & Regulations 10. Institutional Development 10.1 Organizational Management & Administration 10.2 Institutional & Civil Society Development 10.3 Alliance & Partnership Development

Explanation:

Currently 1.3 million Iowans participate in wildlife-associated recreation. To accommodate additional users, public access for a variety of wildlife-associated recreational uses must be assured on public and private lands and waters wherever these activities are compatible with sound management for all wildlife. Access will be improved around urban areas and in counties where it is lacking today. Outreach programs must be developed so that all Iowans regardless of race or gender will find wildlife-associated recreation activities that are enjoyable and available to them. See Appendix 23 for definitions of each Level I and Level II Conservation Action.

A Vision for Wildlife Education

Iowans will respect wildlife for its many values and they will advocate effectively for conservation of wildlife and wildlife habitats.

Goals:

- Iowans will understand the relationships of:
- land use, and its impacts on wildlife diversity & abundance
 - land use, and its impacts on quality of life for all citizens
 - land use, and its impacts on Iowa’s economic sectors related to wildlife recreation
 - wildlife diversity & abundance, and its impacts on quality of life in Iowa
 - wildlife diversity & abundance, and its impacts on Iowa’s economy
 - quality of life for all citizens, and its impacts on Iowa’s economy
 - Iowa’s economic decisions and their impacts on wildlife-based contributions to quality of life for all citizens

Conservation Strategies and Actions

- Work with stakeholders to develop consistent messages about the value of wildlife and their associated habitats that convey health, wellness, economic, and other *quality of life* benefits (tourism and economic development, departments of health, physicians, wellness coordinators, etc.)

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	3. Awareness Raising

	3.1 Outreach & Communication 5. Livelihood, Economic & Moral Incentives 5.1 Linked Enterprises & Livelihoods 5.4 Valuation of/Payments for Ecosystem Services 5.5 Non-Monetary Values
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2. Refine and expand current wildlife education efforts targeted to formal and non-formal education venues.

Focus on:

- a. Priorities established in this Plan,
- b. Needs identified by the formal education community (e.g., through direct contact with the Iowa Department of Education and Area Education Agencies),
- c. Information collected through teacher focus groups
- d. Needs of other potential target audiences.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	9. Education & Training 9.1 Formal Education 9.2 Training & Capacity Development

3. Determine appropriate target audiences based on the overarching goals of this Plan.

- a. Determine audience needs through needs assessments
- b. Develop appropriate informational materials and distribution venues

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	8. Research & Monitoring 8.1 Basic Research & Status Monitoring 8.2 Effectiveness Monitoring/Adaptive Management 9. Education & Training 9.2 Training & Capacity Development

4. Secure additional staff to coordinate educational efforts across the state

- a. Materials development,
- b. Staff training and assistance,
- c. Maintenance of regional partnerships to facilitate implementation of educational efforts.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	10. Institutional Development 10.1 Organizational Management & Administration 10.2 Institutional & Civil Society Development 10.3 Alliance & Partnership Development 10.4 Financing Conservation

5. Develop training programs for professionals in fields that affect land use (agriculture, engineering, community planning, developers, etc.) and community leaders to inform them of the impacts of development on wildlife habitats and the quality of life for citizens on a local level.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	3. Awareness Raising

	3.1 Outreach & Communications 5. Livelihood, Economic & Moral Incentives 5.1 Linked Enterprises & Livelihoods 9. Education & Training 9.2 Training & Capacity Development
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6. Pro-active wildlife education for K-12 classrooms as well as post-secondary and adult conservation education and outdoor skills must be expanded through aggressive outreach programs.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	9. Education & Training 9.1 Formal Education

Explanation:

To attain these visions, political leaders must be made aware of the economic and social benefits that are achieved through scientific management of Iowa's wildlife and provide the necessary funding. Pro-active wildlife education for K-12 classrooms as well as post-secondary and adult conservation education and outdoor skills must be expanded through aggressive outreach programs. Educational programs must be developed for professionals in other disciplines and for state, regional and community leaders that make decisions on the development and use of natural resources that impact wildlife.

See Appendix 23 for definitions of each Level I and Level II Conservation Action.

A Vision to Fund Wildlife Conservation

Stable, permanent funding will be dedicated to the management of wildlife at a level adequate to achieve the visions of this plan.

Goals:

- Government (Federal, state, and county) and private conservation spending will be increased so that the goals of this Plan are reached by 2030.
- Funding will be dependable, secure, and appreciated as a powerful economic and social investment.

Conservation Strategies and Actions

1. Develop a marketing campaign that will convince citizens, conservation professionals, and activists in private conservation groups, community leaders and politicians that funding this Plan will be an important step in helping to solve a myriad of social and economic problems in Iowa.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	3. Awareness Raising 3.1 Outreach & Communications

2. Expand membership in the coalition of traditional wildlife and agricultural groups that is lobbying Congress for Federal farm conservation programs on private land to include nongame and recreational interests.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	7. Law & Policy 7.1 Legislation 7.2 Policies & Regulations

	10. Institutional Development 10.2 Institutional & Civil Society Development 10.3 Alliance & Partnership Development
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3. Develop a broad-based coalition of conservation leaders, educators, politicians and local economic interests to identify and secure passage of permanent funding mechanisms that will provide sufficient funding to meet Plan goals in 25 years.

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	7. Law & Policy 7.1 Legislation 7.2 Policies & Regulations 10. Institutional Development 10.1 Organizational Management & Administration 10.2 Institutional & Civil Society Development 10.3 Alliance & Partnership Development 10.4 Financing Conservation

4. Leverage conservation dollars and make use of private dollars as well as public funds

Crosswalk to the Actions Taxonomy:	
Level I & Level II Actions	10. Institutional Development 10.3 Alliance & Partnership Development 10.4 Financing Conservation

Explanation:

Achieving the visions outlined in this plan will require cooperation from public-private partnerships at all levels of government (Federal, state and local) and from all private stakeholders. Funding from all sources will have to reach a greater level than at any time in the past. Historically funding for wildlife programs in Iowa has come from hunters and anglers through license fees and excise taxes. All Iowans will receive tangible and intangible benefits when the IWAP is implemented. Presently, 25 percent of Iowans hunt or fish; another 25 percent enjoy wildlife viewing; and 74 percent say they enjoy seeing wildlife during other recreation activities. Wildlife-associated recreation generates \$1.5 billion in economic activity annually in Iowa, equivalent to 16,000 jobs. Increasing wildlife habitat will reduce soil erosion, improve water quality, and reduce drinking water costs for all citizens. The costs for implementing the Plan should be borne by all citizens.

See Appendix 23 for definitions of each Level I and Level II Conservation Action.

Conservation Actions Taxonomy

Appendix 23 displays the full taxonomy and definitions of Level I and II Conservation Actions, as developed for the global conservation community by the Conservation Measures Partnership. Table 6- 1 lists conservation actions and provides some explanation and a few examples that may have relevance in Iowa. A few of the actions included in the full list are not applicable or appropriate for governmental agencies to engage in (e.g. Protests & Civil Disobedience). This Plan is implemented by a wide array of entities (individuals, non-profit organizations, municipal, state or federal agencies, educational institutions, etc.). The actions listed are not all applicable to every type of conservation entity. However, any individual or organization with an interest in implementing the Plan should hopefully be able to find a way to contribute to making the Plan’s visions a reality.

References Cited in Chapter Six

Conservation Measures Partnership. 2013. Open standards for the practice of conservation. Version 3.0. Last accessed August 25, 2015. www.ConservationMeasures.org

Salafsky, N, D Salzer, AJ Stattersfield, C Hilton-Taylor, R Neugarten, SHM Butchart, B Collen, N Cox, LL Master, S O'Connor, and D Wilkie. 2008. A standard lexicon for biodiversity conservation: unified classifications of threats and actions. Conservation Biology 22:897-911.

Table 6- 1. Conservation Actions as defined by the Conservation Measures Partnership, with some explanation and examples.

Because this Conservation Actions taxonomy was developed to be inclusive of all types of conservation across the globe, some actions listed below may not be particularly relevant to Implementation of this Plan, and inclusion here does not imply that this Plan recommends or supports undertaking any of the following actions. **Recommended actions are listed above on pages 3-13**, with a cross-walk to the actions taxonomy presented in this table. The purpose of providing the taxonomy is to provide an organizational framework by which conservation efforts can be presented across species groups or ecosystem types, across entities, and across states and regions.

Conservation Actions	lowa-specific explanation and examples
A. Target Restoration/Stress Reduction Actions	Actions to directly restore a target or mitigate a stress
1. Land/Water Management	Actions directed at conserving or restoring sites, ecosystems and the wider environment
1.1 Site/Area Stewardship	Enhancing areas/mitigating stresses for particular sites and/or ecosystem types. (e.g. maintaining natural vegetation, removing invasive species, etc.)
1.2 Ecosystem & Natural Processes (Re)Creation	Restoring, reconstructing, or enhancing natural areas and natural disturbance processes (e.g. planting and maintaining natural vegetation, conducting prescribed fires, wetland drawdowns and other actions to restore degraded hydrologic regimes, etc.). Some overlap with 1.1 but typically on a larger scale.
2. Species Management	Actions directed at conserving or restoring specific species
2.1 Species Stewardship	Conserving specific species within their current range (e.g. providing and maintaining artificial nest structures, management of game species, provision of food plots, etc.)
2.2 Species Re-Introduction & Translocation	Re-introducing species to places where they formerly occurred or to suitable future habitat (e.g. species re-introduction projects such as Greater Prairie-chickens)
2.3 Ex-Situ Conservation	Protecting biodiversity out of its native habitats with the aim of ultimately restoring it to these habitats (e.g. captive breeding programs for rare species, seed banking, etc.)
B. Behavioral Change / Threat Reduction Actions	Actions to get people to stop direct threats or continue/increase positive behaviors
3. Awareness Raising	Actions designed to make people aware of key issues, thus leading to behavior change

Conservation Actions	lowa-specific explanation and examples
3.1 Outreach & Communications	Promoting desired behavioral change by providing information through various media and other channels (e.g. naturalist programming, press releases, educational webpage development, etc.)
3.2 Protests & Civil Disobedience	Promoting desired behavioral change by conducting protests or other confrontational means (e.g. petitions, protest marches, etc)
4. Law Enforcement & Prosecution	Monitoring and enforcing compliance with existing laws, policies & regulations, and standards & codes at all levels
4.1 Detection & Arrest	Detecting and/or directly stopping violations of existing laws, policies/regulations and standards/legal codes (e.g. conservation officer patrols)
4.2 Criminal Prosecution & Conviction	Ensuring sanctions for violations of existing laws, policies/regulations and standards/legal codes (e.g. following up on arrests)
4.3 Non-criminal Compliance Enforcement	Threatening or bringing non-criminal legal action to get individuals, organizations, or firms to change behavior (e.g. legal actions carried out in civil arena)
5. Livelihood, Economic & Moral Incentives	Actions using livelihood, economic and moral incentives to directly influence behavior or to change attitudes that then lead to behavioral change
5.1 Linked Enterprises & Livelihoods	Developing enterprises that directly depend on the maintenance of natural resources or provide substitute livelihoods as a means of changing behaviors or attitudes (e.g. supporting eco-tourism or other non-damaging natural resource-based businesses)
5.2 Substitution & Alternative Livelihoods	Promoting alternative products and services that substitute for environmentally damaging ones (e.g. grass banking, wetland mitigation, recycling and use of recycled materials, etc.)
5.3 Market Forces	Using market mechanisms to change behaviors and attitudes (commodity certification programs like “wildlife-friendly” meat products, development of cap-and-trade markets for greenhouse gas emissions, etc.)
5.4 Valuation of / Payments for Ecosystem Services	Using direct or indirect payments for ascribing economic value to change behaviors and attitudes (tax incentives for conservation, compensation for provision of ecosystem services)
5.5 Non-Monetary Values	Using intangible and moral values to change behaviors and attitudes (development of religious arguments for conservation, linking conservation to human health and well-being)
C. Enabling Condition Actions	Actions that create the conditions necessary for other conservation efforts to succeed
6. Conservation Design & Planning	Actions to legally or formally protect sites and/or species
6.1 Site/Area Protection	Legally or formally establishing or expanding public or private parks, reserves, and other protected areas roughly equivalent to IUCN Categories I-VI* (expanding or creating new areas of National Wildlife Refuges, National Parks, Forests, State, County, or City Wildlife Areas, Forests, Parks, private protected areas, etc.)

Conservation Actions	Iowa-specific explanation and examples
6.2 Easements & Resource Rights	Legally or formally establishing protection or easements of some specific aspect of the resource on private lands outside of IUCN Categories I-VI (Conservation Easements through Farm Bill programs such as Conservation Reserve Program, Wetland Reserve Easement, other programs through land trusts etc.)
6.3 Land/Water Use Planning & Zoning	Legally or formally designating land or water uses (e.g. formal planning and zoning by Councils of Government, as well as non-regulatory conservation area designation such as Bird Conservation Areas, Important Bird Areas, and Amphibian & Reptile Conservation Area, etc.)
6.4 Site/Area Planning & Monitoring	General planning and monitoring of public or private parks, reserves and other protected areas roughly equivalent to IUCN Categories I-VI* (e.g. development of management plans for National Wildlife Refuges or Wildlife Management Areas, monitoring of areas, conducting Adaptive Resource Management)
6.5 Site Infrastructure	Creating and maintaining the physical infrastructure for protected areas and other conservation sites (e.g. maintaining parking areas, roads, fences, signs, etc. in conservation areas)
6.6 Species Designation, Planning & Monitoring	General designation and management of specific plant and animal populations of concern (e.g., development of species-specific management plans such as the Greater Prairie-chicken conservation plan, monitoring in association with such plans, designation of species as SGCN, etc.)
7. Law & Policy	Actions to develop, change, and influence formal legislation, regulations, and voluntary standards
7.1 Legislation	Making, implementing, changing, influencing, or providing input into formal government sector legislation at all levels: international, national, state/provincial, municipal, tribal (e.g. providing information to policy-makers, working to influence congressional or legislative appropriations, developing permitting systems)
7.2 Policies & Regulations	Making, implementing, changing, influencing, or providing input into policies and regulations affecting the implementation of laws and codes at all levels: international, national, state/provincial, municipal, tribal private (e.g. providing input into agency plans or regulations, working with communities to implement zoning, etc.)
7.3 Private Sector Standards & Codes	Setting, implementing, changing, influencing, or providing input into voluntary standards & professional codes that govern private sector practice (voluntary codes of practice)
7.4 Compliance & Enforcement Capacity	Monitoring and enforcing compliance with laws, policies & regulations, and standards & codes at all levels (strengthening regulatory monitoring efforts)
8. Research & Monitoring	Basic and applied research to support conservation work
8.1 Basic Research & Status Monitoring	Basic research related to conservation (e.g. ecological research on the habitat requirements of a specific species or suite of species)

Conservation Actions	Iowa-specific explanation and examples
8.2 Effectiveness Monitoring / Adaptive Management	Assessment of and learning about the effectiveness of strategies (e.g. research designed to assess the effectiveness of conservation strategies or actions)
9. Education & Training	Enhancing knowledge and skills of specific individuals
9.1 Formal Education	Enhancing knowledge and skills of students in a formal degree program (e.g. public schools, colleges and universities, continuing education programs)
9.2 Training & Capacity Development	Enhancing knowledge, skills and information exchange for practitioners, stakeholders, and other relevant individuals in structured settings outside of degree programs (e.g. workshops and trainings for carrying out management, developing guidelines or manuals for natural resource managers, etc.)
10. Institutional Development	Creating the institutions needed to support conservation work
10.1 Organizational Management & Administration	Doing the work needed to establish and operate conservation organizations and agencies (e.g. hiring & managing staff for conservation agencies at any level of government)
10.2 Institutional & Civil Society Development	Creating or providing non-financial support & capacity building for non-profits, government agencies, communities, and for-profits (developing local land trusts or other conservation organizations, starting public-private partnerships, starting prescribed fire cooperatives, etc.)
10.3 Alliance & Partnership Development	Forming and facilitating partnerships, alliances, and networks of organizations (e.g. holding meetings, conferences, engaging stakeholders, developing networks and communities of practice, etc.)
10.4 Financing Conservation	Raising and providing funds for conservation work

* IUCN Protected Areas Categories System: IUCN protected area management categories classify protected areas according to their management objectives. For more information, visit:

http://www.iucn.org/about/work/programmes/gpap_home/gpap_quality/gpap_pacategories/

Category Ia: Strict Nature Reserve

Category Ib: Wilderness Area

Category II: National Park

Category III: Natural Monument or Feature

Category IV: Habitat/Species Management Area

Category V: Protected Landscape/Seascape

Category VI: Protected area with sustainable use of natural resources