Florida's State Wildlife Action Plan (Action Plan, originally the Comprehensive Wildlife Conservation Strategy) is a comprehensive, statewide plan for conserving the state's wildlife and vital natural areas for future generations. The Action Plan’s purpose is to serve as a starting point for building a common framework for Florida’s numerous wildlife conservation partners. Perhaps most importantly, it is an opportunity for Floridians to work collaboratively to identify important wildlife and habitat resources, summarize the primary conservation issues, and develop potential solutions. The Action Plan is designed to be an adaptive document. As part of the implementation of Florida’s State Wildlife Grant (SWG) Program, the Florida Fish and Wildlife Conservation Commission (FWC) will ensure the Action Plan will be regularly updated to guarantee its long-term relevance and success.

Florida’s Climate and Landscape
(Adapted from Hoctor 2003)

Florida is an ecologically diverse state covering almost 54,000 square miles (U.S. Census Bureau 2010) that ranges from temperate to subtropical conditions. The landscape of Florida is relatively flat with a maximum elevation in the north of approximately 100 meters in the north; elevations in the central and southern reaches of Florida rarely exceed 30 meters.

Northern Florida is within the southern temperate zone and consists of broad alluvial riparian habitats, and upland flats and ridges once dominated by longleaf pine communities. The central peninsula consists of broad flatlands once dominated by longleaf and slash pine, dry and wet prairies and sandy ridges with scrub and sandhill communities harboring numerous rare and endemic species (Myers 1990). The southern tip of the peninsula, though heavily modified by development, still contains tropically-influenced hammocks, swamps, rocklands and freshwater marshes of the Big Cypress Swamp, Everglades and the Florida Keys.

In North Florida, rivers originating in the southern Appalachians and Piedmont are an important ecological component, harboring increasingly rare mollusk and fish species. Lakes are very common in the Florida peninsula; Lake Okeechobee in South Florida is one of the largest lakes in North America. Numerous springs also are characteristic of the vast limestone regions of North and Central Florida. Springs, limestone caves and sinks support many rare aquatic invertebrates (Deyrup and Franz 1994). Estuarine ecosystems include productive salt marsh communities in the northern half of the state, mangrove communities in the southern half and seagrass communities statewide.

The Gulf of Mexico and Atlantic Ocean significantly influence the generally warm, humid climate. Summer thunderstorms are frequent and lightning-borne fires are an important ecological process that has shaped many upland and wetland communities for millennia (Chen and Gerber 1990). South Florida experiences dramatic seasonal shifts in weather patterns, with heavy rains occurring mainly in the summer. North Florida’s rainfall is more frequent in winter because of the influence from continental frontal systems (Chen and Gerber 1990).
Freezes occur yearly in North Florida but are rare in South Florida. Freeze events have a strong influence on the range of tropical species up the Florida peninsula. Tropical species range farther north along the coasts, which are better buffered from freeze events than interior areas because of the warm waters of the Atlantic and Gulf of Mexico (Harris and Cropper 1992).

Florida has a total surface area of 37,533,700 acres of which 3,133,600 acres are water areas (U.S. Department of Agriculture 2009). Approximately 9,871,259 acres, or 28 % of Florida, is non-submerged federally, state, and locally managed conservation lands (Florida Natural Areas Inventory [FNAI] 2010b, Figure 1A).

Figure 1A. Florida’s federal, state, local and private conservation lands total approximately 9,871,259 acres.
Florida’s People and Economy

In the past 50 years, Florida’s population has grown from fewer than five million to more than 18 million people (U.S. Census Bureau 1995, U.S. Census Bureau 2010). Florida’s most densely populated urban areas include Miami, Orlando, Tampa and Jacksonville. The 2030 population projection anticipates the state population to reach 28.7 million people, a 59% increase from 2010 (U.S. Census Bureau 2010).

Florida’s economy is tied to its natural and man-made attractions. Tourism is the largest industry in Florida and contributes $53 billion a year to the state’s economy. Nearly 71 million visitors are drawn to Florida each year from across the United States and abroad. They come to see the many entertainment attractions in Florida and to enjoy Florida’s moderate climate and abundant natural resources, including clear waters, world-class beaches, coral reefs, parks, rivers and lakes. Wildlife-related recreation activities abound in Florida because of the number of fishing, hunting and wildlife-watching opportunities and accounted for $8.1 billion spent on trips, equipment and other items in 2006. Abundant freshwater and saltwater fishing opportunities have contributed to Florida’s designation as the “Fishing Capital of the World” (Visit Florida 2011), aided by 700 world-record fish catches (seven times more than any other state). Nearly three million people engaged in fishing and hunting activities in Florida and more than four million participated in wildlife-watching activities in 2006 (U.S. Fish and Wildlife Service and U.S. Census Bureau 2006).

Florida’s economy and its communities also benefit from money and jobs created by industries based on natural resources, which include a $16.6 billion forestry industry (Hodges et al. 2003), a more than $700 million hunting industry (Southwick Associates 2007), a $8.32 billion fishing industry (U.S. Fish and Wildlife Service and U.S. Census Bureau 2006, American Sportfishing Association 2008), and an $16.8 billion boating industry (Thomas J. Murray & Associates, Inc. 2008, FWC 2010b). Florida seaports directly and indirectly generate more than 550,000 jobs and $66 billion in total economic value. Florida’s cruise industry generates another 126,000 jobs and $5.2 billion in wages for Florida workers (Florida Ports Council 2010).

Florida’s Wildlife and Ecosystems

Florida’s Wildlife

Florida is home to more than 16,000 species of native fish, wildlife and invertebrates (see Species of Greatest Conservation Need chapter). There are 147 or more endemic vertebrate species and subspecies as well as 410 known terrestrial and freshwater endemic invertebrates (Muller et al. 1989). The number of endemic marine invertebrates is unknown.

Florida's wildlife is a mixture of southern temperate, neotropical and western species. Temperate species include the red-cockaded woodpecker, and various amphibians, fish and mollusk species (Gilbert 1992, Moler 1992, Deyrup and Franz 1994, Rodgers et al. 1996). Sea level rise and fall have been a dominating biogeographic force. For example, the Florida scrub-jay, Florida mouse, eastern diamondback rattlesnake and gopher tortoise are all closely related to
species found in western North America – a result of semiarid habitat that stretched into Florida during the much lower sea levels of the early Pleistocene periods (Webb 1990). Neotropical species have colonized Florida by flying across the Gulf of Mexico or by riding Gulf Stream currents and include numerous plants, wading bird species and raptors such as the snail kite and short-tailed hawk (Rodgers et al. 1996). Many marine fish and invertebrate species have pelagic larvae, which are transported long distances from Caribbean waters and settle out in Florida waters (Gilmore 1995, Roberts 1997).

As of November 2010, 131 species are designated as Federally-designated Endangered or Threatened, State-designated Threatened, or State-designated Species of Special Concern by the FWC in accordance with Florida Administrative Code Rule Chapter 68A-27. This includes 67 animals federally listed as endangered or threatened species, or experimental non-essential by the United States Fish and Wildlife Service (USFWS) under the federal Endangered Species Act (ESA, 16 U.S.C. 1531 to 5143). For more information on federally and state-listed species, please go to the FWC’s imperiled species website (FWC 2011c).

Florida’s game species include both migratory and resident species. Hunting opportunities for migratory bird species include ducks, geese, common moorhen, coots, snipe, rails, woodcock, mourning doves and white-winged doves. Resident game includes deer, gray squirrels, wild hogs, rabbits, alligator, quail and turkey. From Florida’s 2.1 million acres of freshwater lakes and reservoirs and 102,500 miles (165,000 kilometers) of streams and canals, more than 250 different species of freshwater fishes have been collected. Popular marine game fish species include common snook, red drum and spotted sea trout, with several species of bass and sunfish the most popular freshwater game fish. In addition, Florida is a premier birding destination because of the various tropical species that are best viewed or only found in the state (Kale and Maehr 1990).

Endangered Ecosystems and Action Plan Habitats

In an assessment of endangered ecosystems in the United States, Florida was considered the state most at risk of ecosystem loss. It is recognized as a priority for conservation based on a national assessment of risk of ecosystem disappearance. The highest ranking endangered ecosystem in the United States is the South Florida landscape (Figure 1B). Seven additional ecosystems found at least partially in Florida were also identified in the list of the top 21 endangered ecosystems nationally. These 21 endangered ecosystems were prioritized based on their decline in original area since European settlement, present area (rarity), imminence of threat, and number of federally listed threatened and endangered species (Noss and Peters 1995).

Florida’s Action Plan uses a habitat-based approach that divides the state landscape into 45 distinct habitat categories based on community structure and composition. During the development of the 2005 Action Plan, multiple partners helped identify numerous threats to these habitat categories. The partners then helped to prioritize the habitats based on the relative threat level the habitats received (FWC 2005, Gordon et al. 2005).
Florida’s Endangered Ecosystems

- South Florida landscape (1)
- Longleaf pine and savanna (3)
- Eastern grasslands, savanna and barrens (4)
- Coastal communities in the lower 48 states (7)
- Large streams and rivers in the lower 48 states (11)
- Cave and karst systems (12)
- Florida scrub (15)
- Southern forested wetlands (21)

Figure 1B. Florida’s endangered ecosystems. Priority order is shown in parentheses (Noss and Peters 1995).

All 45 habitat categories identified in 2005 and in this Action Plan are worthy of attention and conservation effort; however, several are identified as being under the greatest threat (FWC 2005). Eight terrestrial habitat categories were identified as having the highest relative threat status (Beach/Surf Zone, Coastal Strand, Dry Prairie, Freshwater Marsh and Wet Prairie, Natural Pineland, Pine Rockland, Sandhill and Scrub). Three freshwater habitat categories (Coastal Tidal River or Stream, Softwater Stream and Spring and Spring Run) and nine marine habitat categories (Beach/Surf Zone, Bivalve Reef, Coastal Tidal River or Stream, Coral Reef, Inlet, Mangrove Swamp, Salt Marsh, Seagrass and Tidal Flat) also were identified as having the highest relative threat status. Two of these marine habitat categories (Beach/Surf Zone and Coastal Tidal River or Stream) also were identified in the terrestrial and freshwater habitat categories; they were placed in both systems because of the process used to determine threats and actions and because of their importance to each ecosystem. See the Habitats chapter for more information on the FWC’s priority habitats.

Statewide Threats

Many of the threats facing wildlife in Florida form common themes that affect multiple habitats and numerous species. This section introduces the highest priority statewide threats identified by the FWC and partners in the Action Plan (FWC 2005). By focusing attention and efforts on these threats, benefits can be accrued to a wide variety of habitats and species. Although not all-encompassing, implementation of actions and projects that diminish these threats should have the largest positive impact for fish and wildlife resources across the state.

Alterations of the Physical Environment

Habitat loss and fragmentation is one of the most pervasive threats to Florida’s wildlife, reaching across habitats statewide. It is directly related to a subsequent array of threats from infrastructure or actions of Florida’s residents, which includes roads, surface water diversion and withdrawal, residential activities and nutrient loading caused by impervious surface installation and non point-source pollution. Habitat fragmentation affects wildlife by isolating populations,
altering the movement patterns of individuals, and increasing the negative aspects of edge effects. Development can disrupt ecological connectivity and results in substantial loss of function of adjacent natural habitat including landscape-level functions, such sediment movement, hydrology, fire regime and wildlife movements. Some alterations of the physical environment such as dams, shoreline hardening, dredging, beach nourishment and impoundments can cause concern to Floridians because of their impacts on our natural resources. While these alterations may provide services for human recreation, health and/or safety, including securing property from damage from flooding or erosion, maintaining navigation, and creating reservoirs to meet water supply needs, they can be detrimental to wildlife. While any one alteration may not be significant, it is the cumulative effects of this threat that are important. Where these actions are sometimes necessary, the full impacts of these actions should be understood and considered before they are undertaken, and in some cases, additional management implemented to lessen affects to wildlife. As the human population increases, more land will be developed with the highest pressure occurring on coastal and upland habitats.

Degradation of Water Resources

Degradation of Florida’s water resources is a widespread threat to the state’s natural resources. This threat includes groundwater and surface withdrawal, drainage or channelization of wetlands, diversion of rainfall from impervious cover, contamination from industrial and agricultural operations, and contamination from inadequate stormwater and sewage management. In many of Florida’s springs, declines in water quality and reduced flows have been detected. Contamination by excess nutrients and chemicals such as pesticides, herbicides and petroleum hydrocarbons can degrade surface waters. Altered salinity levels are another source of water degradation. Diversion or withdrawal of surface water for consumptive uses is expected to increase in the immediate future as limits on groundwater withdrawals are reached, further impacting fish and wildlife dependent on the availability of surface water.

Incompatible Fire Management

Lack of appropriate fire management is a threat in many of Florida’s terrestrial habitats that lie within ecosystems that were historically fire-maintained. Many native wildlife and plant species depend on periodic fires to maintain desirable habitat conditions. Changes in vegetation structure and composition occur where fire frequency, seasonal timing, intensity and extent are altered. These changes have resulted in loss of habitat value for particular wildlife species, even in lands managed for conservation. Many of Florida’s fire-dependant habitats have become fragmented because of urban development, making naturally occurring fire and prescribed fire more problematic. When fire management practices do not keep pace with the accumulation of fuels, wildfires can be severe and can result in destruction of the seed bank and sterilization of the soil; it may jeopardize human health and safety.

Introduced Plants and Animals

While the distribution of introduced species differs regionally in Florida, the threats posed by these species can occur across all habitats categories. Many introduced species that are observed in Florida never become established nor do they cause any negative impacts. However,
those that do become established as long-term reproducing populations have the potential to become invasive, causing damage to native species and habitats, posing a threat to human health and safety, or causing high ecological and economic costs (Pimentel et al. 2005). Invasive species, especially plants, can change community structure and composition, alter hydrological and fire regimes, alter soil sedimentation and erosion processes, and modify habitat values for both wildlife and humans. Invasive species also can pose direct threats to wildlife through competition, predation and pathogen movement. There are several pathways by which nonnative species find their way into Florida’s natural habitats. Marine species can be transported to Florida waters in the ballast water of ships. Freshwater and marine species that encrust boat surfaces can be transported from one water body to another. Shipping containers and packing materials often contain nonnative wood boring or plant species. By far, the greatest pathway for the introduction of nonnative species is the pet trade where nonnatives often escape or are released into the wild.

**Key Conservation Challenges**

There are many obstacles to administering conservation programs and implementing a State Wildlife Action Plan. The key conservation challenges below are faced by agencies and organizations statewide and across the nation. The Action Plan highlights recommendations to collaboratively address these concerns to improve the efficiency of conservation efforts in Florida.

**Public Awareness Challenge**

Promoting informed decision-making and participation in Florida’s conservation and management issues is imperative to achieving the goals of the Action Plan. Conservation of Florida’s fish and wildlife ultimately depends upon the commitment of Floridians to their protection. The key to instilling this commitment is effectively designed conservation education programs that not only provide residents with basic knowledge of Florida’s wildlife and habitats, but also provide them with an understanding of what actions they can take to alleviate and reverse the loss of Florida’s wildlife and habitats. Fortunately, Florida has experienced an increasing interest in youth conservation and outdoor-related activities exemplified by programs such as Youth Conservation Camps, fishing camps and clinics, youth hunting safety programs, Get Outdoors Florida!, and No Child Left Inside.

Implementation of Florida’s Action Plan offers opportunities for outreach and contribution of many partners. The development and implementation of programs that raise awareness and motivate helpful actions among various audiences are key goals. Conservation education programs will increase knowledge of and concern for the conditions of the state’s terrestrial, marine, freshwater and estuarine ecosystems and their protection. One of the goals of the Action Plan is to encourage everyone to become involved in a proactive manner for the benefit of all fish and wildlife populations.
Information Management Challenges

Numerous entities across the state collect and manage ecological data, and organizations constantly face the challenge of limiting redundancy in acquiring data and improving means of sharing information. This obstacle was encountered in our attempts to collect scientific data on a number of species. Had there been an integrated network of information, there would be fewer data gaps that may be costly to address. One of the goals of Florida’s Action Plan is to build the capacity to share the most accurate, updated information on species and habitats. To allow for better informed management objectives and decisions, as well as incorporation of existing knowledge, the Action Plan has initiated the steps necessary to identify the needs and the gaps through its species and habitat monitoring activities. The next step is a collaborative effort to create a more unified data management approach (see Florida’s First Five Years of Action Plan Implementation chapter, Goal 4 for more information).

Data Gap Challenges

Data gaps on the distribution, life history, status, trend, population dynamics, genetic diversity and management needs for all species exist and will continue to be identified. Invertebrate groups and marine species in particular have received little attention in the past because of lack of awareness and funding. While these groups tend to include smaller species, many perform critical ecosystem functions that need to be better understood. Continued research and monitoring work is important to address species data gaps and develop effective conservation measures.

Data gaps exist for species’ habitats as well. The level of detail, including spatial extent, configuration, and qualitative measures, is lacking for some habitat categories to provide appropriate information for accurate species mapping. Improved and updated mapping and characterization of terrestrial, freshwater and marine habitat types is ongoing, using higher resolution imagery and more advanced technologies. Updated and accurate habitat information is essential to monitor and measure success of conservation efforts.

By addressing information needs for habitats and species, Florida scientists and managers can better conserve Florida’s fish and wildlife. For examples of projects that have addressed some of these data gap issues, see Florida’s First Five Years of Action Plan Implementation chapter, Goals 3 and 4.

Partnership Challenges

Effective partnering is a formidable challenge because of the broad array of existing responsibilities and priorities, missions, visions and historical interactions between these agencies and organizations in Florida. Coordination and cooperation are essential to achieving the actions within Florida’s Action Plan. In Florida, wildlife populations and important wildlife habitat are managed by numerous public and private entities, and wildlife conservation issues affect many diverse stakeholders. Solving Florida’s wildlife conservation challenges will require collaborative efforts from a wide array of partners, including groups that do not traditionally work together. Partnerships are multidimensional, with partners contributing in numerous ways.
by providing such things as expertise, financial and in-kind support, political strength, public support, communications and policy development. Successful partnerships utilize the strengths and resources that each partner brings to the project and provide for mutual support and shared responsibility and credit.

**Florida’s Approach to Conservation**

Everyone who lives in Florida, visits Florida or invests in Florida has a shared interest in the resilience and the quality of Florida’s natural resources. Clean rivers, lakes and beaches support a wide variety of fishing, hunting and recreational opportunities. The appealing climate and access to enjoy Florida’s natural resources are a key driver of Florida’s economy. In order to meet and overcome the challenges and threats to Florida’s habitats and wildlife, it is important that Floridian’s use the many tools available to address wildlife and habitat conservation. Florida’s approach to the conservation of its natural resources is an established framework that consists of acquisition, incentive tools, education, coordination and partnerships, research and monitoring, management, planning and regulations.

**Acquisition**

Florida’s nationally recognized conservation and recreation lands-buying program is called Florida Forever. The Florida Forever program, which commenced in 2001 and succeeded the Preservation 2000 conservation program, has resulted in the acquisition of more than 650,000 acres of land worth $2.73 billion (FDEP 2011a). Appropriations are funded through the cash proceeds from the sale of a series of bonds and cash transfers from General Revenues. Funds are distributed by the Florida Department of Environmental Protection (FDEP) to multiple state agencies for land purchase. With help from the Florida Forever program as well as other funds, Florida currently has 9.8 million acres of federal, state and local conservation lands. Nearly 200,000 additional acres are private conservation lands (FNAI 2011b).

Land acquisition and conservation easement programs at the federal, state and local levels will continue to be essential to conserve areas important to wildlife. Land acquisitions also help to ensure the public has access to quality conservation areas in order to hunt, fish and participate in other recreational activities. Acquisition and easements are tools applicable to terrestrial and many freshwater habitats. This is not the case for many coastal or marine habitats where most areas are either sovereign commons or already developed. Land acquisition will become more challenging as land values increase; therefore, new and enhanced strategies will be required, such as cooperative and incentive-based programs.

**Incentive Tools**

Many incentive programs on private lands, administered by state and federal agencies, encourage private landowners to implement land management actions that benefit wildlife and ecosystem functions. These programs provide technical and financial assistance to private landowners. Defenders of Wildlife created a document that summarizes many different opportunities (Mullins et al. 2008). Examples of these programs include Partners for Fish and Wildlife (USFWS), Landowner Assistance Program (FWC), Cooperative Forestry Assistance
Program (Florida Forest Service) and Farm Bill programs (Natural Resources Conservation Service/FWC), such as the Environmental Quality Incentives Program, Wildlife Habitat Incentives Program, and Farm and Ranch Protection Program. Links for many of these programs are available on the FWC Landowner Assistance Program webpage (FWC 2011d).

Education

Education plays a vital role in conservation of Florida’s wildlife and other natural resources. The goal of conservation education is to lead individuals from simple awareness to beneficial action and behavioral changes. Many residents know little about Florida’s natural resources and do not realize how their individual actions collectively contribute to the threats of these resources. The future health of Florida’s natural resources will depend on continuous and comprehensive educational efforts designed to promote ecological literacy and the balance between natural resources, wildlife conservation, economic productivity and development.

Coordination and Partnerships

Partnerships are critical to implementing many of the actions needed to conserve Florida’s natural resources. The responsibility for mitigating threats to wildlife and habitats fall under the jurisdiction of many agencies; therefore, coordination, cooperation and communication among federal agencies, state agencies, local governments, non-governmental organizations and private entities are essential.

Research and Monitoring

Numerous universities, government agencies and private organizations are engaged in fish and wildlife research statewide. Through effective research and monitoring, scientists and managers gain a better understanding of the natural environment and how to better protect, conserve and manage Florida's fish and wildlife resources. Many research projects implemented by multiple partners have focused on obtaining and expanding knowledge to fill information gaps on life history, status, trends and management needs of many wildlife species. Monitoring also is an integral component to Florida’s approach to conservation. By monitoring species and habitats, wildlife biologists and managers can evaluate where conservation efforts are adequate and where new management strategies are needed to better conserve Florida’s natural resources. For more information on species and habitat research and monitoring, please see Florida’s First Five Years of Action Plan Implementation chapter.

Conservation Planning and Management

Florida has a rich history of conducting detailed species assessments and systematic, landscape-based conservation planning efforts. As a result, Florida has many conservation plans and planning tools available, varying in scope from the county to regional and statewide scales. Together these plans identify key areas to conserve and to maintain biodiversity and habitat connectivity. While a detailed summary of all of Florida’s conservation planning resources is beyond the scope of this document, Florida’s Planning Toolbox is a comprehensive synthesis document outlining available planning tools (The Center for Urban and Environmental Solutions
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NatureServe and the National Geographic Society also have a synthesis of conservation tools on their LandScope Florida website (LandScope America 2011).

These planning tools, in conjunction with research and monitoring, are used to manage Florida’s species and habitats in a way that balances the needs of wildlife with the needs of people. The FWC has management plans for both imperiled and game species. Wildlife management in Florida is undertaken by several organizations and includes habitat and species conservation and restoration on public and private lands. The state manages conservation lands including state parks, preserves, forests and wildlife management areas for public use. These areas can be actively managed to restore wildlife populations in Florida. Laws and policies also help to manage Florida’s natural resources by helping to ensure sustainable hunting and fishing practices.

Laws and Policies

The formation of ecologically sound laws and policies are important steps to conserve Florida’s natural resources. These range from rules to protect threatened species to rules for improving water quality. Federal, state and local governments oversee and enforce these policies. Although the enforcement of laws is important to Florida’s approach to conservation, Florida’s Action Plan does not focus on regulatory actions, but instead works through voluntary and incentive-based action.

Florida’s Wildlife Legacy Initiative

In 2004, the FWC created Florida’s Wildlife Legacy Initiative (Initiative) to steward the Action Plan and Florida’s State Wildife Grants (SWG) Program. The ultimate aim of the Initiative is to conserve wildlife and their habitats to prevent them from becoming more rare and costly to protect. The Initiative is a non-regulatory program designed to combine effective statewide planning with regional partnership development to implement actions at the local level.

The three main components of the Initiative are: (1) the State Wildlife Action Plan, (2) partnerships, and (3) the State Wildlife Grants Program. These three components work together in an adaptive framework: the Action Plan provides context for identifying and prioritizing goals; grants provide funding to implement actions for achieving the goals; partnerships are built or maintained to improve efficiency. As the Action Plan is revised and updated, goals and funding priorities of the SWG Program will change accordingly.

Florida’s State Wildlife Action Plan

The Action Plan is part of a nation-wide effort by all 50 states and six U.S. territories to develop action plans. All action plans had to address eight elements to make the state or U.S. territory eligible to receive federal funding in the form of State Wildlife Grants (Figure 1C).

During a 14-month period in 2004-2005 Florida's Wildlife Legacy Initiative involved state, federal and local agencies, universities and education centers, conservation organizations, recreation groups, businesses, and the public in the development of the Action Plan. Approximately 1,200 natural resource experts and individuals were invited to participate in the plan development. More than 500 people contributed to questionnaires and participated in 16
workshops, two conferences, an open house and an online virtual workshop, resulting in more than 5,000 comments on two draft documents. Completed in September 2005, the Action Plan was approved by the USFWS in December 2005.

Starting in 2010, the FWC led efforts to revise portions of the Action Plan and submitted the first revision in October 2011. The Action Plan was systematically evaluated through multiple conferences with staff and core partners to determine what should be changed, updated or added. Live webinars were held throughout the process to engage and inform a broad range of partners and stakeholders. A webpage was devoted to the revision process and provided timelines, powerpoint presentations, draft documents and Initiative staff contact information. Comments were solicited from both subject matter experts and the general public via email lists and news articles. The revised Action Plan reduced redundancy in the introductory chapters, added information on Action Plan and SWG implementation, included new chapters focused on freshwater prioritization and climate change, and revised the Species of Greatest Conservation Need (SGCN).

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Figure 1C. The eight elements of a State Wildlife Action Plan. Congress identified eight required elements to be addressed in each state’s Action Plan. Please refer to the State Wildlife Grant Program – Overview webpage on the USFWS website for more detailed information (USFWS 2006).

Partnerships

Coordination and cooperation are essential to achieving the actions within Florida’s Action Plan, but with limited funding, priorities must be identified. Successful and long-term implementation will require the combined activity of the FWC and many partners in other agencies, conservation organizations and the private sector. Multiple potential partners were identified in the first iteration of the Action Plan (FWC 2005, Appendix A), many of which have collaborated with the FWC and each other to implement the Action Plan (see Florida’s First Five Years of Action Plan Implementation chapter and Florida’s Wildlife Legacy Initiative website for examples of collaborative efforts). In 2006, the FWC worked with partners in Florida to identify five implementation goals to guide resources and efforts after the Action Plan was completed. These goals were based on the statewide actions and the 18 priority habitats identified in the Action Plan. The implementation goals are starting points that assist in determining SWG criteria, priority projects, and areas to focus resources and build partnerships. Implementation goals will be evaluated every five years as the Action Plan is revised. To learn
more about the implementation goals and what has been accomplished in recent years see Florida’s First Five Years of Action Plan Implementation chapter.

**Florida’s State Wildlife Grants Program**

The purpose of Florida’s SWG Program is to implement the Action Plan by funding projects that benefit Florida’s wildlife and their habitats. Program funds also help to support staff who work with local partners, including local governments, field offices of state and federal agencies and non-governmental organizations (NGOs) to support collaborative and partnership-based conservation. In conjunction with matching support from other sources, the SWG Program has been an important resource for wildlife conservation efforts in Florida. Projects funded under SWG have included data gaps, research, conservation actions and partnership-building opportunities identified in the Action Plan or through its development. The SWG Program has focused on multiple-species or habitat-level projects aimed at maintaining or improving natural system integrity and preventing future declines in wildlife populations. Additional information about the SWG Program can be found on the [FWC’s Wildlife Legacy website](http://www.floridawildlife.org) (FWC 2011b).

**Evaluating Success and Adaptive Management**

An adaptive management framework is a major component of the Action Plan. The Action Plan, SWG-funded projects and goals for implementation are evaluated for success and effectiveness on various timescales; the assessments are used to improve conservation actions. Additionally, species and habitat monitoring statewide provide researchers and managers with an understanding of how collective actions are impacting wildlife and their habitats (see Florida’s First Five Years of Action Plan Implementation chapter, Goal 4). Conservation actions and implementation goals can be adapted to focus on specific habitats and species for which ongoing evaluations may indicate a need for further action.

The flow chart in Figure 1D demonstrates how evaluations are incorporated at these scales and how, together with monitoring, they are applied to provide feedback on the effectiveness of these components. This multi-level, overall evaluation scheme will help ensure that the Action Plan is meaningfully implemented and will provide needed documentation of progress. The reporting and evaluation schedule for the Action Plan encompasses the following levels and time-scales:

I. State Wildlife Action Plan
   A. Five-year — Assessment, evaluation and revision as needed

II. Implementation goals
   A. Five-year — Assessment, evaluation and revision as needed

III. Individual projects
   A. Quarterly — Reports
   B. Annual — Reports
   C. Final — Reports and evaluations

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IV. Monitoring
   A. Species — see Florida’s First Five Years of Action Plan Implementation chapter
   B. Habitats — see Florida’s First Five Years of Action Plan Implementation chapter

![Flow chart showing the conceptual framework for how monitoring and evaluation is applied to provide feedback at multiple levels as Florida’s Action Plan is implemented.](image)

This conceptual framework for measuring effectiveness allows the FWC and Floridians to assess, learn from and adapt the Action Plan. The five-year reviews will assess Action Plan success, and the document will be revised accordingly. Action Plan revision also will take into account the evaluation of the implementations goals, specific conservation actions recommended by individual projects, as well as the results of species and habitat monitoring. Evaluation and revision of the Action Plan will be conducted with the understanding that there are a number of variables which can affect success of the Action Plan regardless of the actions being
implemented. In addition to the variables and influences outside the control of the Action Plan, some conservation actions require years or decades of implementation before a measurable response can be detected.

State agencies, including the FWC, have found it difficult to attribute the actions of any single project to changes in species or overall habitat status. It also has been challenging to summarize the results of many different actions within and across state boundaries into meaningful reports. With help from state fish and wildlife agencies and key conservation partners, The Association of Fish and Wildlife Agencies’ (AFWA) Teaming With Wildlife (TWW) committee, has begun to develop and test an effectiveness measures framework for assessing SWG funded projects. This framework will help states improve the overall effectiveness of conservation actions and provide greater accountability to policy makers and the public (AFWA 2010).

The Action Plan is intended to be a flexible, living document and will be subject to continual revision and update as data gaps are filled, new information arises, and stakeholder and public input is received. Less formal Action Plan updates may be produced at intervals shorter than the periods stated above in response to these matters or as newly emerging issues and needs arise. When determined to be necessary, such Action Plan updates may be submitted to the USFWS for review and comment.