CHAPTER 1: INTRODUCTION

Problem and Need

Wildlife conservation responds to the challenges of the times. The original wildlife conservation movement began in the first half of the twentieth century in response to unregulated harvest for sporting and commercial purposes. During this period, a number of landmark federal laws were enacted, notably the Migratory Bird Treaty Act, the Pittman-Robertson Federal Aid in Wildlife Restoration Act, the Lacey Act, and the Dingell-Johnson Sport Fisheries Restoration Act. All were created following education campaigns by the conservation community.

State and federal fish and wildlife agencies grew rapidly, supported by increases in state and federal conservation funding. The US Bureau of Sport Fisheries and Wildlife (now the US Fish and Wildlife Service) was formed and state fish and wildlife agencies either developed from scratch or became greatly centralized and expanded, using revenue from a combination of state license fees and federal funding from excise taxes on sporting equipment. The resulting state fisheries and wildlife management programs were well established by the late 1960s and early 1970s and were largely game-oriented.

As times and conditions changed, new laws were enacted. In the early 1970s, the Endangered Species Act, Clean Water Act, and Clean Air Act all were developed and companion state laws and programs were enacted. In order to provide early direction to the South Carolina Department of Natural Resources (SCDNR) Nongame and Endangered Species Program, a statewide symposium on endangered species was held in 1976. At that meeting, committees of specialists in vertebrate taxa (mammals, birds, herpetofauna, fish) were formed to provide information about species that had uncertain status or were believed to be in jeopardy (Forsythe and Ezell 1976). Out of this meeting came the formation of the nation’s first Heritage Trust Program wherein the taxa committees continued to meet periodically and update the species lists. Rare plants were also added to the list of species tracked.

As the economic changes begun in the 1970s progressed, many states, including South Carolina, entered a period of rapid economic expansion and human population growth that continues to this day. South Carolina has one of the fastest rural-to-urban conversion rates and is the 9th ranked state in terms of total land area developed annually (Miley, Gallo and Associates LLC 2008). In 2010, South Carolina was ranked as the 24th most populated state in the nation at 153.9 people per square mile (US Census Bureau 2012) and one of the fastest growing in the nation (Miley, Galo and Associates LLC 2008). By 2030, the projected housing density is expected to reach anywhere from 16 to 128 housing units per square kilometer throughout much of the state (Hammer and Radeloff 2003) as the population nears five million (Miley, Gallo and Associates LLC 2008). The biggest population increases currently occurring are in the Upstate, coastal counties, and around the capital (Lexington and Richland Counties) (SCFC 2010).

The conversion of prime forest and agricultural land to residential uses is changing the landscape of South Carolina. In addition, rising costs coupled with falling prices are creating hardships for many family farms. Long-term declines in farmland are dramatic: in 1920, 192,693 farms were producing goods in South Carolina, and 63.7% of the land in the State consisted of farms (US
Bureau of the Census 1954). By 2006, the number of farms in the state had been reduced to 24,700 (Miley, Gallo and Associates LLC 2008). Over 13 million acres of forests, which cover two thirds of South Carolina’s total land area, are also at risk for development since 11 million acres are in private ownership (Miley, Galo and Associates LLC 2008; SCFC 2010).

As land use is converted from rural to urban uses and the population of South Carolina increases, new challenges arise for fish and wildlife species in the state. Long-standing downward trends in numbers of some species that previously had been overlooked have become evident. In a state-by-state analysis of biodiversity conducted for The Nature Conservancy, South Carolina ranked 14th among all states in species diversity and 15th in terms of risks to native species (NatureServe 2002). In a planning exercise conducted in 1994, SCDNR biologists estimated that as many as one third of the State’s vertebrate species are now—or soon will be—experiencing serious declines (SCDNR 1994). The South, as a whole, has already lost an estimated 614 species to extinction—64 terrestrial vertebrates and 550 vascular plants (Wear et al. 2012).

The SCDNR continues to support a large number of conservation initiatives on public and private lands, including habitat protection; technical guidance and cost sharing; and education. Farm Bill programs have helped provide assistance to landowners across the State, positively affecting 264,950 acres as of 2007 (USDA-ERS 2013). A statewide wildlife strategy would align all conservation activities with common goals that can be consulted by all South Carolinians, especially resource managers, local governments, and the scientific community. The State Wildlife Grants program provides a vehicle to create such a strategy.

In order to sustain South Carolina’s diverse wildlife resources in the future, the following actions are critical: (1) increase baseline biological inventories with emphasis on natural history, distribution, and status of native species; (2) increase commitment by natural resource agencies, conservation organizations, and academia toward establishing effective conservation strategies; (3) increase financial support and technological resources for planning and the implementation of these strategies; and (4) create public-private partnerships and educational outreach programs for broad-scale conservation efforts. This Action Plan is a first step toward instituting these actions.

**Legislative Mandate and Guidance**

The charge to state wildlife agencies to develop comprehensive strategies had its origins in the Wildlife Conservation and Recreation Program (WCRP) that was created in the federal Appropriations Act of 2001. Appropriations language provided that funds may be used for “...the planning and implementation of [a state’s] wildlife conservation and restoration program and wildlife conservation strategy, including wildlife conservation, wildlife conservation education, and wildlife-associated recreation projects” (114 STAT. 2762A -118 PUBLIC LAW 106–553 — APPENDIX B — Title IX).

The WCRP appropriations language challenged the states to develop projects in the three major areas anticipated in the Teaming with Wildlife initiative: conservation, education, and recreation. WCRP appropriations language also provided that “Within five years of the date of the initial apportionment, [the states shall] develop and begin implementation of a wildlife conservation strategy based upon the best available and appropriate scientific information and data ....”
Specific criteria for the wildlife conservation strategies were developed. South Carolina committed to developing its “wildlife conservation strategy” within the required five years in order to qualify for WCRP funds.

WCRP was only funded for one year and was replaced in 2002 and subsequent years by the State Wildlife Grants Program (SWG), also through the appropriations process. Unlike WCRP, the SWG program emphasizes conservation projects alone and charges the states “…to develop by October 1, 2005, a comprehensive wildlife conservation plan [strategy], consistent with criteria established by the Secretary of the Interior, that considers the broad range of the State, territory, or other jurisdiction’s wildlife and associated habitats, with appropriate priority placed on those species with the greatest conservation need and taking into consideration the relative level of funding available for the conservation of those species…” (115 STAT. 414 PUBLIC LAW 107-63 — APPENDIX A). The document that all states ultimately prepared in response to this mandate was referred to as a Comprehensive Wildlife Conservation Strategy (CWCS). The 2005 version of South Carolina’s document was therefore named accordingly. Over time, the Strategy became referred to internally as well as in other states as the State Wildlife Action Plan or SWAP. Thus, the 2015 iteration of this document underwent a name change to this more familiar title.

As per Element 6 of the original legislation, all states made a commitment to review and revise their plans within 10 years. South Carolina began the review process in September 2010. Due to personnel turnover and emerging issues (e.g. the spread of white-nose syndrome), the completion of the final version was delayed until 2014. These revisions were completed in accordance with the current SWG Guidance Document (2007). Any significant changes to the Strategy/Action Plan and an up-to-date public review process were documented. Congress’ version identified the required elements for strategies in the WCRP legislation. The USFWS adopted those same elements for the SWG required SWAP, so one document will satisfy both needs. The SWAP must identify and be focused on the “species in greatest need of conservation,” yet address the “full array of wildlife” and wildlife-related issues. They must provide and make use of the elements identified in Box 1-1: The Eight Required Elements. This original guidance has been expanded considerably during the course of SWAP preparation; however the eight elements remain the core standard for the strategies.
Box 1-1: The Eight Required Elements

1) Information on the distribution and abundance of species of wildlife, including low and declining populations as the State fish and wildlife agency deems appropriate, that are indicative of the diversity and health of the State’s wildlife.

2) Descriptions of locations and relative condition of key habitats and community types essential to conservation of species identified in (1).

3) Descriptions of problems, which may adversely affect species identified in (1) or their habitats, and priority research and survey efforts needed to identify factors, which may assist in restoration and improved conservation of these species and habitats.

4) Descriptions of conservation actions determined to be necessary to conserve the identified species and habitats and priorities for implementing such actions.

5) Descriptions of the proposed plans for monitoring species identified in (1) and their habitats, for monitoring the effectiveness of the conservation actions proposed in (4), and for adapting these conservation actions to respond appropriately to new information or changing conditions.

6) Descriptions of procedures to review the Strategy/Plan at intervals not to exceed ten years.

7) Descriptions of the plans for coordinating, to the extent feasible, the development, implementation, review, and revision of the Plan/Strategy with Federal, State, and local agencies and Indian tribes that manage significant land and water areas within the State or administer programs that significantly affect the conservation of identified species and habitats.

8) Descriptions of the necessary public participation in the development, revision, and implementation of the Plan/Strategy.

Roadmap to the Required Elements in South Carolina’s SWAP

As part of the additional guidance received, States were instructed to highlight the location of information specific to the eight elements for reviewers of the SWAP. Therefore, Table 1-1: Roadmap to the Required Elements presents this information.
<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>SC SWAP CHAPTER</th>
<th>LOCATION</th>
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<tbody>
<tr>
<td>1. Distribution and abundance of species</td>
<td>Chapter 2</td>
<td>Throughout chapter</td>
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<td>Chapter 3</td>
<td>Throughout chapter</td>
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<td>Appendices 1 A-D</td>
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<td>Entire volume</td>
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<td>2. Location and relative condition of key habitats</td>
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<td>Throughout chapter</td>
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<td>Chapter 4</td>
<td>Throughout chapter</td>
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<td></td>
<td>Supplemental Volume</td>
<td>Entire volume</td>
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<td>3. Problems that affect species</td>
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<td>Throughout chapter</td>
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<td>Chapter 5</td>
<td>Throughout chapter</td>
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<td>Supplemental Volume</td>
<td>Entire volume</td>
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<td>4. Conservation actions described</td>
<td>Chapter 5</td>
<td>Throughout chapter</td>
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<td>Chapter 6</td>
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<td>Chapter 9</td>
<td>Throughout chapter</td>
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<td>Supplemental Volume</td>
<td>Entire volume</td>
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<td>5. Plans for monitoring and adaptive management</td>
<td>Chapter 5</td>
<td>Throughout chapter</td>
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<td>Chapter 6</td>
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<td>Appendix 2</td>
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<td>Appendix 7</td>
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<td>Supplemental Volume</td>
<td>Entire volume</td>
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<tr>
<td>6. Review and revise Plan</td>
<td>Chapter 8</td>
<td>Throughout chapter</td>
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<tr>
<td>7. Coordinating with federal, state, and local agencies as well as Indian tribes.</td>
<td>Chapter 3</td>
<td>Throughout chapter (taxa teams)</td>
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<td>Chapter 7</td>
<td>Throughout chapter</td>
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<td>Appendix 3</td>
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<td>Supplemental Volume</td>
<td>Entire volume appendix</td>
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<tr>
<td>8. Public participation</td>
<td>Chapter 7</td>
<td>Throughout chapter</td>
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<td>Supplemental Volume</td>
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Chapter 1: Introduction

SWAP Organization

The SWAP, or Action Plan, is organized to first make the reader aware of the need for a strategy then to discover how the actual Action Plan was developed and presented. In the Introduction, a discussion of the need for the SWAP and the legislative mandate that allows SCDNR to develop and implement the strategy is presented. The selection of South Carolina’s priority wildlife species is discussed in Chapter 2: SC’s Priority Species while the methods for prioritizing those species and the challenges they face are detailed in Chapter 3: Taxonomic Groups. The condition and location of habitats and challenges to the management of those habitats is presented in Chapter 4: South Carolina’s Landscape. Appendices 1 A-D are spreadsheets that list the species of concern and their habitat associations. The conservation strategies that will be implemented to address the challenges identified in the three previous chapters is discussed in detail in Chapter 5: Statewide Conservation Strategies; the nine conservation action areas around which strategies have been constructed are also presented in that chapter. After listing conservation actions to address species and habitat challenges, the manner in which they will be monitored is contained in Chapter 6: SC’s Comprehensive Monitoring Program. Strategies for monitoring the effectiveness of conservation actions are also discussed. The SCDNR formed extensive partnerships during the initial development of the SWAP and has retained them through the revision process. These partnerships are discussed in Chapter 7: Seeking Public Input and Maintaining Partnerships. The public input process is also summarized. The manner in which the SCDNR prioritized conservation actions, will implement the conservation actions in the SWAP, and adapt the Action Plan as new information becomes available is presented in Chapter 8: Implementation and Adaptive Management. Since the original Plan was completed in 2005, the State Wildlife Grants (SWG) that have resulted from the implementation of that Plan are summarized in Chapter 9: SWG Project Summaries. Finally, we include a list of references in the Literature Cited as well as provide a Glossary and Appendices associated with the SWAP. The last Appendix (8) is a list of acronyms used within the SWAP and Supplemental Volume.

A Supplemental Volume: South Carolina’s Priority Species is submitted with this Action Plan. The Supplemental Volume contains reports for the species of greatest conservation need (hereafter also referred to as priority species) included on South Carolina’s Priority Species List. Each of these reports includes a description of the distribution and abundance of each species and its habitat requirements, the challenges that the species faces, and specific conservation actions for addressing those challenges. Additionally, some of these reports discuss ways to work with public and private entities toward conservation as well as strategies for monitoring species, habitats, and effectiveness of conservation actions.

The Supplemental Volume to South Carolina’s SWAP provides a unique look into challenges and conservation actions that pertain to each of the species on this state’s Priority Species List. By providing species-specific actions, the SCDNR can use the Action Plan in two ways: (1) to manage species of concern over large areas or habitat and (2) to manage particular species in any habitat where that species occurs, no matter the size of the management area. Further, the species-specific approach in the Supplemental Volume allowed for development of very concise conservation actions for each species, which are expected to permit SCDNR or its partners to easily convert those actions to project proposals/plans.
Chapter 1: Introduction

Authority and Capability of the SCDNR to Prepare and Implement the SWAP

Article III, Section 34, South Carolina Constitution, 1895, as revised, states in relevant part: “that the General Assembly is empowered to divide the State into as many game zones as may appear practicable, and to enact legislation that may appear proper for the protection of game in the several zones.”

Legislation creating the SC Department of Natural Resources and governing its activities is covered under Titles 48 and 50 of the SC Code of Laws. The entire code covers the generalities of operating the agency, as well as special laws pertaining to certain species, penalties, and subdivisions of the state. The most concise, broad charge to the SCDNR is found in the following sections:

§48-4-10 provides that “The South Carolina Department of Natural Resources is created to administer and enforce the laws of this State relating to wildlife, marine resources, and natural resources and other laws specifically assigned to it.”

§48-4-80. Provides for the creation of a Board to serve as “the governing body of the agency.”

§50-3-80 provides that the Department shall continuously investigate the game and fish conditions of the State and the laws relating thereto. It shall annually make report of its activities to the General Assembly and recommend legislation and other action by the General Assembly in its judgment conducive to the conservation of wildlife.

Subsequent legislation provides assent to federal fish and wildlife restoration acts and authorizes the SCDNR to “perform such acts as they be necessary to the conduct and establishment of cooperative fish and wildlife restoration project(s) as defined in such act(s) of Congress…”

Authorities under Title 50 include jurisdiction over saltwater fish and related activities.

In addition, Title 50 authorizes SCDNR to promulgate regulations relating to hunting, fishing, the taking and possession of wildlife, and provides for penalties relating thereto. Authorization is further extended to SCDNR to acquire and dispose of property, conduct hearings, and “own, sell, lease, exchange, transfer or rent real property” for purposes of carrying out its authorities. Concerning recreation, this authority extends to “furnishing the people of the State with hunting areas and fishing facilities.”

The South Carolina Nongame and Endangered Species Conservation Act (§50-15-10 et seq.) authorizes the Department to “…conduct investigations on nongame wildlife in order to develop information relating to population, distribution, habitat, needs, limiting factors and other biological and ecological data to determine management measures necessary for their continued ability to sustain themselves successfully.” The Act further authorizes SCDNR to issue regulations and “develop management programs designed to insure the continued ability of nongame wildlife to perpetuate themselves successfully.”
Subsequent sections of the Act set forth administrative procedures for developing regulations—penalties for taking and possession of nongame wildlife considered by SCDNR under this Act to be endangered. The Act also provides that the agency will maintain lists of endangered species and amend them periodically. The Act further authorizes SCDNR to establish programs, including “acquisition of land or aquatic habitat, as are deemed necessary for management and endangered wildlife.” Further, SCDNR is authorized to enter into cooperative agreements for purposes of carrying out its responsibilities under the Act.

Criteria for listing species as endangered under the state statute closely follow those for the federal Endangered Species Act. A second category, “Species in Need of Management,” is also provided for recognizing and providing less stringent protection for species whose status does not warrant listing as endangered. Under the “species in need of management” category, SCDNR is charged with conducting ongoing investigations of nongame wildlife in order to determine which species are in need of management and for developing programs for their management in order to “sustain themselves successfully.” This section of the statute roughly parallels that of the federal statute dealing with threatened species; however, the intent of the state statute is not only to provide listing authority, but also to establish authority for SCDNR to engage in conservation activities in addition to or in lieu of, formal listing and regulatory actions.

A closely related statute establishes the South Carolina Heritage Trust Program (§51-17-10 et seq.). This legislation designates SCDNR as the lead agency to develop and conduct a program whose purpose is “protecting lands and making them available to state agencies, educational institutions and public and private groups” for a number of conservation purposes. The statute authorizes SCDNR to conduct inventories of lands having natural significance, acquire fee simple lesser interest in land, and establish strong legal protections for property thus acquired.

In 1994, the legislative mandate of the SCDNR was updated in a general reorganization of state government. Subsequently, SCDNR adopted the following mission statement:

*The South Carolina Department of Natural Resources (SCDNR) is the advocate for and the steward of the state’s natural resources.*

Within five divisions are numerous individual programs that are responsible for executing the mission in areas such as wildlife and fisheries management, endangered species management, marine fisheries conservation, education, ground and surface water management, soil and water conservation, habitat protection, and a broad array of law enforcement activities in addition to enforcement of fish and game laws. Therefore, from a legal and organizational standpoint, SCDNR was well equipped to lead the development and execution of the SWAP and now the revision of it.

**Changes to This Edition of the SWAP**

The 2005 version of South Carolina’s document was named the Comprehensive Wildlife Conservation Strategy (CWCS). Over time, the Strategy became referred to internally as the State Wildlife Action Plan, or SWAP, for ease of discussion and to match terminology with
neighboring states. Thus, the 2015 iteration of this document underwent a name change to this more familiar title.

The changes to the **mammals** section of the Plan included the listing of 8 new species, all bats. The additional species included all of South Carolina’s colonial cavity roosting and foliage roosting bats. Upon the discovery of White-nose Syndrome (WNS) in 2006 and subsequent confirmation in South Carolina in 2013, these bats were immediately considered at risk due to their roosting and swarming behavior and were placed in the “highest” priority category within the SWAP. WNS is caused by the fungus, *Pseudogymnoascus destructans* (formerly *Geomyces destructans*). Other changes in the mammals section involved correcting the listing of the subspecies name of the fox squirrel to the Southern fox squirrel. The Atlantic right whale was also renamed to specify that the North Atlantic right whale was the priority species.

**Birds** had 48 new species added to the list this iteration (including subspecies) while 42 species underwent priority reassignments. Changes in priority ranking were due, in part, to the methodology change for species selection, but also new trends in populations for these species have become available and are documented in various national plans.

Changes made to the 2015 list of priority **herpetofauna** included some removals and additions. The canebreak rattlesnake was removed from the list as it was not supposed to be included as a separate species of the timber rattlesnake. Hellbender and southern dusky salamander were also removed due to recent research showing they are not naturally found in South Carolina. Painted turtle was added to the priority list as it had been inadvertently left off the first time. New species that were recently discovered included the patch-nosed salamander and dwarf black-bellied salamander, both of which earned a place on the list in the “highest priority” and “high priority” categories, respectively. The Eastern box turtle was also added to the list since recent concerns over the pet trade put it at risk. Other changes to the priority list included 10 priority ranking changes—upgrades to a higher priority listing or downgrades to a lower listing due to more available data on the species.

**Freshwater fishes** underwent several changes due to improved knowledge of the species’ populations and ranges learned through the most recent South Carolina Stream Assessment (2006-2011) funded by State Wildlife Grants. There were 9 new additions to the list; one in the “highest priority” category and the rest in the “moderate priority” category. There were 3 fish that had corrections to their common names. One species, the Saluda Darter, is now considered synonymous with the Carolina Darter. South Carolina’s form of what was formerly the Sailfin Shiner is now recognized as the Lowland Shiner (*Pteronotropis stonei*). The Lowland Shiner was a Priority species in 2005 and remains one in 2015. The Bluefin Killifish and Banded Darter are considered introduced species in South Carolina, and although rare, do not warrant priority status. Five fish species were removed from the list altogether. No existing listed priority species were demoted or promoted to other categories.

In the **diadromous fish** category, the American Eel and American Shad have now been given a status in the State of South Carolina as a “species of concern” while the Atlantic sturgeon has since been listed as Federally and State Endangered.
Changes to the crayfish list for South Carolina included the addition of 2 new species, the endemic Carolina needlenose crayfish and Cambarus sp. “B”. The latter species has yet to be described and fully understood. The Oconee stream crayfish was renamed the Chauga crayfish. Additionally, 10 other species received common names in this iteration of the SWAP. The latest stream surveys also indicated that the Pee Dee lotic crayfish and Carolina Sandhills crayfish (formerly simply called the Sandhills crayfish) were more abundant than first realized and were thus demoted to the “moderate priority” category. The Ohio River shrimp, first discussed in the 2005 version of the SWAP in the marine invertebrates section, was moved to the freshwater section because of its association with rivers.

The freshwater mussel list underwent some changes such as the renaming of the Carolina Slabshell (Elliptio canagarea) as Carolina Elephantear. The reason for the change was due to the fact that the shell was not shaped like other typical slabshells. Likewise, the Southern Rainbow (Villosa vibex) was renamed the Eastern Rainbow (V. modioliformis). The Atlantic Spike moved up in priority ranking from ‘moderate’ to ‘high’ due to new information available on the status and distribution of the species. A new species this iteration is the Altamaha Arcmussel (A. arcula). Eastern Lampmussel (formerly mislabeled in the text as Eastern Lampshell) and the Rayed Pink Fatmucket have been broken out into separate species, L. radiata and L. splendita, respectively. In 2011, 4 mussel species that occur in South Carolina were proposed as candidates for listing as Federally Threatened or Endangered species (USFWS 2011).

Freshwater snails underwent a few changes as well. Somatogyrus sp. (a pebblesnail) was given a formal name, panhandle pebblesnail, and downgraded to “high priority” due to better knowledge of population estimates. The "Physa species A" mentioned in the previous (2005) version of the SWAP was formally described as Physa carolinae by Wethington, Wise, and Dillon in 2009. Physa carolinae is actually rather common, and does not merit any special conservation concern (R. Dillon, pers. comm.).

A new taxa category was added to cover freshwater, marine and terrestrial leeches to which 4 species were added. The 2006-2011 South Carolina Stream Assessment, although not specifically designed to target leeches, documented the occurrence of the New England medicinal leech, which was previously not known to occur in the State.

For marine fish and invertebrates, the priority species lists were substantially shortened this iteration of the Plan from 938 down to 91 to make them more manageable. Initially, the marine taxa team had considered all species for which information was lacking. This iteration, however, they used a feasibility of study filter to make prioritizations. Some species received new state and global ranks (S and G ranks), and all were able to be priority ranked for the first time. All received species or guild accounts in the Supplemental Volume this iteration.

In the first edition of the SWAP, 15 insects were highlighted. Since that time, there have been additions to state species records along with new species descriptions. Therefore, in the 2015 version, 32 were highlighted because the taxonomic committee felt there was enough information to discuss them. In the past, no S-ranks existed for insects in South Carolina. Where knowledge was sufficient, based on the opinions of the various experts, S-ranks were included
for certain groups in this iteration of the Plan, but these should be considered approximations. None of the insects can be ranked as highest, high, or moderate priority at this time.

A major component of this revision includes updates to the current landscape or habitat chapter (Chapter 4) that provide a more comprehensive way of describing and mapping priority habitats within the State. For the initial SWAP preparation (previously referred to as the CWCS), the principal source of information for terrestrial habitat definitions was Nelson’s (1986) classification of South Carolina’s natural communities. In the previous edition, no GIS supporting maps were included in the Plan. Habitats within the chapter were described in narrative form and were not mapped within the ecoregions. Given the utility that GIS support maps provide, we felt that their addition was an appropriate measure to update our plan that would also echo neighboring states’ efforts.

As GAP data has been criticized for its low accuracy rate, it was proposed to use it as a support system for land cover types, which were loosely based on Nelson’s *Natural Communities of South Carolina*, and not as the sole basis for classifications. Utilizing our Technology Development Program staff, SC GAP data were isolated by ecoregion and then re-classified to “fit” into the original habitat classes creating the crosswalk table seen in Appendix 4. SC GAP habitat class descriptions—found in the 2001 final report entitled, “A GAP Analysis of South Carolina”—and expertise from the Heritage Trust staff were used to justify merging of the GAP map units into their respective SWAP original habitats. SC GAP data actually identified more land cover types within the ecoregions, therefore, providing a more comprehensive overview of the actual habitats present.

The 2005 Plan’s Chapter 2 detailing South Carolina’s priority species was split into two chapters in this revision and the prioritization process for species and Conservation Action Areas (CAAs) more succinctly defined. The statewide conservation strategies chapter (Chapter 5) was updated to include measures of success that had occurred under each CAA since 2005. A new ninth CAA was added to cover the emerging issue of climate change. South Carolina’s Monitoring Program chapter (Chapter 6) was also updated with the latest accomplishments.

The newest public input received is discussed in Chapter 7 and came in the form of climate change workshops. Strategies developed from theses workshops as well as a new Agency climate change guidance document were incorporated in Chapter 5’s CAAs. The draft 2015 SWAP was posted to the SCDNR website, advertised, and the suggestions received from the public and our partners incorporated into Chapters 5 and 7.

Now that the SWAPs from the states are actively being implemented, an updated explanation of that process is discussed in Chapter 8. An altogether new chapter was added at the end of the document, Chapter 9: State Wildlife Grant Project Summaries. This chapter highlights the 33 grant projects funded through SWG as part of the implementation of the SWAP that have been completed since 2005. Subjects range from research and survey to habitat enhancement projects.

In the Supplemental Volume’s species/guild accounts, some of the conservation recommendations have been accomplished and were thus moved to/discussed in the species/guild’s conservation accomplishments section. In addition, any ongoing or new
recommendations were kept or added. The habitat section of the Supplemental Volume was incorporated into Chapter 4: SC’s Landscape of the main document and thus removed from the Supplement altogether.