# Arkansas Wildlife Action Plan

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www.WildlifeArkansas.com

The Arkansas Comprehensive Wildlife Conservation Strategy ©Arkansas Game and Fish Commission, 2005 Revised, October 2006

Jane E. Anderson, Wildlife Action Plan Coordinator

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#### Arkansas Game and Fish Commission Little Rock, Arkansas 72205

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Scott Henderson Director

Brett Morgan Little Rock

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George Dunklin Jr. DeWitt

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September 22, 2005

**Emily Jo Williams** Assistant Regional Director for Migratory Birds and State Programs U.S. Fish and Wildlife Service 1875 Century Blvd, Suite 240 Atlanta, GA, 30345

Dear E.J.:

In the accompanying package, you will find two copies of Arkansas' Comprehensive Wildlife Conservation Strategy along with the same information on CD. A CD is also being sent to the Washington, D.C. federal aid office.

I can't tell you how pleased I am to be taking this step along with the other state directors. It has been more than two decades since we initiated efforts in the regional associations to secure nongame federal funding. We would not be here without the leadership shown by the IAFWA and the USFWS. Surely these state strategies will demonstrate to Congress the need for dedicated funding and the ability of the states to wisely target that funding to species of greatest conservation need.

Our CWCS is intended to be a useful planning tool for both professional and citizen conservationists in Arkansas. We involved our major partners from the beginning. Their response has been more than gratifying - it's been heroic, given the scope of the work. I am also struck by the receptivity of Arkansas citizens to this initiative. They have demonstrated again support for the broad array of wildlife and seem supportive of our agency for assembling the scientific underpinnings for sound decision making.

I also want to recognize the assistance my staff received from the IAFWA staff, the Teaming With Wildlife committee, The Wildlife Diversity Program Managers and the FWS federal assistance staff. Some very visionary, hard working people have made a difference in fish and wildlife conservation.

> Phone: 501-223-6300 Fax: 501-223-6448 Website: www.agfc.com

The mission of the Arkansas Game and Fish Commission is to wisely manage all the fish and wildlife resources of Arkansas while providing maximum enjoyment for the people.

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We are only pausing to submit our CWCS as a snapshot in time. It will be continually updated as we learn more and take effective conservation actions. We will be receptive to any suggestions for improving it and are already identifying features to assist implementation.

Sincerely,

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Scott Henderson Director

Cc: U.S. Fish and Wildlife Service Division of Federal Assistance Attn: Genevieve Pullis LaRouche 4401 N. Fairfax Drive MBSP-4020 Arlington, VA 22203

# Acknowledgments

The preparation of Arkansas' CWCS involved the input and participation of a wide variety of individuals, including staff within multiple divisions of the Commission, as well as from other state and federal agencies, conservation organizations, private industry and academia.

We extend our warmest thanks to everyone who has contributed their support, knowledge, time and energy in the development of the Strategy.

#### Champions

Sen. Blanche Lincoln, Gov. Mike Huckabee, Sen. Mark Pryor, Rep. Vic Snyder, Rep. Mike Ross, Director Scott Henderson and Deputy Director David Goad.

#### Served on teams and committees:

Alan Christian, Alan Clingenpeel, Allan Mueller, Arlene Green, Becky McPeake, Betty Crump, Bill Holimon, Bill Keith, Bill Posey, Blake Sasse, Bob Sikes, Brian Wagner, Catherine Rideout, Chris Davidson, Cindy Boland, Cindy Osborne, Dan Scheiman, David Saugey, Don Catenzaro, Don White, Doug Zollner, Doyle Shook, Elizabeth Murray, Ellen Fennell, Ethan Inlander, Gary Heidt, Henry Robison, J. D. Wilhide, Jeff Holmes, Jeff Quinn, Jim Baker, Jim Wise, John Harris, Karen Ballard, Karen Rowe, Kaushik Mysorekar, Kay McQueen, Kelly Irwin, Ken Smith, Kris Rutherford, Lane Patterson, Lucy Moreland, Michael Slay, Michael Warriner, Mike Fuhr, Nancy Ledbetter, Renn Tumlison, Sagar Mysorekar, Sandra Miller, Stan Trauth, Stephen Brandenbura, Steve Duzan, Steve Filipek, Thomas Risch, Tim Snell, Tom Buchanan, Tom Foti and Tom Nupp.

#### Assisted with public meetings

Karen Ballard, Mike Benton, Allan Beuerman, Brad Carner, David Covington, Betty Crump, Kyle Cunningham, Richard Davies, Ellen Fennell, Tom Harrington, Scott Henderson, Becky McPeake, Sandra Miller, Stephen O'Neal, Beth Phelps, Karen Rowe, Blake Sasse, Melony Wilson, Gerald Alexander, Mark Barbee, Ruth Ann Chapman, Nelson Childers, Randy Chlapecka, Steve Culp, Garrick Dugger, David Evans, Steve Filipek, Rhonda Foster, Steven Fowler, David Fowlkes, Dave Freeze, Che Gordon, Caroll Guffey, Johnny Gunsaulis, Gwen Handcock, Carl Hayden, Janie Hipp, Bryan Hollis, Mark Hooks, Doug Hunter, Brian Infield, Matthew Irvin, Steve Kelley, Wes Kirkpatrick, Berni Kurtz, Reggie Liddell, David Long, Gregg Mathis, Brian McKinzie, Roger Milligan, Jodi Morris, John Payne, Jeff Quinn, Rex Roberg, Laura Rogers, Charles Self, Eley Talley, Fran Tomerlin, Kalven Trice, John Benjamin and Kim Smith.

We are grateful to Angela Browner for creating the CWCS logo and Bruce Cook for aiding with production. We would also like to thank the participants of our June 2005 stakeholder meetings.

> John Sunderland, CWCS Coordinator Jane Anderson, CWCS Editor Jeff Johnston, CWCS Database Manager

## Arkansas Game and Fish Commission

#### Mission

The mission of the Arkansas Game & Fish Commission is to wisely manage all the fish and wildlife resources of Arkansas while providing maximum enjoyment for the people.

#### Authorities

"The control, management, restoration, conservation, and regulation of birds, fish, game and wildlife resources of the State, including hatcheries, sanctuaries, refuges, reservations and all property now used for said purposes and the acquisition and establishment of same, the administration of the laws now and/or hereafter pertaining thereto" is vested in the Arkansas Game and Fish Commission by Amendment 35 to the Arkansas Constitution, approved in the general election of November 7, 1944.

#### Funding

Amendment 35 to the Arkansas Constitution establishes the Game Protection Fund as the depository of all Commission revenues and restricts appropriation to the purposes defined above. It also contains specific authority for the Commission to "spend such monies as are necessary to match federal grants under the Pittman-Robertson or similar acts for the propagation, conservation, and restoration" of wildlife.

In the 1996 general election, Arkansans approved Amendment 75 to the Arkansas Constitution, finding that "fish, wildlife, parks, tourism and natural heritage constitute a major economic and natural resource of the State and they desire to provide additional funds to the Arkansas Game and Fish Commission, the Department of Parks and Tourism, the Department of Heritage and Keep Arkansas Beautiful." Forty-five percent of all monies collected from an additional excise tax of one-eighth of one percent on taxable sales of property and services is credited to the Game Protection Fund established by Amendment 35 for exclusive use by the Arkansas Game and Fish Commission, as appropriated by the General Assembly.

To make the case for revenue expansion the Arkansas Game and Fish Commission prepared the Plan For Conservation – a vision document reflecting the agency's planned resource allocation among broad programmatic areas (e.g., fish and wild-life management, enforcement, nongame and threatened species management, conservation education, etc.). These allocations were developed using historic allocations as a baseline, but with prioritization of new Conservation Sales Tax funding relying heavily on public input. Since passage of Amendment 75, Plan For Conservation has guided agency budgeting and helped us keep our promises to Arkansans.

#### Major CWCS partners

Arkansas constructed its Comprehensive Wildlife Conservation Strategy with key partners who served on the Steering Committee from the beginning. Aiding the Arkansas Game and Fish Commission were The Nature Conservancy, Audubon Arkansas, U. S. Fish and Wildlife Service, U. S. Forest Service and Arkansas Natural Heritage Commission. As the work on the Strategy progressed, additional members joined: The Arkansas Academy of Science, the Cooperative Extension Service and Natural Resources Conservation Service. The relationships are spelled out in Memoranda of Agreement (Appendix 1.2 and 1.3)

Through numerous meetings during the development phases, the Steering Committee's role was to make key decisions to direct the cooperative effort that forms the structure of the CWCS.

The role of the Steering Committee will change somewhat after the CWCS acceptance as tasks include proposal evaluation, SWG apportionment, directed Request for Proposals, CWCS revision and involvement in the Annual/Biennal Symposia.

This first iteration of our Strategy is only the most visible result of our multi-year planning efforts. Of even greater value are the inter-agency and organizational networks and communication bridges that were formed and strengthened through this effort. The ultimate test of our Strategy will be measured through the success of its implementation and the strengthening of collaborative efforts and partnerships.

	Committee
Allan Mueller	US Fish and Wildlife Service
Ken Smith	Audubon Arkansas
Bill Holimon	Arkansas Natural Heritage Commission
Doyle Shook	Arkansas Game and Fish Commission
Lucy Moreland	Arkansas Game and Fish Commission
Steve Filipek	Arkansas Game and Fish Commission
Kris Rutherford	Arkansas Game and Fish Commission
Lane Patterson	The Nature Conservancy
Kay McQueen	The Nature Conservancy
Betty Crump	US Forest Service and Arkansas Academy of Sciences
Jim Baker	Natural Resources Conservation Service
John Sunderland	Arkansas Game and Fish Commission
Jane Anderson	Arkansas Game and Fish Commission
Jeff Johnston	Arkansas Game and Fish Commission

Table 1.1 CWCS Steering Committee



The Nature Conservancy Arkansas Field Office 601 North University Avenue Little Rock, AR 72205 tel [501] 663.6699 fax [501] 663.8332

nature.org

September 16, 2005

Mr. Scott Henderson, Director Arkansas Game and Fish Commission 2 Natural Resources Drive Little Rock, AR 72205

Dear Mr. Henderson:

The Nature Conservancy has dedicated itself to the long-term survival of all viable native species and community types through conservation activities that restore and conserve ecological processes needed to ensure their long-term persistence. To accomplish this vision, TNC staff is charged with identifying the species, communities, and ecological systems that will serve as targets for conservation action in ecoregions of the United States. The CWCS SWG program has provided support to TNC in accomplishing our goal of site conservation planning and in determining conservation data gaps.

Further, CWCS administered through Arkansas Game and Fish Commission has provided a coordinated approach that has pooled the resources of a larger group of conservation partners to fund research and improvements for "species of greatest conservation need."

Thank you to the AGFC for your key efforts in working towards meetings the goals and objectives of the CWCS.

Sincerely,

Kay McQueen Director of Conservation Programs



United States Forest Department of Service Agriculture **Ouachita National Forest** 

P.O. Box 1270 Hot Springs, AR 71901

File Code: 1500 Date: September 15, 2005

Dear Scott Henderson, Arkansas Game and Fish Commission Director

You and your Staff are to be commended for your leadership in developing the Comprehensive Wildlife Conservation Strategy (CWCS). The Arkansas CWCS is a unique tool that represents all wildlife species, not just demand species, and I believe it represents an ideological shift to comprehensive management for ecosystem health.

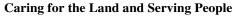
Native ecological communities across the Southern Region are increasingly threatened by fragmented land ownership and development, disrupted natural disturbance regimes, and nonnative invasive species. In response to these threats, conservation agencies and organizations have been devoting considerable resources to developing a consistent framework for conservation plans. These plans include the Ecoregional Conservation Plans of The Nature Conservancy, Physiographic Area Conservation Plans by Partners in Flight, Revised National Forest Land and Resource Management Plans, and Comprehensive Wildlife Conservation Strategies (CWCS) of State agencies.

The Arkansas Game and Fish Commission (AGFC) has demonstrated a high level of commitment to this effort by providing leadership in the CWCS initiative. As a result of partnership efforts, conservation targets, key factors, and measurable ecological indicators, have been developed for habitat relative to over 370 aquatic and terrestrial wildlife species. The AGFC Staff and key partners including the Arkansas Natural Heritage Commission, the Arkansas Chapter of the Nature Conservancy, the Audubon Society, Conservation Southeast, Inc., Natural Resource Conservation Service, USDA Cooperative Extension Service, USDI Fish and Wildlife Service, the Ouachita and Ozark-St. Francis National Forests, as well as many local academic scientific experts throughout the State, have cooperatively developed and populated this database.

The process and database developed through this partnership have spread beyond this original application and are currently being utilized in plan development and revisions in other national forests, as well as by other agencies. The Forest Services appreciates and commends the Arkansas Game and Fish Commission's dedication and commitment to the Comprehensive Wildlife Conservation Strategy. Together, all who have contributed have helped craft a balanced strategic plan appropriate to the times and the challenges in managing lands for the benefit of all.

Sincerely,

/s/ Alan G. Newman ALAN G. NEWMAN Forest Supervisor



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#### The Department of Arkansas Heritage

Mike Huckabee, Governor Cathie Matthews, Director

Arkansas Arts Council

Arkansas Historic Preservation Program

Delta Cultural Center

Historic Arkansas Museum

Mosaic Templars Cultural Center

Old State House Museum



Arkansas Natural Heritage Commission

1500 Tower Building 323 Center Street Little Rock, AR 72201 (501) 324-9619 fax: (501) 324-9618 tdd: (501) 324-9811 e-mail: info@arkansasheritage.org website: http://naturalheritage.com

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September 19, 2005

Scott Henderson Arkansas Game and Fish Commission 2 Natural Resources Drive Little Rock, AR 72205

Dear Mr. Henderson,

The Arkansas Natural Heritage Commission would like to thank you for the opportunity to assist in the development of the Arkansas Comprehensive Wildlife Conservation Strategy. We appreciate the Arkansas Game and Fish Commission for providing the leadership for this extensive, cooperative vision for conserving the wildlife species in greatest need of conservation in Arkansas.

The Arkansas Natural Heritage Commission is committed to providing additional assistance as needed. We look forward to working with you and other partners in the execution of this important strategy.

Sincerely,

Thomas Foti

Tom Foti Research Chief

Audubon ARKANSAS

Heritage West 201 East Markham Street Suite 450 Little Rock, AR 72201 Tel: 501-244-2229 Fax: 501-244-2231 www.audubon.org

September 21, 2005

Scott Henderson Director Arkansas Game and Fish Commission #2 Natural Resources Drive Little Rock, AR 72205

Dear Scott:

I am writing in support of the Comprehensive State Conservation Wildlife Strategy (CSCWS) program as implemented in Arkansas. The Arkansas CSCWS is making possible today a wildlife program that was only a dream two decades ago. With the exception of excellent hunting and fishing programs designed to manage game species, no intentional effort was made to study, to protect, and to manage non-game species, unless those species were listed as endangered or threatened by the U.S. Fish and Wildlife Service. The state conservation tax brought greater equity to wildlife management, but the State Wildlife Grants (SWG) available through the CSCWS has finally brought full equity for all animal species in the state.

Not only is the health of smallmouth populations closely watched, but now stream darters and mussels are accorded status and valued as indicators of aquatic habitat health. Not only are ducks and geese monitored, but raptors and warblers are counted each year with great interest and precision. Indeed, its feels like a new day has arrived in the Natural State.

In closing, I wish to call attention to the exceptional people you have gathered to guide the CSCWS program. John Sunderland, Doyle Shook, Jane Anderson, and David Goad are outstanding and a credit to the Arkansas Game and Fish Commission. I have total confidence in their management and administrative abilities. I sincerely hope this program survives the budget axe in Washington, D.C. The future health of our nation depends on healthy ecosystems and a balance between the built and natural communities. The CSCWS helps to assure that balance. Thank you for this opportunity to write in support of the CSCWS.

Sincerely yours,

Kon Smith

Kenneth L. Smith State Director

cc: John Sunderland Jane Anderson



September 26, 2005

Scott Henderson, Director Arkansas Game and Fish Commission 2 Natural Resources Drive Little Rock, AR 72205

Dear Mr. Henderson:

The University of Arkansas Division of Agriculture Cooperative Extension Service was pleased to partner with Arkansas Game and Fish Commission to fulfill the requirements for public involvement as part of the Arkansas Comprehensive Wildlife Conservation Strategy (CWCS).

Our county Extension agents and specialists were engaged in facilitating the five regional meetings with farmers and private landowners held throughout the state. The input reported from the meetings, the website, and the statewide survey not only contributed to the CWCS plan, but also benefited our natural resource program. In our 2005 strategic plan, one objective was to aid citizens, farmers, and natural resource managers with understanding the complex of natural resource interests and management alternatives. The CWCS provided a perfect venue for addressing that need.

We look forward to continued opportunities to work with your agency in developing an informed constituency regarding our wildlife resources in Arkansas.

Sincerely,

w. Tyles

Dr. Ivory Lyles Associate Vice President of Agriculture Cooperative Extension Service University of Arkansas

Cc: Milo Shult, Tom Riley, Becky McPeake

ArkansasP.O. Box 391is our2301 S. University AvenueLittle Rock, Arkansas 72203campus501-671-2000

#### Visit our web site at: http://www.uaex.edu

University of Arkansas, United States Department of Agriculture and County Governments Cooperating The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Equal Opportunity Employer.

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# Road map to the eight elements

Congress identified eight required elements to be addressed in these wildlife conservation plans. Further, the plan must identify and be focused on the "species in greatest need of conservation," yet address the "full array of wildlife" and wildliferelated issues. They must provide and make use of:

(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; and,

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

(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; and,

(4) Descriptions of conservation actions proposed to conserve the identified species and habitats and priorities for implementing such actions; and,

(5) 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; and,

(6) Descriptions of procedures to review the plan at intervals not to exceed ten years; and,

(7) Plans for coordinating the development, implementation, review, and revision of the plan 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) Congress also affirmed through this legislation, that broad public participation is an essential element of developing and implementing these plans, the projects that are carried out while these plans are developed, and the Species in Greatest Need of Conservation that Congress has indicated such programs and projects are intended to emphasize.

The following section is a guide to how Arkansas addressed the eight required elements.

Element 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;

**Locations:** The methodology of selecting, scoring and ranking **species that are indicative of the diversity and health of the State's wildlife** is provided in Section 2. Species of Greatest Conservation Need on pages 5-14.

Lists of SGCN presented by taxa group and ranked by Species Priority Score are provided in Section 2. Species of Greatest Conservation Need on pages 15-27.

Each SGCN has an individual Species Report located on pages 45-1082. Refer to this for Species Priority Score. Species Priority Scores reflect the **abundance** and population trend of the SGCN.

Refer to Species Reports on pages 45-1082 for element occurrence data mapping for SGCN. Element Occurrence Maps are located on the first page of each Species Report. Element occurrence data mapping reflects the **distribution** of the SGCN.

Refer to Species Reports on pages 45-1082 for ecoregions, ecobasins, terrestrial and aquatic habitats associated with SGCN. The ecoregions and habitats associated with SGCN represent **distribution**.

The entire list of SGCN is listed by Species Priority Score in Appendix 2.1 (pages 1788-1795).

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

**Locations:** Refer to Section 3. The Ecoregions of Arkansas on pages 1083-1187. Within each ecoregion description is an **ecoregion map, description**, **associated SGCN and associated habitats**. Ecoregions are ranked by conservation priority based on overall importance to SGCN.

Section 4. Terrestrial Habitat, pages 1188-1575, has **descriptions**, **locations**, **key factors and indicators**, and, where available, **relative condition** of terrestrial habitats. Each terrestrial habitat is ranked according to its overall importance to SGCN associated with it.

Section 5. Aquatic Habitats, pages 1576-1612, has **descriptions, maps and indicators of aquatic condition**. Each aquatic habitat is ranked according to its overall importance to SGCN associated with it.

**Descriptions of relative condition** of key habitats and community types essential to conservation of species are discussed in Appendices 3.1, 3.2 and 3.3. (TNC's Ecoregional Assessments), pages 1802-1952.

Element 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;

Locations: Refer to Section 2. Species of Greatest Conservation Need in the Species Reports, pages 45-1082, for data gaps or research needs associated with each SGCN. This is research needed to identify factors which may assist in restoration and improved conservation of these species and habitats.

Refer to the Species Reports, pages 44-1082. Each Species Report lists **problems** (threats and sources) which may adversely affect each SGCN.

Refer to Section 3. The Ecoregions of Arkansas, pages 1088-1187, for tables that summarize and rank the **problems faced**. Problems faced by SGCN are presented in each ecoregion section.

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

Locations: Refer to the Species Reports, pages 45-1082. Each Species Report has a section lwhich lists conservation actions called for associated with each SGCN.

Refer to Section 3. The Ecoregions of Arkansas, pages 1083-1187, **Conservation Actions** ranked to provide guidance for prioritizing the implementation of such actions. Each ecoregion has a list of Conservation Action categories associated with it.

Element 5: 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;

Locations: Refer to Section 1. Wildlife Action Plan on pages xxxi - xxxv.

Refer to Section 2. Species Reports, pages 45-1082, for a list of **species-specific monitoring** actions.

Refer to Section 4. Terrestrial Habitats, page 1193, for monitoring associated with conservation actions called for.

Refer to Section 5. Aquatic Habitat, page 1612, for monitoring associated with conservation actions called for.

Element 6: Descriptions of procedures to review the plan at intervals not to exceed ten years;

Location: Refer to Section 1. Wildlife Action Plan, page xxxvi.

Element 7: Plans for coordinating the development, implementation, review, and revision of the plan 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.

**Location:** Refer to "Major partners," pages vii-xix for a discussion of teams and partnerships involved in producing CWCS.

Refer to Section 6. Informing and engaging on pages 1634 for description of website.

Refer to Section 6. Reaching out to the scientific community, pages 1628-1630.

Refer to Section 6. Native American contact, pages 1638, 1645-1646.

Refer to Appendices  $\,$  1.2 (pages 1771-1787) and 1.3, pages (pages 1788-1795) for MOAs with major partners.

Element 8: Congress also affirmed through this legislation, that broad public participation is an essential element of developing and implementing these plans, the projects that are carried out while these plans are developed, and the Species in Greatest Need of Conservation that Congress has indicated such programs and projects are intended to emphasize.

Location: Section 6. Informing and engaging the public (pages 1613-1768) documents outreach and public participation.