***Section Three***

**Cooperating Entities**

**2011-2016 NPS Management Plan**

**Introduction**

The Arkansas Nonpoint Source (NPS) Pollution Management Plan is implemented through working partnerships with state and federal agencies, educational institutions, local units of government including, but not limited to, municipalities, counties, conservation districts, regional planning commissions, 501(c)3 nonprofit organizations, and other not-for-profit entities. These partners are represented on the NPS Pollution Management Plan Stakeholder Group, which convenes every year to assess progress toward goals and objectives, identify strategies to improve coordination of statewide programs and watershed implementation activities, and recommend to the Arkansas Natural Resources Commission (ANRC), formerly the Arkansas Soil and Water Conservation Commission, whether there is a need to update the program. Additional partners will be added as needed in order to implement the 2011-2016 NPS Pollution Management Plan.

ANRC will continue to seek and develop Memoranda of Understanding with the lead agencies of each statewide program in order to define more clearly each agency’s roles and responsibilities with respect to the NPS Pollution Management Plan. Table 3.1 indicates the lead agencies for each statewide program. Table 3.2 identifies the statewide programs to which the cooperating entities may contribute directly or indirectly over the course of the 2011-2016 NPS Pollution Management Plan. Table 3.3 identifies cooperating entities that may contribute directly or indirectly in the implementation of priority watershed programs.

**Table 3.1: Lead agencies for statewide programs**

|  |  |
| --- | --- |
| **Statewide Program** | **Lead Agency** |
| Agriculture | Arkansas Natural Resources Commission |
| Silviculture | Arkansas Forestry Commission |
| Resource Extraction | Arkansas Department of Environmental Quality |
| Surface Erosion | Arkansas Natural Resources Commission |
| Road Construction and Maintenance | Arkansas Natural Resources Commission |
| Urban Runoff | Arkansas Department of Environmental Quality and the Arkansas Department of Health |

**Arkansas Natural Resources Commission (ANRC)**

ANRC manages and protects water and land resources for the health, safety and economic benefit of the State of Arkansas. A nine-member Commission appointed by the governor provides direction for ANRC. The governor also appoints the ANRC executive director. ANRC is divided into three operating divisions: the Conservation Division, the Water Management Division, and the Water Development Division.

Since 1990, ANRC has been the lead agency for planning, coordinating, and implementing the NPS Pollution Management Plan, including the development and maintenance of the plan’s updates, submitted to the U.S. Environmental Protection Agency (EPA) for approval every five years. In addition, ANRC manages wide-ranging programs that address NPS pollution both directly and indirectly across its three divisions. The list below highlights a few of those programs.

**Nonpoint Source Pollution Grants Program:** ANRC offers competitive grants, funded through Section 319(h) of the Clean Water Act (CWA), to support statewide programs and implementation projects on an annual cycle. Special emphasis is given to watersheds prioritized by the NPS Pollution Management Plan Stakeholder Group. ANRC provides assistance to eligible entities on preparation of grant applications, including conceptual project design, development of a work plan, and budget preparation. ANRC accepts work plans for projects to manage, reduce, or abate NPS pollution. Projects are funded for one to three years.

**Support for Conservation Districts:** ANRC provides significant support for Arkansas’ 75 conservation districts in collaboration with the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS).

**Arkansas Association of Conservation Districts**: The purpose of the Arkansas Association of Conservation Districts is to help conservation districts increase their capacity to effectively and efficiently conserve soil and water. Conservation districts are political subdivisions of the State of Arkansas. They are a creation by popular vote of resident landowners for the purpose of conserving land and water resources as authorized by Act No. 197 of the Arkansas General Assembly of 1937, the nation’s first conservation district law. ANRC appoints two members of each local conservation district while three members are elected locally.

**Technical Assistance:** ANRC, the Arkansas Department of Environmental Quality (ADEQ), the Arkansas Forestry Commission (AFC), the Arkansas Game & Fish Commission (AGFC), NRCS and other entities may provide technical assistance to conservation districts through their staffs of professional engineers, geologists, and/or biologists in the design and implementation of best management practices (BMPs) for the purpose of improving or maintaining water quality.

**Water Quality Technicians:** ANRC provides state funding to some local conservation districts for water quality technicians. The technicians provide assistance to landowners in the implementation of farm management plans and in the implementation of water quality and conservation plans. ANRC, in cooperation with NRCS, oversees on-going training of technicians on management techniques and practices. NRCS provides daily supervision for conservation district technicians.

**Poultry Registration:** Poultry feeding operations, in which 2,500 or more poultry are housed or confined on any given day must register annually in accordance with the Arkansas Poultry Feeding Operations Registration Act.

While confined animal feeding operations (CAFO) regulations at a national level are being developed, in Arkansas CAFOs under the general ARG590000 that have no discharge other than stormwater and which does not propose to discharge is not required to seek permit coverage.

Along with Poultry Registration, ANRC became responsible for other programs authorized by the Arkansas General Assembly in 2003. Implementation began in 2005, and with amendments continued through 2010. They are:

**Nutrient Management Planner Certification Program:** These rules govern ANRC’s Nutrient Management Planner Certification Program for individuals who prepare nutrient management plans. Planners prepare nutrient management plans to indicate how nutrients should be applied to fields and other land for crop production while protecting groundwater and surface water from excessive nutrient enrichment. Plans contain operating procedures based on expected crop type, existing nutrient levels in the soil, organic residuals, optimum timing and placement of nutrients, environmental resource protection, and agronomic practices such as liming, tillage and crop rotation. ANRC certifies the competence of individuals to prepare these plans and determines information to be contained in nutrient management plans.

**Nutrient Management Applicator Certification Program:** These rules govern ANRC’s Nutrient Management Applicator Certification Program for individuals who apply nutrients to land. ANRC certifies the competence of individuals to apply nutrients and provides training relating to nutrient application. The training must, at a minimum, meet the NRCS conservation practice standards for Arkansas. To maintain certification, nutrient planners must develop plans consistent with certified nutrient planner training. ANRC may issue distinct classifications of certification. Persons making nutrient application to Nutrient Surplus Areas (NSAs) on or after the effective date of Title 22, Rules Governing the Arkansas Soil Nutrient and Poultry Litter Application and Management Program, must become certified. Persons making nutrient application outside NSAs are not required to become certified.

**Soil Nutrient and Poultry Litter Application and Management Program:** This program encourages prudent practices regarding the application and management of soil nutrients and poultry litter to protect and enhance the state’s surface water quality while allowing for optimum soil fertility and proper plant growth. The program’s primary goal is to maintain the benefits derived from the wise use of poultry litter, commercial fertilizers, and other soil nutrients while avoiding unwanted effects from excess nutrient applications on the waters within the state. To further this goal, the program provides requirements applicable to NSAs, nutrient management plans, and poultry litter management plans.

**Wetland and Riparian Zones Tax Credit Program:** This program, created by the Arkansas Private Wetland Riparian Zone Creation and Restoration Incentive Act of 1995, allows a credit against the tax imposed by the Arkansas Income Tax Act for any taxpayer engaged in the development or restoration of wetlands and riparian zones. The program is designed to encourage private landowners to restore and enhance existing wetlands and riparian zones and, when possible, create new wetlands and riparian zones because the state continues to experience significant loss of wetlands and most lands suitable for wetlands are privately owned. This program benefits the landowners through tax credits and the state by increasing wetlands and riparian zones, which provide flood control, water quality enhancement, fish and wildlife habitat, recreation, and groundwater recharge.

**Wetland Mitigation Bank Program:** The Arkansas Wetland Mitigation Bank Program is a state-sponsored initiative to re-establish wetland hydrology and vegetation with compensatory funds from Section 404 permit recipients for impacts of approved wetland projects in selected areas that meet program criteria. Within these areas, site selection takes into consideration current and potential contributions to groundwater quality and other factors.

**Ground Water Protection Program:** ANRC is responsible for state level planning, management and protection of groundwater resources. This is accomplished through monitoring aquifer water levels and NPS-related water quality concerns, implementation of BMPs, conservation, enforcement of the proper construction of water wells, and education. These goals are accomplished through a strong working relationship with the public and with other agencies. ANRC works closely with other state and federal agencies to monitor a water well network of more than 1,200 sites for water level and water quality information. Pursuant to the Arkansas Ground Water Protection and Management Act of 1991, ANRC produces an annual groundwater report on the condition of the state’s groundwater resources, makes recommendations on critical areas, participates in the Arkansas Conservation Partnership, and enforces Water Well Construction Commission rules and regulations.

**Arkansas Water Plan:** In 1969, the Arkansas General Assembly passed Act 217 making ANRC responsible for water planning at the state level and the development of the first Arkansas Water Plan. Since its completion and publication in 1975, the plan has served as a guide for efficient development of land and water resources. In 1985, the Arkansas General Assembly enacted Act 1051 directing ANRC to update the plan so it will remain a valid and reliable document addressing current issues. The most recent data and research provide the basis for meeting planning objectives and finding potential solutions. The Arkansas Water Plan, in accordance with Acts 217 of 1969, and 1051 of 1985, consists of 12 basin reports. Each basin report includes a land resource inventory (land use and soil resources), identifies quantity and quality problems for surface and groundwater, and provides solutions and recommendations.

Arkansas Act 469 of 1989, A.C.A. 15-22-503(e)(1) provides that water development projects in Arkansas are implemented consistent with the Arkansas Water Plan. The statute states that “No political subdivision or agency of the state shall spend any state funds on or engage in any water development project … until a preliminary survey and report therefore which sets forth the purpose of the project, the benefits to be expected, the general nature of the works of improvement, the geographic area to be served by the project, the necessity, feasibility, and the estimated cost thereof is filed with the commission and is approved by the commission to be in compliance with the plan.” ANRC provides the structure for which water plan compliance can be achieved.

**Additional Financial Assistance Programs:** The Arkansas General Assembly authorized ANRC to create seven financial assistance programs that use the state’s bonding authority to assist local units of government to finance water-related facilities and projects including the:

* Water Development Fund;
* Water, Sewer & Solid Waste Fund;
* Water Resources Cost-share Revolving Fund;
* Safe Drinking Water Revolving Fund;
* Water, Waste Disposal & Pollution Abatement Facilities General Obligation Bond Program;
* Water Plan Compliance; and
* Clean Water Revolving Loan Fund Program.

**Arkansas Department of Environmental Quality (ADEQ)**

ADEQ protects, enhances, and restores the natural environment for the well-being of all Arkansans. A 13-member commission provides oversight. The governor appoints seven of the members and six agencies are represented by their director or a designee. The agencies are the:

* Arkansas Department of Health (ADH);
* Arkansas Game and Fish Commission (AGFC);
* Arkansas Forestry Commission;
* Arkansas Natural Resources Commission;
* Arkansas Oil and Gas Commission (AOGC); and
* Arkansas Geology Commission (AGC).

The governor appoints the ADEQ director who oversees 12 operating divisions. Two divisions are particularly related to the NPS Pollution Management Plan: the Water Division and the Surface Mining and Reclamation Division. ADEQ develops, monitors, and determines both long- and short-term impacts of land use management practices on water quality standards for surface and groundwater, and also develops waste load allocations. Among other responsibilities, ADEQ is charged with:

* protecting, enhancing and restoring the natural environment for the well-being of all Arkansans;
* maintaining a network of ambient water quality monitoring stations, roving monitoring sites and a program for biological monitoring;
* producing special studies and mandated reports, including the 303(d) List of Impaired Waterbodies and the 305(b) Integrated Water Quality Monitoring and Assessment Report;
* issuing permits under the National Pollution Discharge Elimination System (NPDES) including pretreatment, individual and stormwater permits for water discharge of any sort within the state of Arkansas;
* issuing permits relating to “no-discharge” waste disposal systems (those that do not discharge directly in to waters of the state), and saltwater disposal systems including industrial septic tank systems and animal waste facilities such as hog farms and chicken operations with wet waste disposal systems;
* managing the Underground Injection Control (UIC) Program;
* issuing 401 Water Quality Certifications for any water project requiring a federal permit or license;
* enforcing compliance with permits described above through district field office inspectors and supervisors including:
	+ conducting permit compliance evaluation inspections for NPDES facilities permitted for surface water discharges, primarily municipal wastewater treatment plants and industrial discharges for process wastewater and for subsurface or no discharge facilities, including industrial septic tank systems, animal waste facilities such as hog farms and chicken operations with wet waste disposal systems, and oil- and gas-related inspections that address deep well injection of brine from oil production;
	+ conducting stormwater inspections which address stormwater runoff from construction and industrial sites;
	+ investigating citizen complaints against municipalities, industries, other citizens, or agricultural facilities;
	+ responding to spills of materials from industries, transportations, and municipalities to assure protection of the environment;
	+ investigating fish kills related to environmental causes; and collecting routine water samples from a network of sampling stations to monitor ambient water quality of waters of Arkansas; and
* Regulating Surface Mining and Reclamation, which includes two programs.
	+ **Non-Coal Program:** Act 827 of 1991, as amended, deals with the reclamation of land affected by the mining of non-coal minerals such as

bauxite, clay, sand, and gravel using open cut mining methods. An amendment to the law, passed in 1995, authorized the regulation of the practice of removing sand and gravel from the beds of streams within Arkansas. A 1999 amendment authorized the regulation of soil and shale pits with some exemptions based on the size of the pit and the distance from adjacent property lines. Regulation 15, the Arkansas Open Cut Mining and Land Reclamation, set performance standards that must be followed during mining and during the process of reclaiming land to a beneficial use. Act 1166 of 1997 provided a regulatory framework for the operation, reclamation and safe closure of new stone quarries and any land purchased or leased for a quarry.

* **Coal Program:** Active coal mines must comply with Rule 20, the Arkansas Surface Coal Mining and Reclamation Code (ASCMRC). Active coal mining sites are inspected on a monthly basis for compliance.
* Providing technical, administrative and professional assistance to citizen groups and state and federal agencies.

The Arkansas Watershed Advisory Group (AWAG) is a consortium of state and federal agency personnel and private citizens that promotes local voluntary approaches to watershed management and conservation. AWAG provides direction to organize watershed groups, where to seek technical assistance, facilitates quarterly discussion of voluntary approaches, and hosts an annual water quality conference. ADEQ provides staff support for AWAG. Project WET is a national water education program for educators and grades K-12 that promotes awareness, appreciation, knowledge, and stewardship of water resources through the development and dissemination of classroom ready teaching aids. AWAG coordinates the program in Arkansas.

**Arkansas Forestry Commission (AFC)**

AFC promotes forest resource health, conservation, and stewardship of forests. The governor appoints the nine-member AFC Board of Commissioners and also selects the state forester, who oversees day-to-day operations. The following is a partial list of AFC programs that relate to silvicultural NPS pollution management.

**BMPs:** AFC develops and maintains BMPs, a set of voluntary techniques and practices that forest managers can use to control nonpoint sources of pollution at a given site.

**BMP Monitoring:** AFC collects and analyzes survey data on the implementation of recommended forestry BMPs in Arkansas’ nonpoint water source silvicultural program. AFC collaborates with forest industry associations and the University of Arkansas Division of Agriculture Cooperative Extension Service to provide training and technical assistance to help loggers, landowners, and forest managers implement recommended silvicultural BMPs to control nonpoint sources of pollution.

**Pollution Abatement:** Through a Memorandum of Understanding, ADEQ refers citizen complaints about pollution from silvicultural activities to AFC for investigation and voluntary resolution before taking enforcement action.

**Forest Management Incentives:** AFC helps landowners apply for federal cost-share assistance for improving management of their forestland, including the Environmental Quality Incentives Program (EQIP), the Conservation Reserve Program (CRP), the Wildlife Habitat Incentives Program (WHIP), and other related programs administered by NRCS and the Farm Service Agency (FSA).

**Forest Land Enhancement Program (FLEP):** This is a cost-share program administered by the Arkansas Forestry Program with federal funds.

**The Forest Stewardship Program:** The stewardship program recognizes and rewards landowners that are managing their forestlands according to a multiple-use concept. Landowners have access to resource professionals who assist them in obtaining a written forest management plan addressing multiple-use management.

**Forest Legacy Program (FLP):** The legacy program uses conservation easements and fee-simple acquisitions to protect environmentally important privately owned forest areas that are threatened by conversion to non-forest uses.

**Forest Inventory and Analysis:** AFC, in cooperation with the USDA Forest Service Southern Research Station, is responsible for collecting scientific data from permanently established plots located all over the state. The plots, each representing 5,937 acres, are strategically located on a three-mile by three-mile grid. Natural resource managers use the data to make management decisions. The inventory plots have been generating data since they were established in the 1950s. The forest survey allows resource managers to monitor Arkansas’ natural resource trends through time.

**Urban and Community Forestry Program:** AFC provides technical assistance and grants for urban forestry through a cooperative agreement with the USDA Forest Service. Communities, non-federal government agencies, educational institutions, and 501(c)3 non-profit organizations may apply for these competitive grants.

**Arkansas Department of Health (ADH)**

As it relates to NPS pollution, ADH protects the health of all Arkansas’ citizens by providing technical assistance, analytical services, training, regulation, and public education related to public and private water, waste disposal, and other systems. The 22-member Board of Health provides policy oversight and is appointed by the governor. The governor also appoints the director of the Department of Health.

**Public Water Systems Regulation and Enforcement:** ADH regulates and provides oversight of public water systems throughout the state. This program consists of plan review of new water system facility construction, inspection of water system facilities, troubleshooting water treatment and distribution problems, investigating complaints, and collecting and analyzing samples to determine water quality. ADH also performs related functions such as review of new sewer system construction plans, inspection of proposed cemetery sites, and provision of water system operator training and certification. ADH promulgates rules to ensure public water systems adhere to EPA regulations.

**Wellhead Protection (WHPP) Program:** This program is a pollution prevention and management program used to protect underground sources of drinking water. The federal Safe Drinking Water Act (SDWA) Amendments of 1986 specified that certain program activities such as delineation, contaminant source inventory, and source management, be incorporated into state Wellhead Protection Programs, which are approved by EPA prior to implementation.

**Source Water Assessment Program (SWAP):** The Safe Drinking Water Act (SDWA) Amendments of 1996 required states to develop and implement Source Water Assessment Programs (SWAP) to analyze existing and potential threats to the quality of the public drinking water sources throughout the state. States were given considerable flexibility in the design of their programs. A state SWAP includes delineating the source water assessment areas, conducting contaminant source inventories, determining the susceptibility of each public water supply source to contamination from the inventoried sources, and releasing the results of the assessments to the public.

**Individual Sewage Disposal Systems:** ADH approves and inspects individual disposal systems including alternate and experimental sewage system applications and subdivisions. ADH also issues annual licenses for septic tank manufacturers, installers, and pumpers and provides training for professional staff and industry personnel as well as education materials for rural homeowners.

**Subdivisions:** ADH consults with developers on proper sewage disposal plans for proposed subdivisions, provides information on soil suitability determinations, which may determine lot size and the number of lots, and reviews plans for drinking water supply and sewage disposal.

**Septic Tank Cleaning:** Septic tank cleaners are required to pass a test and pay an annual fee for each vehicle in order to be licensed. ADH conducts an annual inspection of all pumping vehicles and monitors documentation of the legal sites where tank cleaners dispose of septage waste.

**Outdoor Bathing Places and Swimming Beaches:** ADH consults with the U.S. Army Corps of Engineers, the U.S. Forest Service, the Arkansas Department of Parks & Tourism, and private individuals concerning the development and operation of swim beaches. ADH monitors bacteriological water quality throughout the swimming season. ADH administers regulations in compliance with EPA recommendations.

**Environmental Complaints:** ADH responds to environmental complaints involving
vectors, marine sanitation, garbage, sewage, and other basic sanitation regulations.

**Arkansas State Highway and Transportation Department (AHTD)**

Through its Environmental Division, AHTD provides multidisciplinary review and analysis of project development and operations to ensure compliance with environmental laws, regulations, and policies. Federal environmental legislation includes the National Environmental Policy Act (NEPA), CWA, the Endangered Species Act, the National Historic Preservation Act, and others. AHTD is committed to environmental stewardship and mitigation of environmental and cultural impacts. The partial list of programs below describes how AHTD participates directly and indirectly in the NPS Pollution Management Plan.

**NEPA Project Review:** The NEPA of 1969 establishes procedures that all federal agencies are required to implement to make environmental consideration a necessary part of their decision-making processes including approval and construction of federally funded highway projects. To this end, AHTD produces environmental documentation for all federally funded construction projects for the Federal Highway Administration review and approval. Full disclosure of environmental issues includes scoping with resource agencies and a public involvement process that consists of early public involvement meetings and public hearings. NPS-related activities routinely undertaken include geographic information systems analysis, wetland impact assessments, and stormwater permitting. In addition, the Division monitors water quality and implements wetland mitigation property management strategies.

**Stormwater Management:** AHTD has a statewide small municipal separate storm sewer system (MS4) NPDES permit. The agency works under a Stormwater Management Plan that addresses minimum control measures including public education and outreach, public participation/involvement, illicit discharge detection and elimination, construction site runoff control, post-construction runoff control, and pollution prevention/good housekeeping. The Environmental Division provides training to AHTD personnel on stormwater management and permit requirements. In February 2010, AHTD instituted an erosion and sediment control training and certification course through the University of Arkansas Center for Training Transportation Professionals (CTTP) to train and certify construction and maintenance personnel. This certified training program is offered to AHTD contractors.

**Resource Agency Permit Facilitation:** AHTD obtains all required environmental permits for state and federally funded highway projects including filing Notices of Intent, preparing permit applications, and obtaining permits.

**Highway Construction BMPs:** AHTD maintains a manual of BMPs for construction stormwater management and provides training to its contractors and staff on BMPs. The CTTP training program is offered to AHTD contractors.

**Technology Transfer Program (T2):** This program is responsible for assisting cities and counties with obtaining information and training on transportation-related technology. While the program focuses on construction and maintenance, materials, administration, and computer programs, cities and counties have also benefited from training on stormwater BMPs. The Arkansas Technology Transfer Program is a cooperative effort of AHTD, the Federal Highway Administration's Local Technical Assistance Program (LTAP) and the University of Arkansas at Fayetteville.

**Arkansas Game and Fish Commission (AGFC)**

AGFC controls, manages, restores, conserves, and regulates bird, fish, game and wildlife resources of the state, including acquiring and establishing hatcheries, sanctuaries, refuges, reservations, and all property now owned or used for these purposes under the auspices of a seven-member commission appointed by the governor for seven-year terms. Some of the AGFC programs related directly and indirectly to the NPS Pollution Management Program are listed below.

**Water Development Projects:** AGFC coordinates with federal, state, and other interests to protect fish and wildlife resources on private and public lands associated with federal water development activities including:

* reviewing and evaluating federally permitted projects such as Section 404 Permits (CWA), and Section 10 Permits (Rivers and Harbors Act) administered by the U. S. Army Corps of Engineers;
* identifying and recommending opportunities for fish and wildlife restoration and enhancement features associated with planning of federal and state water development projects; and
* coordinating with federal assistance programs (Section 1135, Section 206, and Section 22 programs) administered by the U. S. Army Corps of Engineers.

Stream Teams are voluntary groups of citizens interested in working on water conservation efforts sponsored by a coalition of agencies and private groups, including the AGFC, Keep Arkansas Beautiful, ADEQ, Audubon Arkansas, NRCS, the Arkansas Bass Association, ANRC, the Arkansas Cattleman’s Association, the Arkansas Department of Parks & Tourism, the Arkansas Chapter of the Sierra Club, and approximately two dozen other agencies and groups. Stream Teams help control litter, work on streambank stabilization projects, improve fish habitat, and monitor water quality. Approximately 500 Stream Teams are active in Arkansas.

**Threatened and Endangered Species Conservation:** In cooperation with U.S. Fish & Wildlife Service (USFWS), AGFC has developed and maintains conservation programs for resident federally listed threatened and endangered species.

**Wildlife Conservation State Grants Program:** AGFC offers competitive grants to public agencies, universities, and nonprofit organizations to conserve non-game species of concern and their habitats including aquatic species and habitats.

**Nature Centers:** The Governor Mike Huckabee Delta Rivers Nature Center located in Pine Bluff opened in 2001, followed by the Forrest L. Wood Crowley’s Ridge Nature Center in Jonesboro. The Janet Huckabee Arkansas River Valley Nature Center opened in Fort Smith in 2005. The final center is located in central Arkansas (Little Rock). These nature centers offer an opportunity to expand water quality education for the general public; for example, the Pine Bluff center focuses on wetlands education.

**Lakes and Wildlife Management Areas:** AGFC manages more than 100 lakes and wildlife management areas spanning thousands of acres in Arkansas.

**Arkansas State Plant Board (ASPB)**

ASPB is primarily responsible for regulating pesticides and other agricultural chemicals used in Arkansas. ASPB has primacy under the federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the authority to regulate the proper labeling, distribution, storage, transportation, use, application, and disposal of pesticides within the state. Some of the ASPB programs that directly or indirectly relate to the NPS Pollution Management Plan, particularly the agricultural statewide program, are listed below.

**Groundwater Protection:** In February 1992, ASPB implemented a generic Pesticide Management Plan (PMP). The goal of the plan is to prevent the state’s groundwater from becoming contaminated by agricultural chemicals and, if contamination is found, to respond appropriately. Additionally, the PMP provides for the protection of public health and welfare, the propagation and protection of terrestrial and aquatic life, the protection of the environment, the operation of existing industries and agriculture, and the maintenance and enhancement of long-term economic health of the state. The PMP also recognizes that preserving groundwater quality is far less costly and more ecologically sound than restoring groundwater back to its natural state.

**Groundwater Monitoring:** ASPB monitors groundwater wells for NPS contamination of pesticides.

**Pesticide Registration:** Before a pesticide can be sold in Arkansas, it must first be registered with ASPB in accordance with the Arkansas Pesticide Control Act and Regulations. This allows ASPB to confirm that the product meets all state and federal requirements to provide for both human and environmental protection. Each year ASPB registers approximately 10,000 pesticides for use in the state.

**Dealer Licensing:** Dealers who wish to sell or distribute those pesticides designated by EPA as restricted use pesticides must first obtain a license from ASPB to do so in accordance with the Arkansas Pesticide Use Regulations. ASPB processes more than 400 dealer applications annually.

**User and Applicator Training/Certification:** Both users and applicators of restricted use pesticides must be trained in the proper handling of such pesticides and then licensed by ASPB in accordance with the Arkansas Pesticide Use and Application Act and Regulations. Those applicators who will apply pesticides commercially must also be tested before a license can be issued. Each year ASPB issues approximately 15,000 private applicator licenses, 900 commercial applicator licenses, 2,000 non-commercial applicator licenses, 500 commercial firm licenses (ground and air), and 250 custom applicator licenses.

**Enforcement:** ASPB is also responsible for taking enforcement action against those persons and businesses that fail to comply with pesticide laws and regulations. Penalties can range from a warning letter to a monetary assessment of up to $1,000 and license revocation.

**Worker Protection:** The ASPB Pesticide Division is responsible for enforcement of
the worker protection standard in Arkansas as it applies to the use of pesticides.

**Arkansas Livestock and Poultry Commission (ALPC)**

ALPC was created by Act 87 of 1963 and has authority for the control, suppression, and eradication of livestock and poultry diseases and pests, and supervision of sanitation related to livestock and poultry production. In addition, ALPC is responsible for promoting development of Arkansas livestock and poultry industries and administering regulations pertaining to livestock and poultry production. With respect to the NPS Pollution Management Plan, ALPC is responsible for regulation of carcass disposal. ALPC regulates carcass disposal under two sets of regulations: Carcass Disposal – Poultry (Act 87 of 1963, Act 150 of 1985, Act 168 of 1985, and Act 20 of 1989) and Regulation for the Disposal of Large Animal Carcasses, Excluding Dogs and Cats (Act 87 of 1963-Code 2-33-101 and Act 150 of 1985-Code 19-6-448).

**Arkansas Geological Commission (AGC)**

Dating back to 1857, AGC’s mission is to develop and provide knowledge of the geology and hydrogeology of the state, to stimulate orderly development, and to encourage effective management and utilization of the state’s mineral, fossil-fuel and water resources, while protecting the environment. This is accomplished through services that include consultation on water well and septic tank inquiries and water well construction records. AGC has on file more than 145,000 water well construction records dating from the early 1970s filed by county and township/range.

Other services include geologic mapping on areas of the state where the State Mapping Advisory Committee determines need. AGC also provides topographic maps and interpretation as well as many publications. Mineral occurrences are developed to the benefit of the state and nation while keeping economic development to the benefit of Arkansas’ citizens. Service is provided to mineral and fossil fuel companies through geologic interpretation of the state. Natural hazards are identified and noted where protection can be developed and instituted.

**Arkansas Oil and Gas Commission (AOGC)**

AOGC’s mission is the regulation of the Arkansas oil, gas, and brine industries to prevent
waste, encourage conservation, and protect the correlative rights of mineral ownership associated with the production of oil, natural gas, brine, and associated products. AOGC has issued more than 38,000 permits to drill oil, gas, and brine wells since its creation in 1939. AOGC maintains well-specific permitting, drilling, plugging and abandonment, and production records for these wells. A nine-member commission appointed by the governor provides oversight.

**Arkansas Department of Parks & Tourism (ADPT)**

As indicated in its mission statement, ADPT is committed to enhancing the quality of life for all citizens by providing facilities and skilled leadership for the development and safeguarding of natural resources. Conservation of valuable state resources through ADPT policy plays an indirect role in the management of NPS pollution in the following ways.

**Arkansas State Parks:** The planning and development (P&D) section of Arkansas State Parks designs and reviews designs of professional architectural/engineering consultants for renovations and new construction within the state park system. P&D also cooperates with regulatory agencies (i.e., ADEQ, ADH, the Arkansas Building Authority, the International Building Code, and others) for compliance with environmental laws, rules, and regulations. Some of the regulations considered are the National Environmental Policy Act of 1969, the Clean Air Act, CWA, Executive Order 115114, Protection and Enhancement of Environmental Quality, Executive Order 11288 Concerning Prevention, Control and Abatement of Water Pollution, the Wild and Scenic Rivers Act of 1968, Executive Order 11990, Protection of Wetlands, and the Fish and Wildlife Coordination Act.

**SCORP:** The Outdoor Recreation Grants section of ADPT prepares the Statewide Comprehensive Outdoor Recreation Plan (SCORP) that identifies outdoor recreation concerns and goals. ADPT seeks the input of all interested federal and state agencies when updating the SCORP. A section of the plan is dedicated to the conservation of natural and cultural resources. Special consideration is given to wetlands, consistent with the Emergency Wetlands Resources Act of 1986, Section 303. The Arkansas Multi-Agency Wetland Planning Team (MAWPT) has contributed valuable wetland information for publication in the SCORP. Applicants seeking grant monies to assist in the development of parks and trails address SCORP issues.

**Grant Applications:** Staff members of the Outdoor Recreation Grants Program (ORGP) administer grants for the development of local parks and trails. ORGP coordinates grant projects with the statewide clearing house by requiring Matching Grant Applicants to submit an environmental review with their applications. Any proposed park or trail development project near a lake, stream or other water resource must contact the AGFC’s Stream Team for environmental examination before consideration for a grant award.

**Environmental Review:** Throughout the state, projects subject to environmental review are examined by ADPT for consideration and commentary. Projects impacting parks, streams, and wetlands raise concern. Onsite visits are conducted when concerns warrant them. Comments and recommendations are sent to project applicants and the Arkansas Technical Review Committee.

**University of Arkansas Division of Agriculture**

The University of Arkansas Division of Agriculture is divided into two groups: the Cooperative Extension Service and the Agricultural Research Stations. The Cooperative Extension Service develops research-based education and training programs and delivers programs through county faculty located in every county of the state. The Agricultural Research Stations support research, including highly applied demonstration projects with direct application to NPS pollution management. Faculty members are located on five university campuses, seven research stations and five research and extension centers around the state. Many faculty with joint research and extension responsibilities contribute to the NPS Pollution Management Plan. Working closely with ANRC and the Arkansas Conservation Partnership (ACP), the University of Arkansas Division of Agriculture conducts applied research on new and innovative agricultural BMPs, provides soil testing services to the state’s land users, and works with state agencies in the development of effective policy for the management of agricultural NPS pollution. Specific to the 2011-2016 NPS Pollution Management Plan Statewide Agricultural Program, the University of Arkansas Division of Agriculture Cooperative Extension Service is the primary agency for development and delivery of agricultural education and training programs, including NPS management. With respect to the NPS Management Plan, some of the University of Arkansas Division of Agriculture Cooperative Extension Service’s education and training programs include:

* in-Service training for multi-agency personnel;
* program planning and leadership for community and natural resource leaders;
* water quality awareness curriculum for school children;
* training on BMPs, regulatory frameworks and the relationship between production/biological processes that impact water quality for agricultural producers;
* Farm\*A\*Syst, Urban\*A\*Syst and Home\*A\*Syst programs help agricultural producers as well as urban and rural dwellers identify and reduce sources of NPS pollution in their environments;
* urban stormwater management education;
* certification programs for pesticide applicators, nutrient applicators, etc.;
* regulatory requirements and required training mandated in regulation (e.g., Regulation Five requires training for permitted liquid animal waste management systems);
* sources of cost-share and other financial assistance;
* BMP training for landowner and logger education for private non-industrial forestlands; and
* Discovery Farm and Farm Production Verification Program Demonstrations as on- farm examples of BMP implementation and results.

Extension also maintains an extensive library of up-to-date, research-based fact sheets, applied research publications, and BMP manuals and guidelines. Content of these educational materials is carefully coordinated with ANRC, NRCS, AFC and other members of ACP.

The University of Arkansas Division of Agriculture Research Stations maintain research and demonstration farms in all the major agricultural areas of the state, where farmers learn about the most recent information available to them on production and environmental methods. Arkansas’ NPS Pollution Management Plan works with the University of Arkansas Division of Agriculture to utilize these research and demonstration farms to evaluate the effectiveness of BMPs and to educate farmers and landowners about how they can be beneficial to them in reducing the loss of sediment, nutrients, and organic material from their farms. In addition, faculty is involved in modeling watersheds, evaluating alternative products and markets to utilize poultry litter, designing streambank restoration projects, geomorphological assessment, evaluating technologies to improve stormwater management, and other critical projects.

**University of Arkansas Arkansas Water Resource Center (AWRC)**

AWRC is one of 54 water research institutes in the United States established through the Water Resources Research Act of 1964. AWRC’s mission is to:

* plan and conduct water resource research, cooperating closely with colleges, universities and other institutes in Arkansas to address the state’s water and land-related problems; promote the dissemination and application of research results;
* provide for the training of scientists in water resources;
* formulate a research program that is responsive to state water issues; and
* work closely with state and federal agencies.

AWRC has contributed substantially to Arkansas’ water resources via research and educational outreach activities through established partnerships with federal, state, and local entities. AWRC also provides one of the primary mechanisms in the state for technology transfer and has over the years trained a large pool of students who eventually move into the workforce that targets water resource concerns throughout Arkansas. Through these collaborative partnerships AWRC provides effective coordination between the university research community and watershed-based implementation projects by providing technical assistance that is delivered to land users throughout the state, but especially within the priority watersheds. AWRC's Water Quality Lab provides analytical, field, and technical support to the water quality investigative community, which includes university researchers, state agencies, federal agencies, and private groups or individuals. The Water Quality Lab is accredited for microbiological examination of drinking water by ADH for surface water examination by ADEQ and for trace level drinking water examination by the Louisiana Department of Health. The lab is the only lab in the state accredited under EPA National Environmental Laboratory Accreditation Conference (NELAC) standards.

**Other Universities**

Faculty at nearly every public and private university in Arkansas are involved in activities that directly and indirectly improve the results of the NPS Pollution Management Plan, including education and training of professionals, applied research, project design and management and public outreach. Universities that are represented on the NPS Management Plan Stakeholder Group include:

* Arkansas Tech University;
* University of Arkansas at Monticello;
* Arkansas State University;
* University of Arkansas at Little Rock;
* University of Central Arkansas;
* University of Arkansas at Pine Bluff; and
* Southern Arkansas University.

**U.S. Department of Agriculture Natural Resources Conservation Service (NRCS)**

NRCS helps landowners and communities conserve, maintain, and improve the state’s natural resources and environment. NRCS coordinates with its partners through the State Technical Committee. The State Technical Committee is composed of individuals who represent a variety of natural resource sciences and occupations, including soil, water, plants, wetlands, and wildlife. NRCS employees provide information and technical assistance to private landowners and land users. In addition, NRCS provides financial assistance to landowners to implement conservation measures through the following programs authorized in the Farm Security and Rural Investment Act of 2002, also known as the 2002 Farm Bill.

**Conservation Security Program (CSP):** CSP is a voluntary program that provides financial and technical assistance to producers who advance the conservation and improvement of soil, water, air, energy, plant and animal life, and other conservation purposes on private working lands. Such lands include cropland, grassland, prairie land, improved pasture and range land as well as forested land and other non-cropped areas that are an incidental part of the agriculture operation. NRCS annually selects priority watersheds where the CSP program is targeted. For example, NRCS selected the Cadron, Lower Neosho, Lower St. Francis and Lower White-Bayou Des Arc watersheds for focus in FY2005.

**Environmental Quality Incentives Program (EQIP):** EQIP offers financial and technical help to assist eligible participants install or implement structural and management practices on eligible agricultural land. Persons engaged in livestock or agricultural production on eligible land may participate in the EQIP program. EQIP activities are carried out according to a plan of operations developed in conjunction with the producer that identifies the appropriate conservation practice or practices to address the resource concerns. The practices are subject to NRCS technical standards adapted for local conditions. EQIP offers contracts with a minimum term that ends one year after the implementation of the last scheduled practices and a maximum term of 10 years. These contracts provide incentive payments and cost-shares to implement conservation practices. EQIP may cost-share up to 75 percent of the costs of certain conservation practices. Incentive payments may be provided for up to three years to encourage producers to carry out management practices they may not otherwise use without the incentive. However, limited resource producers may be eligible for cost-shares up to 90 percent. Farmers and ranchers may elect to use a certified third-party provider for technical assistance. In FY2003, Arkansas allocated approximately $11 million for 570 EQIP projects while eligible producers requested $76 million.

**Wetlands Reserve Project (WRP):** WRP is a voluntary program that provides incentives to landowners to restore, protect, or enhance the functions of wetland ecosystems. In Arkansas, the program focuses on restoring bottomland hardwood forest ecosystems and restoring water quality in the Lower Mississippi River Valley, Arkansas River Valley, and Red River Valley through reforestation and hydrology restoration. Arkansas is currently ranked second in the nation in enrolled WRP acres. The program annually results in reforestation of 8,000 acres of bottomland hardwoods and restoration of hydrology on more than 6,000 acres.

**Watershed Protection and Flood Prevention Program (PL 83-566):** The objective of this program is for NRCS to cooperate with state and local agencies to carry out works of improvement for soil conservation and other purposes including flood prevention, conservation, development, utilization and disposal of water, and conservation and proper utilization of the land. NRCS implements the Watershed Protection and Flood Prevention Act through two program areas: Watershed Survey and Planning and Watershed Protection and Flood Prevention Operations. NRCS in Arkansas has approximately 63 watershed projects either completed or actively being implemented and has completed 14 river basin surveys.

**Emergency Watershed Protection (EWP):** This purpose of this program is to undertake emergency measures, including the purchase of flood plain easements (see next item) for runoff retardation and soil erosion prevention to safeguard lives and property from floods, drought, and the products of erosion on any watershed whenever fire, flood, or any other natural occurrence is causing or has caused a sudden impairment of the watershed. EWP provides funding to project sponsors for work such as clearing debris from clogged waterways, restoring vegetation, and stabilizing river banks. The measures that are taken must be environmentally and economically sound and generally benefit more than one property owner. NRCS provides up to 75 percent of the funds needed to restore the natural function of a watershed. The community or local sponsor of the work pays the remaining 25 percent, which can be provided by cash or in-kind services. The joint efforts of NRCS, the Clark County Conservation District and AFC provided land users in Arkansas with technical and financial assistance to establish or refurbish firebreaks damaged by ice storms.

**Emergency Watershed Protection-Floodplain Easement Program:** The goal of this program is to reduce the recurring cost of flood damage in areas prone to flooding while restoring or protecting fish and wildlife habitat, especially wetland habitat. The program accomplishes this by acquiring perpetual easements from interested landowners and, where necessary, restoring the hydrology and vegetation of the floodplain. NRCS has designated the following rivers or watersheds as priority areas in Arkansas in order to maximize environmental benefits: L’Anguille River and Departee Creek Watersheds, Bayou Bartholomew, St. Francis River/Little River Floodway and Mississippi River, White River, Black River and Buffalo River. L’Anguille, Bayou Bartholomew, and the Upper White River watersheds are priorities for the 2011-2016 NPS Pollution Management Plan.

**NPS Project:** NRCS is providing technical and financial assistance in Arkansas through the Buffalo River Tributaries Land Treatment Watershed Project.

**Grassland Reserve Program (GRP):** This is a voluntary program that offers landowners easements, long-term rental agreements or restoration agreements to protect, restore, and enhance grasslands including grassland, rangeland, pastureland, shrubland, and certain other lands. The program is jointly administered by NRCS, FSA and USFS. The program conserves vulnerable grasslands from conversion to cropland or other uses and conserves valuable grasslands by helping maintain viable ranching operations. The first GRP sign-up period in Arkansas ended in late 2004.

**Grazing Lands Conservation Initiative (GLCI):** Funded in 2003, this program provides technical and educational assistance to owners of private grazing lands to improve management. In its first year, the program conducted more than 25 workshops, field days, and presentations for more than 600 farmers and purchased 11 easements. The program is not a cost-share program. The Arkansas Grazing Lands Advisory Committee provides oversight and the University of Arkansas Division of Agriculture Cooperative Extension Service and NRCS carry out the program.

**Wildlife Habitat Incentives Program (WHIP):** This is a voluntary program that provides cost-share to implement practices that improve habitat for game and non-game species. NRCS and AGFC biologists work with the applicant to conduct a sound habitat evaluation of the proposed area, carefully prioritize the habitat needs, and meet those needs by planning and timely installation of the appropriate management practices.

**Resource Conservation and Development Councils (RC&Ds):** RC&Ds are independent regional nonprofit organizations staffed with NRCS employees and partially funded by NRCS. RC&Ds improve the capability of state and local units of government in rural areas to plan, develop, and carry out resource conservation and development projects designed to meet unique needs of rural communities. The councils often convene wide-ranging partners and develop resources to implement important projects that otherwise might not be undertaken. For example, one RC&D was instrumental in the creation of the Lower Little River Watershed Coalition while another RC&D pulled together a partnership to implement an extensive education program for private non-industrial landowners in an area of the state where BMP compliance was less than desirable.

**Mississippi River Basin Initiative (MRBI):** To improve the health of the Mississippi River Basin, including water quality and wildlife habitat, NRCS announced the Mississippi River Basin Healthy Watersheds Initiative (MRBI). Through this initiative, NRCS and partners help producers in selected watersheds in the Mississippi River Basin voluntarily implement conservation practices and systems that avoid, control, and trap nutrient runoff, improve wildlife habitat, and maintain agricultural productivity.

The Initiative builds on the past efforts of producers, NRCS, partners, and other state and federal agencies in the 12-State Initiative area, including Arkansas, to address nutrient loading in the Mississippi River Basin. MRBI is implemented through the Cooperative Conservation Partnership Initiative (CCPI), the Wetlands Reserve Enhancement Program (WREP), Conservation Innovation Grants (CIG), and other programs.

The initial project sites selected in Arkansas are Lake Conway-Point Remove, L'Anguille, Cache, Lower St. Francis, Bayou Macon, Boeuf River and Little River Ditches watersheds.

**U.S. Department of Agriculture Farm Service Agency (FSA)**

FSA is dedicated to achieving an economically and environmentally sound future for American agriculture. In the 1930s, Congress set up a unique system under which federal farm programs are administered locally. Farmers eligible to participate elect a three- to five-person county committee, which reviews county office operations and makes decisions on how to apply the programs. This grassroots approach gives farmers a say in how federal actions affect their communities and their individual operations. After more than 60 years, it remains a cornerstone of FSA's efforts to preserve and promote American agriculture. FSA administers three conservation programs authorized in the Food, Conservation and Energy Act of 2008, also known as the 2008 Farm Bill.

**Conservation Reserve Program (CRP):** This is a voluntary program for agricultural landowners. Through CRP, producers can receive annual rental payments and cost-share assistance to establish long-term, resource conserving covers on eligible farmland. CRP is administered by the Commodity Credit Corporation (CCC) through FSA. Program support is provided by NRCS, the University of Arkansas Division of Agriculture Cooperative Extension Service, state forestry agencies, and local conservation districts.

**Conservation Reserve Enhancement Program (CREP)**: FSA and Arkansas launched a $10 million CREP program to improve water quality of the Bayou Meto watershed and wildlife habitat in five central Arkansas counties in 2001. Producers enrolled in CREP remove lands from agricultural production and plant native grasses, trees and other vegetation to improve water quality, soil and wildlife habitat under voluntary 10-15 year contracts. The Arkansas CREP is targeting 4,700 acres to establish tree buffers around streams and rivers in the Bayou Meto watershed.

**Emergency Conservation Program (ECP):** This program provides emergency funding and technical assistance for farmers and ranchers to rehabilitate farmland damaged by natural disasters.

**U.S. Department of Agriculture Forest Service (USFS)**

The mission of USFS is to sustain the health, diversity, and productivity of the nation’s forests and grasslands to meet the needs of present and future generations. In addition to managing national forests and grasslands, USFS is also among the largest forestry research organizations in the world, and provides technical and financial assistance to state and private forestry agencies.

The Ouachita National Forest covers 1.8 million acres in central Arkansas and southeastern Oklahoma. The Ouachita National Forest includes land in three priority watersheds for the 2006-2010 NPS Management Program, including the Poteau River watershed, the Upper Saline River watershed and the Lower Little River watershed.

The Ozark-St. Francis National Forest is actually two distinct forests. The Ozark National Forest covers 1.2 million acres, mostly in the Ozark Mountains of northern Arkansas. A small section of the forest is in the Upper White River watershed, which is a 2006-2010 NPS Management Program priority watershed. The St. Francis National Forest covers 22,600 acres in eastern Arkansas, one of the smallest and most diverse forests in the country. Some of the USFS programs are listed below.

**Forest Planning:** Each forest in the National Forest System operates under a Forest Plan. The Amended Forest Plan for the Ouachita National Forest was signed in March 1990. The current plan for the Ozark-St. Francis National Forests was signed in July 1986. Both of Arkansas’ national forests are in the process of developing new plans that will provide direction for the next 10-15 years. In its capacity as the lead silviculture agency for the 2011-2016 NPS Pollution Management Plan, AFC will participate in these planning processes to encourage federal consistency. In addition, local watershed groups will also participate in these planning processes.

**Forest Service Research and Development (R&D):** Scientists carry out basic and applied research to study biological, physical, and social sciences related to diverse forests and rangelands. USFS research promotes ecologically sound management of national forest lands as well as private forest lands. Examples of relevant research products include:

* forest inventory and analysis reports on status and trends in forest area and location. The program is managed in cooperation with State and Private Forestry and National Forest System.
* fish and water research that enhances understanding of organisms, populations, ecosystems, and ecological processes that is essential for managing forests and rangelands to sustain water quality and biological diversity. This research is crucial to the agency's ability to comply with requirements of key environmental statutes, including CWA.
* Ozark-Ouachita Highlands Assessment of Aquatic Conditions provides an inter­disciplinary comparative assessment of 73 watersheds in portions of three states that make up the Ozark-Ouachita Highlands.

**U.S. Geological Survey (USGS)**

USGS is the principal federal agency for generating hydrologic information and appraising the nation’s water resources. The water resources of Arkansas consist of numerous streams, springs, lakes and aquifer systems. USGS collects stream flow, groundwater levels, and water quality data throughout the state. These hydrologic data and other data are used in research and hydrologic studies to describe the quantity, quality, and location of Arkansas’ water resources. The collection, analysis, and interpretation of these data are done in cooperation with other federal, state, and local agencies, universities, and research centers. The USGS Arkansas Water Resources website at <http://ar.water.usgs.gov> provides a wealth of data and links to research publications.

**U.S. Fish and Wildlife Service (USFWS)**

USFWS’s mission is to conserve, protect and enhance fish and wildlife and their habitats through consultation, cooperation, and communication for the continuing benefit of the American people. In partnership with the state, USFWS provides a range of environmental services programs to protect endangered and threatened species, conserve habitat and reduce environmental contaminants. In cooperation with USFWS, AGFC has developed and maintains conservation programs for resident federally listed threatened and endangered species.

**Endangered Species Act (ESA):** This act requires all federal agencies to conserve threatened and endangered species. While managing federal lands or engaging in other federal business that could affect listed species, agencies must first consult with USFWS to ensure that their actions will not harm a listed species or damage or destroy its habitat. These actions include the issuing of federal permits, licenses granting approval to certain private activities, or federally funded actions. In the relatively few cases where USFWS determines a proposed action will harm a species, the agency suggests ways for landowners to modify their proposals to conserve listed species. USFWS also works with agencies to minimize potential harm to protected species, allowing projects to continue. Private landowners who develop and implement an approved habitat conservation plan providing for conservation of threatened or endangered species can receive an incidental take permit that allows the development project to go forward.

**Habitat Conservation and Environmental Contaminants Programs:** These programs are responsible for providing information and consultative services for the protection and conservation of fish and wildlife species and their habitats to a widely diverse audience including federal, state, and local governments, businesses and private individuals. Consultations include:

* mapping of wetlands;
* habitat restoration and management;
* contaminant risk assessment, restoration, and remediation; and
* public outreach and education.

The programs provide USFWS with internal and external review to insure compliance for a variety of federal environmental and resource laws.

**Federal Permits and Projects:** USFWS evaluates federally constructed, licensed, or permitted water resource development projects and provides recommendations to reduce impacts to fish and wildlife resources. Under the provisions of the Fish and Wildlife Coordination Act, CWA, and other legislation, federal agencies permitting or constructing these projects must consult with USFWS during the planning of projects. USFWS provides technical support to the agencies in the planning process, providing fish and wildlife resources information and analyses while recommending measures to mitigate impacts.

**National Wetlands Inventory (NWI):** The NWI prepares and distributes maps showing the location and types of wetlands found throughout the region. It also provides technical assistance in wetland delineation, wetland soils, wetland plants, wetland hydrology, wetland trends, and wetland values to individuals, other USFWS programs, and other federal and state agencies.

**Partners for Fish and Wildlife Program:** This program provides financial and technical assistance to restore, improve, and protect fish and wildlife habitat on private lands through partnerships with private landowners and other organizations while leaving the land in private ownership.

**Land Management:** USFWS manages 10 national wildlife refuges, three national fish hatcheries, two ecological service offices, a law enforcement office and a migratory bird field station in Arkansas.

**U.S. Army Corps of Engineers (USACE)**

The mission of USACE is to provide quality, responsive engineering services to the nation for planning, designing, building, and operating water resources and other civil works projects for navigation, flood control, environmental protection, and disaster response as well as providing engineering support for the armed forces and federal agencies. Its workforce includes biologists, engineers, geologists, hydrologists, natural resource managers, and other professionals. Through its centers of expertise, USACE provides environmental consulting services to federal, state, local, and private entities. In granting or denying permits to developers, USACE strives to prevent environmental damage. Evaluating public interest, regulatory experts balance the need of economic development with environmental considerations. USACE forms numerous partnerships with other agencies, state and federal governments, environmental groups and private citizens to help solve ecological problems. The following are a few of USACE programs that relate to the NPS Pollution Management Plan.

**Wetlands and Waterways Regulation and Permitting:** Passage of CWA in 1972 greatly broadened this role by giving USACE authority over dredging and filling in the waters of the United States including many wetlands. A major aspect of the regulatory program is determining which areas qualify for protection as wetlands. In reaching these decisions, USACE uses its 1987 Wetland Delineation Manual. Working toward a national goal of no net loss of wetlands, the Civil Works program is undertaking projects to restore existing wetlands or to create new ones.

**Ecosystem Restoration:** Since passage of the NEPA in 1969, environmental protection has been an important component of the civil works planning process. Legislation passed in 1990 established environmental protection as one of the primary missions of water resources projects along with navigation and flood control. Over the last 10 years, small ecosystem restoration projects have grown increasingly popular throughout the country. This new direction has allowed USACE to expand its traditional environmental activities and enhance or restore natural resources as part of USACE projects.

**Environmental Stewardship:** USACE carries out environmental and natural resource management programs through its projects, managing forest and wildlife habitat, monitoring water quality at its dams and operating fish hatcheries in cooperation with AGFC.

**Nonprofit Organizations**

Statewide, regional, and local nonprofit organizations are key partners in the 2011-2016 NPS Pollution Management Plan. Examples of these organizations include, but are not limited to:

**The Nature Conservancy (TNC):** The mission of TNC is to preserve the plants, animals, and natural communities that represent the diversity of life on earth by protecting the lands and waters they need to survive. The Arkansas Chapter of TNC has field offices in Northwest and East Arkansas. This chapter has been actively providing assistance to the NPS Pollution Management Plan by providing training to local professionals in stream geomorphology assessment and restoration practices. TNC works collaboratively with state, federal, and local agencies to achieve its mission and is providing staff support for planning and implementation of NPS management assessments, Nine Element Plans and projects in the Upper Saline River, the Strawberry River, the Spring River, and others. Priority rivers include the Strawberry River, the Kings River, the Mulberry River, the Little Red River, Spavinaw Creek, the Buffalo River, the Eleven Point River, and the Spring River.

**Audubon Arkansas:** Audubon’s national mission is to conserve and restore natural ecosystems, focusing on birds, other wildlife and their habitats for the benefit of humanity and the earth’s biological diversity. Audubon Arkansas’ vision is to inspire and lead environmental education, resource management, habitat restoration, bird conservation, and enlightened advocacy. Audubon Arkansas is providing staff leadership for planning and implementation of NPS pollution management programs in two watersheds – the West Fork of the White River in northwest Arkansas and the Fourche River in and around Little Rock.

**Watershed Organizations:** Nonprofit watershed organizations exist in some watersheds. Those that exist are in different stages of development and maturation. New groups are forming even as existing groups cease to exist. The NPS Pollution Management Plan will support the development of effective and sustainable watershed groups where there is local leadership and potential for effective implementation of Nine Element Plans in priority watersheds. The following is a partial list of watershed groups. Groups working in priority watersheds are noted with an asterisk.

* Bayou Bartholomew Alliance\*
* Beaver Lake Watershed Partnership\*
* Cache River Watershed Partnership
* Alliance for an Improved Middle Fork- AIM\*
* Friends of the North Fork and White River
* Fourche Creek Watershed Group
* Kings River Watershed Partnership\*
* L'Anguille River Watershed Coalition\*
* Lake Fayetteville Watershed Partnership\*
* Leatherwood Creek Watershed Group
* Little Red River Action Team
* Lower Little River Watershed Coalition\*
* Lower Mississippi River Conservation Committee
* Lower White River Watershed Group
* Strawberry River Watershed Group
* Save Our Spring River
* Upper White River Basin Foundation\*
* West Fork of the White River Watershed\*
* Illinois River Watershed Partnership

**Local Government and the Entities That Serve Them**

Local units of government including municipalities, counties and conservation districts as well as the entities that serve them are key partners in the 2011-2016 NPS Pollution Management Plan. Examples of local government partners include, but are not limited to:

**Municipalities and Counties:** Phase I Municipal Stormwater Program and municipal NPDES permits cover and regulate municipalities with populations over 100,000, drainage systems interconnected with these municipalities’ systems or municipalities determined to be significant contributors of pollutants. In Arkansas, Little Rock was the only “large” MS4 permitted under Phase I. Phase II of the Stormwater Program regulates municipalities with populations less than 100,000, including urbanized areas (typically areas with a population of 10,000 or greater and density greater than 1,000 people per square mile), cities and county areas designated by the state based on site-specific criteria, and various state and federal facilities (e.g., universities, state highway system, Pine Bluff Arsenal, etc). Municipalities work together to develop education programs, model ordinances, and obtain technical assistance through the Arkansas Municipal League. Counties work together in a similar fashion through membership in the Arkansas Association of Counties.

**Regional Planning Commissions:** Local units of government and other facilities required to obtain permits for municipal separate storm sewer systems (MS4) are finding it beneficial to work together in collaborative efforts in order to reduce the cost and increase the effectiveness of their education and outreach programs. Regional planning Commissions, working in cooperation with the University of Arkansas Division of Agriculture Cooperative Extension Service, are at the forefront of pulling together these innovative partnerships.

* **Northwest Arkansas Regional Planning Commission:** This commission coordinates a regional education effort among the 15 small MS4s in Benton and Washington counties affected by EPA Phase II Stormwater regulations. By contracting with the University of Arkansas Division of Agriculture Cooperative Extension Service to develop and conduct stormwater public education and involvement efforts, the NWA partnership benefits from a comprehensive, cost-effective outreach program that will improve water quality on a watershed-scale. Cooperating entities include the cities of Bentonville, Bethel Heights, Elkins, Elm Springs, Farmington, Fayetteville, Greenland, Johnson, Little Flock, Lowell, Springdale, and Rogers along with Benton and Washington counties and the University of Arkansas.
* **Southeast Arkansas Regional Planning Commission:** With leadership and coordination from the Southeast Arkansas Regional Planning Commission, the University of Arkansas Division of Agriculture Cooperative Extension Service has entered into an agreement with Pine Bluff, White Hall, the University of Arkansas at Pine Bluff, and a portion of Jefferson County that have been identified as small municipal separate storm sewer systems (MS4s) under the new EPA Phase II stormwater regulations. The University of Arkansas Division of Agriculture Cooperative Extension Service will provide public education and outreach, encourage public involvement and participation and train municipal employees in pollution prevention and good housekeeping.

**Conservation Districts:** Conservation districts are the front line for technical assistance to agricultural producers for the implementation of BMPs on their farms. They are political subdivisions of the State of Arkansas, created by a popular vote of resident landowners for the purpose of conserving land and water resources as authorized by Act 197 of the Arkansas General Assembly of 1937, which was the nation's first conservation district law. A five-person board of directors governs each district. ANRC appoints two directors, and resident landowners elect three directors. Arkansas’ 75 conservation districts establish natural resource priorities at the local level and provide support and input into how soil and water conservation programs are implemented at the local level, working cooperatively with landowners and federal and state government agencies. Conservation districts coordinate at the state level through membership in the Association of Arkansas Conservation Districts. Conservation district employees coordinate at the state level through involvement in the Arkansas Association of Conservation District Employees.

**Other Entities that Serve Local Government:** Municipalities and counties also rely on other organizations for education, information and technical assistance, including but not limited to:

* Planning and Development Districts;
* Arkansas Municipal League;
* Arkansas Association of Counties;
* Association of Conservation Districts; and
* Association of Conservation District Employees.

**Membership Associations and Organizations**

Industry associations and farm groups can be important partners in the 2011-2016 NPS Pollution Management Plan. These associations and organizations are in a unique position to pull together audiences of their members, help deliver education and training programs through their meetings, newsletters and websites, participate in the development of BMPs where appropriate, promote increased implementation of BMPs and assist in the monitoring of BMP implementation and evaluation of BMP effectiveness. Examples of associations and organizations that have been involved in the NPS Management Plan development process include:

* Arkansas Farm Bureau;
* Arkansas Poultry Federation;
* Arkansas Environmental Federation;
* Arkansas Homebuilders Association;
* Arkansas General Contractors;
* Arkansas Forestry Association;
* Arkansas Pork Producers Association; and
* Others.

**Water Districts and Associations**

Water districts and associations are also partners in implementing the 2011-2016 NPS Pollution Management Plan. Examples of their involvement include but are not limited to:

* **Beaver Reservoir Water District:** The Water District provides treats and sells drinking water to five municipal customers. The Water District recently hired a director of environmental quality and a director of public affairs to provide education and work with land users in the watersheds of Beaver Reservoir to improve water quality. A representative of Beaver Reservoir Water District serves on the NPS Management Program Stakeholder Group.
* **Southwest Arkansas Water District:** The water district sells water from Millwood Lake to municipalities in a five county area of Arkansas and Texas. The water district is represented on the board of the Lower Little River Watershed Coalition, sponsors water education days and helps develop curriculum for school age children aimed at increasing awareness of water quality.
* **Fort Smith Water Utility:** The Utility is a regional water supplier for 200,000 people in Western Arkansas and Eastern Oklahoma. The utility has an extensive watershed monitoring program and partners with multiple entities to research water quality related topics. The utility’s watershed management efforts are key components of assuring the effective and long-term protection of important drinking water sources. Watershed management activities include: land purchases, resource management, watershed easements, water education programs, and shoreline clean up events for the protection of water quality in the Frog Bayou and Lee Creek watersheds. A representative of Fort Smith Water Utility serves on the NPS Management Plan Stakeholder Group.
* **Central Arkansas Water (CAW):** The water district is a regional water supplier for the Central Arkansas region. The district has taken a comprehensive approach to protecting Lake Maumelle, adopting a comprehensive Watershed Management Plan in 2007. The intent of the plan is to protect the lake from increased pollution that results from development and other land disturbances, provide for the equitable sharing of costs and benefits associated with the protection, and minimize land-use restrictions on owners of property surrounding the water source.
* **Arkansas Rural Water Association:** The Arkansas Rural Water Association is working with a watershed organization in the Upper Saline Watershed to develop strategies to reduce sedimentation.

**Inter-Agency Cooperation**

There are a number of inter-agency teams and work groups that bring together not only different agencies but also teams of scientists and practitioners from different disciplines. Efforts will be made to develop effective working partnerships among these groups in order to gain efficiencies. For example, the Multi-Agency Wetland Planning Team (MAWPT)is in the process of serving up critical wetlands data to the internet and making it available to the public. Much of this geographically referenced data would also be useful to watershed groups. The Comprehensive Wildlife Strategy Steering Committee is assessing habitat threats to non-game species of concern. There may be mutual benefit in sharing data. Coordination can be strengthened between the NRCS Technical Committee and the NPS Pollution Management Plan Stakeholder Group (e.g., meetings could be held back-to-back and agendas coordinated). Six examples of groups created to promote interagency cooperation are briefly described below.

* **NPS Pollution Management Plan Stakeholder Group:** The NPS Pollution Management Plan Stakeholder Group is a new initiative that expands and builds on previous collaborative planning. Organized in July 2004, the expanded group met four times in the preparation of the 2011-2016 NPS Pollution Management Plan. The stakeholders will continue to meet every year to review progress toward achieving the goals and objectives of the plan, to assess the need to update the plan, and to identify ways to improve coordination of implementation activities within statewide programs and between priority watersheds and statewide programs.
* **NRCS Technical Committee:** NRCS coordinates with its partners through the State Technical Committee. The State Technical Committee is composed of individuals who represent a variety of natural resource sciences and occupations, including soil, water, plants, wetlands, and wildlife. The State Technical Committee includes representatives of federal, state, and local agencies as well as nonprofit organizations and others.
* **Arkansas Conservation Partnership (ACP):** A formal relationship known as the ACP was formed in 1992 between key local partners and state and federal agencies with a statewide focus. The ACP includes ANRC, the Arkansas Association of Conservation Districts (AACD), the Arkansas Association of Conservation District Employees (AACDE), NRCS, the University of Arkansas Division of Agriculture Cooperative Extension Service, the University of Arkansas at Pine Bluff, AFC and the Arkansas Resource Conservation and Development Council, Inc.

The partnership is committed to locally-led conservation of natural resources by providing a unique combination of coordinated educational, financial and technical assistance to landowners. While each partner offers unique services, the partnership is committed to teamwork, consensus, joint decision making and sharing of successes and failures. The partnership strives to breakdown interagency barriers, eliminate duplication of effort, and improve communication so that landowners are better served. Partners in the ACP also work closely with ADEQ, ARWC and other entities within the University of Arkansas Division of Agriculture (e.g., the research station at Arkansas State University).

* **Arkansas Watershed Advisory Group (AWAG):** AWAG is a consortium of state and federal agency personnel and private citizens that promotes local voluntary approaches to watershed management and conservation. AWAG provides technical assistance to organize watershed groups, facilitates quarterly discussion of voluntary approaches and hosts an annual water quality conference. ADEQ provides staff support for AWAG.
* **Multi-Agency Wetland Planning Team (MAWPT):** The Arkansas MAWPT comprises state agency representatives promoting wetland conservation through implementation of goals and objectives contained in the Arkansas Wetland Strategy. The Arkansas MAWPT, formed through the governor's office, has developed statewide and watershed level strategies that encourage voluntary, incentive-based conservation initiatives and consistent planning efforts. The hydrogeomorphic classification and assessment of wetlands, Geographical Information Systems (GIS) watershed analyses, restoration and protection of unique wetlands, and educational outreach are key components to successful conservation and management of the wetland resources of Arkansas.
* **Comprehensive Wildlife Strategy Steering Committee:** An interagency, multidisciplinary team of professionals representing public agencies and private organizations are contributing to the development of a strategy for conserving Arkansas non-game wildlife. The interagency team will identify species of concern, identify the habitats where these species are located, assess habitat conditions and identify management practices and financial assistance programs to protect those species and habitats, including aquatic life and habitats. Guidance for developing the strategy is provided by USFWS. This interagency team includes biologists, hydrologists, land use managers, and others. Agencies represented include AGFC, USFS, USFWS, Arkansas Natural Heritage Commission (ANHC), Audubon Arkansas, and TNC.
* **Stream Teams:** These teams are made up of voluntary groups of citizens interested in working on water conservation efforts sponsored by a coalition of agencies and private groups, including AGFC, Keep Arkansas Beautiful, ADEQ, Audubon Arkansas, NRCS, the Arkansas Bass Association, ANRC, the Arkansas Cattleman’s Association, ADPT, the Arkansas Chapter of the Sierra Club and approximately two dozen other agencies and groups. Stream Teams help control litter, work on streambank stabilization projects, improve fish habitat, and monitor water quality. Approximately 500 stream teams are active in Arkansas.