adaptive management—the rigorous application of management, research, and monitoring to gain information and experience necessary to assess and modify management activities.

accessible/accessibility—pertaining to physical access to areas and activities for people of different abilities, especially those with physical impairments.

accession—to record the addition of a new item to a museum or other collection.

alternative—a reasonable way to solve an identified problem or satisfy the stated need (40 CFR 1500.2); one of several different means of accomplishing refuge purposes and goals and contributing to the Refuge System mission (The “Fish and Wildlife Service Manual,” 602 FW 1.5).

amphibian—a class of cold-blooded vertebrates including frogs, toads, or salamanders.

anthropogenic—originating in human activity.

appropriate use—a proposed or existing uses on national wildlife refuges that meet at least one of the following—(1) is a wildlife-dependent recreational use; (2) contributes to fulfilling refuge purposes, the Refuge System mission, or goals and objectives outline in a CCP; or (3) the refuge manager has evaluated the use and found it to be appropriate.

baseline—a set of critical observations, data, or information used for comparison or a control.

biological control—the use of organisms or viruses to control invasive plants or other pests.

biological diversity, also biodiversity—the variety of life and its processes, including the variety of living organisms, the genetic differences among them, and communities and ecosystems in which they occur.

biological integrity—biotic composition, structure, and functioning at genetic, organism, and community levels comparable with historic conditions, including the natural biological processes that shape genomes, organisms, and communities.

canopy—a layer of foliage, generally the uppermost layer, in a vegetative stand; midlevel or understory vegetation in multilayered stands. Canopy closure (also canopy cover) is an estimate of the amount of overhead vegetative cover.

compatibility determination—see compatible use.

compatible use—a wildlife-dependent recreational use or any other use of a refuge that, in the sound professional judgment of the Director of the U.S. Fish and Wildlife Service, will not materially interfere with or detract from the fulfillment of the mission of the Refuge System or the purposes of the refuge (The “Fish and Wildlife Service Manual” 603 FW 3.6). A compatibility determination supports the selection of compatible uses and identified stipulations or limits necessary to ensure compatibility.

comprehensive conservation plan (CCP)—a document that describes the desired future conditions of the refuge and provides long-range guidance and management direction for the refuge manager to accomplish the purposes of the refuge, contribute to the mission of the Refuge System, and to meet other relevant mandates (The “Fish and Wildlife Service Manual,” 602 FW 1.5).

cultural resources—sites, buildings, structures and objects that are the result of human activities and are generally over 50 years old. They include prehistoric and historic sites, properties, artifacts, historic records, traditional use areas and sacred sites that may or may not have artifactual evidence.

deaccession—to remove an item from the listed holdings of a museum or collection.

ecosystem—a dynamic and interrelating complex of plant and animal communities and their associated nonliving environment; a biological community, together with its environment, functioning as a unit. For administrative purposes, the Service has designated 53 ecosystems covering the United States and its possessions. These ecosystems generally correspond with watershed boundaries and their sizes and ecological complexity vary.

environmental health—composition, structure, and functioning of soil, water, air and other abiotic features comparable with historic conditions, including the natural abiotic processes that shape the environment.

environmentally preferable alternative—the environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101. Ordinarily, this means the alternative that causes the
least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources.

**endangered species, Federal**—a plant or animal species listed under the Endangered Species Act of 1973, as amended, that is in danger of extinction throughout all or a significant part of its range.

**endangered species, State**—a plant or animal species in danger of becoming extinct or extirpated in a particular State within the near future if factors contributing to its decline continue. Populations of these species are at critically low levels or their habitats have been degraded or depleted to a significant degree.

**endemic species**—plants or animals that occur naturally in a certain region and whose distribution is relatively limited to a particular locality.

**environmental impact statement**—a document prepared to describe the effects for proposed activities on the environment. “Environment,” in this case, is defined as the natural and physical environment and the relationship of people with that environment.

**extirpated**—when a species of plant or wildlife ceases to exist in a chosen geographic area (not to be confused with extinction, when a species ceases to exist).

**Federal trust species**—all species where the Federal Government has primary jurisdiction including federally endangered or threatened species, migratory birds, anadromous fish, and certain marine mammals.

**fire management plan (FMP)**—a plan that identifies and integrates all wildland fire management and related activities within the context of approved land and resource management plans. The plan defines a program to manage wildland fires (wildfire and prescribed fire).

**fitness**—the ability of an organism to survive in its habitat and pass those genes on to subsequent generations.

**focal species**—a multispecies approach where the ecological needs of a suite of species are used to define an ideal landscape to maintain the range of habitat conditions and ecological processes required by landbirds or other species. Focal species are considered most sensitive to or limited by certain ecological processes (such as fire or nest predation) or habitat attributes (such as patch size). The needs of a suite of focal species are then used to help guide management activities.

**forb**—a broad-leaved, herbaceous plant; a seed-producing annual, biennial, or perennial plant that does not develop persistent woody tissue but dies down at the end of the growing season.

**fragmentation**—a state of discontinuity throughout a defined habitat.

**Friends group**—any formal organization whose mission is to support the goals and purposes of its associated refuge and the National Wildlife Refuge Association overall; Friends organizations and cooperative and interpretive associations.

**FTE**—a full-time equivalent; one or more job positions with tours of duty that, when combined, equate to one person employed for the standard Government work-year.

**goal**—descriptive, open-ended, and often broad statement of desired future conditions that conveys a purpose but does not define measurable units (The “Fish and Wildlife Service Manual,” 620 FW 1.5).

**habitat island**—an area of wildlife habitat delineated by areas of unsuitable wildlife habitat.

**habitat management plan (HMP)**—a stepdown plan to a comprehensive conservation plan that identifies in detail how the objectives and strategies for uplands, riparian areas, river bottoms, and shorelines will be carried out.

**habitat type, also vegetation type, cover type**—a land classification system based on the concept of distinct plant associations.

**herbivory**—grazing of grass and other plants by any animal.

**indigenous**—originating or occurring naturally in a particular place.

**inholding**—non-Service land owned by private, other agency, or other group landowners that is within the boundary of a national wildlife refuge.

**integrated pest management**—methods of managing undesirable species such as invasive plants; education, prevention, physical or mechanical methods of control, biological control, responsible chemical use, and cultural methods.

**introduced species**—a species present in an area due to intentional or unintentional escape, release, dissemination, or placement into an ecosystem as a result of human activity.

**invasive species**—any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem; and whose introduction does or is likely to cause economic or environmental harm or harm to human health.

**invertebrates**—an animal that lacks an internal skeleton or backbone such as insects, butterflies, and aquatic species like snails.

**issue**—any unsettled matter that requires a management decision; for example, a Service initiative, opportunity, resource management problem, a threat to the resources of the unit, conflict in uses, public concern, or the presence of an unde-
sirable resource condition (The “Fish and Wildlife Service Manual,” 602 FW 1.5).
lacustrine—of, relating to, or associated with lakes.
metapopulation—a group of spatially separated populations of the same species which interact at some level.
migration—regular extensive, seasonal movements of birds between their breeding regions and their wintering regions; to pass usually periodically from one region or climate to another for feeding or breeding.
migratory birds—birds that follow a seasonal movement from their breeding grounds to their wintering grounds. Waterfowl, shorebirds, raptors, and songbirds are all migratory birds.
monitoring—the process of collecting information to track changes of selected parameters over time
national wildlife refuge—a designated area of land, water, or an interest in land or water within the National Wildlife Refuge System, but does not include coordination areas; a complete listing of all units of the Refuge System is in the current “Annual Report of Lands Under Control of the U.S. Fish and Wildlife Service.”
National Wildlife Refuge System (Refuge System)—various categories of areas administered by the Secretary of the Interior for the conservation of fish and wildlife including species threatened with extinction, all lands, waters, and interests therein administered by the Secretary as wildlife refuges, areas for the protection and conservation of fish and wildlife that are threatened with extinction, wildlife ranges, game ranges, wildlife management areas, and waterfowl production areas.
native species—a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem.
neotropical migrant—a bird species that breeds north of the United States and Mexican border and winters primarily south of this border.
nest success—the percentage of nests that successfully hatch one or more eggs of the total number of nests initiated in an area.
nongovernmental organization—any group that is not a Federal, State, tribal, county, city, town, local, or other governmental entity.
objective—an objective is a concise target statement of what will be achieved, how much will be achieved, when and where it will be achieved, and who is responsible for the work; derived from goals and provide the basis for determining management strategies. Objectives should be attainable and time-specific and should be stated quantitatively to the extent possible. If objectives cannot be stated quantitatively, they may be stated qualitatively (The “Fish and Wildlife Service Manual,” 602 FW 1.5).
patch—an area distinct from that around it; an area distinguished from its surroundings by environmental conditions.
plant community—an assemblage of plant species unique in its composition; occurs in particular locations under particular influences; a reflection or integration of the environmental influences on the site such as soil, temperature, elevation, solar radiation, slope, aspect, and rainfall; denotes a general kind of climax plant community, such as ponderosa pine or bunchgrass.
pref erred alternative—the alternative which the Service believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors.
prescribed fire—a wildland fire originating from a planned ignition to meet specific objectives identified in a written, approved, prescribed fire plan for which NEPA requirements (where applicable) have been met before ignition. These objectives could be hazardous fuel reduction, habitat- or wildlife-oriented, or other objectives in the prescribed fire burn plan.
priority public use—one of six uses authorized by the National Wildlife Refuge System Improvement Act of 1997 to have priority if found to be compatible with a refuge’s purposes. This includes hunting, fishing, wildlife observation, wildlife photography, environmental education, and interpretation.
proposed action—the alternative initially proposed to best achieve the purpose, vision, and goals of a refuge (contributes to the Refuge System mission, addresses the significant issues, and is consistent with principles of sound fish and wildlife management).
public—individuals, organizations, and groups; officials of Federal, State, and local government agencies; Native American tribes; and foreign nations. It may include anyone outside the core planning team. It includes those who may or may not have shown an interest in Service issues and those who do or do not realize that Service decisions may affect them.
public involvement—a process that offers affected and interested individuals and organizations an opportunity to become informed about, and to express their opinions on, Service actions and policies. In the process, these views are studied thoroughly and thoughtful consideration of public views is given in shaping decisions for refuge management.
purpose of the refuge—the purpose of a refuge is specified in or derived from the law, proclamation, Executive order, agreement, public land order, donation document, or administrative memoran-
dum establishing authorization or expanding a refuge, a refuge unit, or a refuge subunit (The “Fish and Wildlife Service Manual,” 602 FW 1.5).

**refuge use**—any activity on a refuge, except administrative or law enforcement activity, carried out by or under the direction of an authorized Service employee.

**resident species**—a species inhabiting a given locality throughout the year; nonmigratory species

**resilience**—the ability to absorb disturbances, to be changed and then to reorganize and still have the same identity (keep the same basic structure and ways of functioning).

**resource of concern**—each plant and/or animal species, species groups, or communities specifically identified as worthy of specific management in refuge purpose(s), System mission, or international, national, regional, state, or ecosystem conservation plans or acts.

**restoration**—management emphasis designed to move ecosystems to desired conditions and processes, such as healthy upland habitats and aquatic systems.

**riparian area or riparian zone**—an area or habitat that is transitional from terrestrial to aquatic ecosystems including streams, lakes, wet areas, and adjacent plant communities and their associated soils that have free water at or near the surface; an area whose components are directly or indirectly attributed to the influence of water; of or relating to a river; specifically applied to ecology, “riparian” describes the land immediately adjoining and directly influenced by streams. For example, riparian vegetation includes all plant life growing on the land adjoining a stream and directly influenced by the stream.

**scoping**—the process of obtaining information from the public for input into the planning process

**shorebird**—any of a suborder (Charadrii) of birds such as plovers or sandpipers that frequent wetlands.

**special use permit**—a permit for special authorization from the refuge manager required for any refuge service, facility, privilege, or product of the soil provided at refuge expense and not usually available to the public through authorizations in Title 50 CFR or other public regulations (Refuge Manual, 5 RM 17.6).

**stepdown management plan**—a plan that provides the details necessary to carry out management strategies identified in the comprehensive conservation plan (The “Fish and Wildlife Service Manual,” 602 FW 1.5).

**strategy**—a specific action, tool, or technique or combination of actions, tools, and techniques used to meet unit objectives (The “Fish and Wildlife Service Manual,” 602 FW 1.5).

**Superfund**—the name given to the environmental program established to address abandoned hazardous waste sites. It is also the name of the fund established by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA).

**suppression**—all the work of extinguishing a fire or confining fire spread.

**surrogate species**—species that represent other species or aspects of the environment. These include umbrella, focal, keystone, indicator, and flagship species. It is a commonly-used scientific term for system-based conservation planning that uses a species as an indicator of landscape habitat and system conditions.

**threatened species, Federal**—species listed under the Endangered Species Act of 1973, as amended, that are likely to become endangered within the foreseeable future throughout all or a significant part of their range.

**threatened species, State**—a plant or animal species likely to become endangered in a particular State within the near future if factors contributing to population decline or habitat degradation or loss continue.

**U.S. Fish and Wildlife Service (Service, USFWS, FWS)**—the principal Federal agency responsible for conserving, protecting, and enhancing fish and wildlife and their habitats for the continuing benefit of the American people. The Service manages the 93-million-acre National Wildlife Refuge System comprised of more than 530 national wildlife refuges and thousands of waterfowl production areas. It also runs 65 national fish hatcheries and 78 ecological service field stations, the agency enforces Federal wildlife laws, manages migratory bird populations, restores national significant fisheries, conserves and restores wildlife habitat such as wetlands, administers the Endangered Species Act, and helps foreign Governments with their conservation efforts. It also oversees the Federal aid program that distributes millions of dollars in excise taxes on fishing and hunting equipment to State wildlife agencies.

**vision statement**—a concise statement of the desired future condition of the planning unit, based primarily on the Refuge System mission, specific refuge purposes, and other relevant mandates (The “Fish and Wildlife Service Manual,” 602 FW 1.5).

**wildfire**—a wildland fire originating from an unplanned ignition caused by lightning, volcanoes, unauthorized and accidental human-caused fires, and escaped prescribed fires.

**wildland fire**—a general term describing any non-structure fire that occurs in the wildland.