

Appendix J

Glossary

alternative – a reasonable way to fix the identified problem or satisfy the stated need (40 CFR 1500.2) [see also *management alternative* below].

amphidromous fish – fish that can migrate from fresh water to the sea, or vice versa, not for the purpose of breeding, but at other times during the life cycle of the fish.

anadromous – fish that spend a large proportion of their life cycle in the ocean and return to freshwater to breed.

aquatic barrier – any obstruction to fish passage.

aquatic – growing in, living in, or dependent upon water.

biological integrity – composition, structure, and function at the genetic, organism, and community levels consistent with natural conditions, and the biological processes that shape genomes, organisms, and communities.

biological or natural diversity – the abundance, variety, and genetic constitution of animals and plants in nature. Also referred to as “biodiversity.”

breeding habitat – habitat used by migratory birds or other animals during the breeding season.

buffer zones – protective land borders around critical habitats or water bodies that reduce runoff and nonpoint source pollution loading; areas created or sustained to lessen the negative effects of land development on animals and plants and their habitats.

candidate species – those species for which the Service has on file sufficient information on biological vulnerability and threats to propose them for listing.

carrying capacity – the size of the population that can be sustained by a given environment.

catadromous fish – fish that spend most of their lives in fresh water but migrate to sea to reproduce.

Categorical Exclusion (CE, CX, CATEX, CATX) – a category of actions that do not individually or cumulatively have a significant effect on the human environment and have been found to have no such effect in procedures adopted by a Federal agency pursuant to the National Environmental Policy Act (40 CFR 1508.4).

CFR – Code of Federal Regulations.

Challenge Grant Cost Share Program – a grant program administered by the Fish and Wildlife Service providing matching funds for projects supporting natural resource education, management, restoration and protection on Service lands, other public lands and on private lands.

community - the area or locality in which a group of people resides and shares the same government.

community type – a particular assemblage of plants and animals, named for the characteristic plants.

compatible use – an allowed use that will not materially interfere with, or detract from, the purposes for which the unit was established (Service Manual 602 FW 1.4).

compatibility determination – a compatibility determination is required for a wildlife-dependant recreational use or any other public use of a refuge. A compatible use is one which, in the sound professional judgement of the Refuge Manager, will not materially interfere with or detract from fulfillment of the Refuge System Mission or refuge purpose(s)

Comprehensive Conservation Plan (CCP) – a document that describes the desired future conditions of a refuge or planning unit and provides long-range guidance and management direction to achieve the purposes of the refuge, help fulfill the mission of the System, maintain and, where appropriate, restore the biological integrity, diversity, and environmental health of each refuge and the System, and meet other mandates.

concern – see *issue*.

conservation – the management of natural resources to prevent loss or waste. Management actions may include preservation, restoration, and enhancement.

conservation agreements – written agreements reached among two or more parties for the purpose of ensuring the survival and welfare of unlisted species of fish and wildlife and/or their habitats, or to achieve other specified conservation goals. Participants voluntarily commit to implementing specific actions that will remove or reduce the threats to these species.

conservation easement – a legal agreement between a landowner and a land trust (a private, nonprofit conservation organization) or government agency that permanently limits a property's uses in order to protect its conservation values.

cooperative agreement – the legal instrument used when the principal purpose of the transaction is the transfer of money, property, services or anything of value to a recipient in order to accomplish a public purpose authorized by Federal statute and substantial involvement between the Service and the recipient is anticipated.

cultural resources – evidence of historic or prehistoric human activity, such as buildings, artifacts, archaeological sites, documents, or oral or written history.

cultural resource inventory – a professionally conducted study designed to locate and evaluate evidence of cultural resources present within a defined geographic area. Inventories may involve various levels, including background literature search, comprehensive field examination to identify all exposed physical manifestations of cultural resources, or sample inventory to project site distribution and density over a larger area. Evaluation of identified cultural resources to determine eligibility for the National Register follows the criteria found in 36 CFR 60.4 (Service Manual 614 FW 1.7).

cultural resource overview – a comprehensive document prepared for a field office that discusses, among other things, its prehistory and cultural history, the nature and extent of known cultural resources, previous research, management objectives, resource management conflicts or issues, and a general statement on how program objectives should be met and conflicts resolved. An overview should reference or incorporate

information from a field offices background or literature search described in Section VIII. of the Cultural Resource Management Handbook (Service Manual 614 FW 1.7).

database – a collection of data arranged for ease and speed of analysis and retrieval, usually computerized.

diadromous – fish that migrate from freshwater to saltwater or the reverse: a generic term that includes anadromous, catadromous and amphidromous fishes.

digitizing – the process of converting information from paper maps into geographically referenced electronic files for a geographic information system (GIS).

easement – an agreement by which a landowner gives up or sells one of the rights on his/her property. For example, a landowner may donate a right of way across his/her property to allow community members access.

ecosystem – 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 vary in their sizes and ecological complexity.

ecotourism – a type of tourism that maintains and preserves natural resources as a basis for promoting economic growth and development resulting from visitation to an area.

ecosystem approach – a way of looking at socio-economic and environmental information based on ecosystem boundaries, rather than town, city, or county boundaries.

ecosystem-based management – an approach to making decisions based on the characteristics of the ecosystem in which a person or thing belongs. This concept takes into consideration interactions between the plants, animals, and physical characteristics of the environment when making decisions about land use or living resource issues.

ecosystem services - the benefits human populations derive, directly or indirectly, from ecosystem functions (e.g., gas regulation, disturbance regulation, soil formation, pollination, raw materials).

emergent wetland – wetlands dominated by erect, rooted, herbaceous plants.

endangered species – a federally protected species which is in danger of extinction throughout all or a significant portion of its range.

environmental education – education aimed at producing a citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to help solve these problems, and motivated to work toward their solution (Stapp et al. 1969).

Environmental Assessment (EA) – A concise public document, prepared in compliance with the National Environmental Policy Act, that briefly discusses the purpose and need for an action, alternatives to such action, and provides sufficient evidence and analysis of impacts to determine whether to prepare an environmental impact statement or finding of no significant impact (40 CFR 1508.9).

Environmental Impact Statement (EIS) – A detailed written statement required by section 102(2)(C) of the National Environmental Policy Act, analyzing the environmental impacts of a proposed action, adverse effects of the project that cannot be avoided, alternative courses of action, short-term uses of the

environment versus the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitment of resources (40 CFR 1508.11).

estuaries – deepwater tidal habitats and adjacent tidal wetlands that are usually semi-enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land.

estuarine wetlands – "The Estuarine system consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semienclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land." (Cowardin et al. 1979)

exemplary community type – an outstanding example of a particular community type.

extirpated – no longer occurring in a given geographic area.

federal land – public land owned by the Federal government, including lands such as National Forests, National Parks and National Wildlife Refuges.

federally listed species – a species listed under the federal Endangered Species Act of 1973, as amended, either as endangered, threatened or species at risk (formerly candidate species).

Finding of No Significant Impact (FONSI) – A document prepared in compliance with the National Environmental Policy Act, supported by an environmental assessment, that briefly presents why a Federal action will have no significant effect on the human environment and for which an environmental impact statement, therefore, will not be prepared (40 CFR 1508.13).

forbs – A flowering plant, excluding grasses, sedges, and rushes, that does not have a woody stem and dies back to the ground at the end of the growing season.

forested land – land dominated by trees. For the purposes of the impacts analysis in this document, all forested land was assumed to have the potential to be occasionally harvested, and forested land owned by timber companies was assumed to be harvested on a more intensive, regular schedule.

forested wetlands – wetlands dominated by trees.

geographic information system (GIS) – a computerized system used to compile, store, analyze and display geographically referenced information. Can be used to overlay information layers containing the distributions of a variety of biological and physical features.

goal – descriptive, open-ended, and often broad statement of desired future conditions that conveys a purpose but does not define measurable units.

grant agreement – the legal instrument used when the principal purpose of the transaction is the transfer of money, property, services or anything of value to a recipient in order to accomplish a public purpose of support or stimulation authorized by Federal statute and substantial involvement between the Service and the recipient is not anticipated.

habitat fragmentation – breaking up of a specific habitat into smaller unconnected areas. A habitat area that is too small may not provide enough space to maintain a breeding population of the species in question.

habitat conservation – the protection of an animal or plant's habitat to ensure that the use of that habitat by the animal or plant is not altered or reduced.

habitat – the place where a particular type of plant or animal lives. An organism's habitat must provide all of the basic requirements for life and should be free of harmful contaminants.

hydrologic or flow regime – characteristic fluctuations in river flows.

Integrated Pest Management (IPM) - sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks.

interjurisdictional fish – populations of fish that are managed by two or more states or national or tribal governments because of the scope of their geographic distributions or migrations.

interpretive facilities – structures that provides information about an event, place or thing by a variety of means including printed materials, audiovisuals or multimedia materials. Examples of these would be kiosks which offer printed materials and audiovisuals, signs and trailheads.

interpretive materials – any tool used to provide or clarify information, explain events or things, or serve to increase awareness and understanding of the events or things. Examples of these would be: (1) printed materials such as brochures, maps or curriculum materials; (2) audio/visual materials such as videotapes, films, slides, or audio tapes; and (3) interactive multimedia materials, such as cd-rom and other computer technology.

invasive exotic species – non-native species which have been introduced into an ecosystem, and, because of their aggressive growth habits and lack of natural predators, displace native species.

grassroots conservation organization – any group of concerned citizens who come together to actively address a conservation need.

habitat macrosites - an area important because of the presence of rare species, ecological communities, and functioning ecosystems.

issue – any unsettled matter that requires a management decision; e.g., a Service initiative, an opportunity, a management problem, a threat to the resources of the unit, a conflict in uses, a public concerns, or the presence of an undesirable resource condition. Issues should be documented, described, and analyzed in the CCP even if resolution cannot be accomplished during the planning process (Service Manual 602 FW 1.4). See also: *key issue*.

key issue – an issue meeting the following three criteria:

1. Falls within the jurisdiction of the Service;
2. Can be addressed by a reasonable range of alternatives;
3. Influences the outcome of the project.

land trusts – organizations dedicated to conserving land by purchasing land, receiving donations of lands, or accepting conservation easements from landowners.

limiting factor – an environmental limitation that prevents further population growth.

local agencies – generally referring to municipal governments, regional planning commissions or conservation groups.

long term protection – mechanisms such as fee title acquisition, conservation easements or binding agreements with landowners that ensure land use and land management practices will remain compatible with maintenance of the species population at the site.

management alternative – a set of objectives and the strategies needed to accomplish each objective (Service Manual 602 FW 1.4).

management concern – see *issue*.

management opportunity – see *issue*.

management plan – a plan that guides future land management practices on a tract of land. In the context of this environmental impact statement, management plans would be designed to produce additional wildlife habitat along with the primary products, such as timber or agricultural crops. See cooperative agreement.

management strategy – a general approach to meet unit objectives. A strategy may be broad, or it may be detailed enough to guide implementation through specific actions, tasks, and projects (Service Manual 602 FW 1.4).

migratory game birds - birds regulated under the Migratory Bird Treaty Act and state laws, that are legally hunted, includes ducks, geese, woodcock, rails.

minimum tool rule - Apply only the minimum impact policy, device, force, regulation, or practice to bring about a desired result. Achieve results using the most “light-handed” approach (Hendee, 1990).

mission statement – succinct statement of the unit's purpose and reason for being (Region 7 Planning Staff).

mitigation – actions taken to compensate for the negative effects of a particular project. Wetland mitigation usually takes the form of restoration or enhancement of a previously damaged wetland or creation of a new wetland.

National Environmental Policy Act of 1969 (NEPA) – requires all agencies, including the Service, to examine the environmental impacts of their actions, incorporate environmental information, and use public participation in the planning and implementation of all actions. Federal agencies must integrate NEPA with other planning requirements, and prepare appropriate NEPA documents to facilitate better environmental decision making (from 40 CFR 1500).

National Wildlife Refuge (Refuge) – “A designated area of land, water, or an interest in land or water within the System, but does not include Coordination Areas.” Find a complete listing of all units of the System in the current *Annual Report of Lands Under Control of the U.S. Fish and Wildlife Service*.

National Wildlife Refuge System (Refuge System) – all lands and waters and interests therein administered by the Service as wildlife refuges, wildlife ranges, wildlife management areas, waterfowl production areas, and other areas for the protection and conservation of fish and wildlife, including those that are threatened with extinction.

National Wildlife Refuge System Mission (mission) – “The mission of the System is to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration

of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.”

native plant – a plant that has grown in the region since the last glaciation and occurred before European settlement.

non-consumptive, wildlife-oriented recreation – photographing or observing plants, fish and other wildlife.

non-point source pollution – nutrients or toxic substances that enter water from dispersed and uncontrolled sites.

nonforested wetlands – wetlands dominated by shrubs or emergent vegetation.

Notice of Intent (NOI) – a notice that an environmental impact statement will be prepared and considered (40 CFR 1508.22). Published in the Federal Register.

Objective – a concise statement of what we want to achieve, how much we want to achieve, when and where we want to achieve it, and who is responsible for the work. Objectives derive from goals and provide the basis for determining strategies, monitoring refuge accomplishments, and evaluating the success of strategies. Make objectives attainable, time-specific, and measurable.

occurrence site – a discrete area where a population of a rare species lives or a rare plant community type grows.

old field – an area that was formerly cultivated or grazed and where woody vegetation has begun to invade. If left undisturbed, it will eventually succeed into a forest. Many old fields occur at sites marginally suitable for crop production or pasturing. Old fields are highly variable in the Northeast, depending on soil, land use history, and management.

Open Marsh Water Management (OMWM) - a mosquito control technique that improves habitat conditions in salt marshes for mosquito-eating fish by creating ponds that will maintain the fish between lunar tides.

palustrine wetlands – "The Palustrine system includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0%." (Cowardin et al. 1979)

Partners for Wildlife Program – a voluntary habitat restoration program undertaken by the Fish and Wildlife Service in cooperation with other governmental agencies, public and private organizations, and private landowners to improve and protect fish and wildlife habitat on private lands while leaving the land in private ownership.

partnership – a contract or agreement entered into by two or more individuals, groups of individuals, organizations or agencies in which each agrees to furnish a part of the capital or some in-kind service, i.e., labor, for a mutually beneficial enterprise.

population monitoring – assessments of the characteristics of populations to ascertain their status and establish trends related to their abundance, condition, distribution, or other characteristics.

prescribed fire – the application of fire to wildland fuels to achieve identified land use objectives (Service

Manual 621 FW 1.7), either from natural or intentional ignition.

priority public uses – see *wildlife-dependant recreational uses*.

private land – land that is owned by a private individual, group of individuals, or non– governmental organization.

private landowner – any individual, group of individuals or non–governmental organization that owns land.

private organization – any non–governmental organization.

Proposed Action – activities for which an Environmental Assessment is being written; the alternative containing the actions and strategies recommended by the planning team. The proposed action is, for all practical purposes, the draft CCP for the refuge.

protection – mechanisms such as fee title acquisition, conservation easements or binding agreements with landowners that ensure land use and land management practices will remain compatible with maintenance of the species population at the site.

public – individuals, organizations, and groups; officials of Federal, State, and local government agencies; Indian tribes; and foreign nations. It may include anyone outside the core planning team. It includes those who may or may not have indicated an interest in the Service issues and those who do or do not realize that Service decisions may affect them.

public involvement – a process that offers impacted 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.

public involvement plan – broad long term guidance for involving the public in the comprehensive planning process.

public land – land that is owned by the local, state, or Federal government.

rare species – species identified in Appendix 3–6 as Species of Special Emphasis due to their uncommon occurrence within the watershed.

rare community types – plant community types classified as rare by any of the four state Natural Heritage Programs. As used in this environmental impact statement, is inclusive of the exemplary community types. The types are listed in Appendix 3-4.

Record of Decision (ROD) – a concise public record of decision prepared by the Federal agency, pursuant to NEPA, that contains a statement of the decision, identification of all alternatives considered, identification of the environmentally preferable alternative, a statement as to whether all practical means to avoid or minimize environmental harm from the alternative selected have been adopted (and if not, why they were not), and a summary of monitoring and enforcement where applicable for any mitigat CFR 1505.2).

refuge goals – descriptive, open-ended and often broad statements of desired future conditions that convey a purpose but do not define measurable units (Writing Refuge Management Goals and Objectives: A Handbook).

refuge purposes – the purposes specified in or derived from the law, proclamation, executive order, agreement, public land order, donation document, or administrative memorandum establishing, authorizing, or expanding a refuge, a refuge unit, or refuge subunit, and any subsequent modification of the original establishing authority for additional conservation purposes (Service Manual 602 FW 1.4).

refuge lands – those lands in which the Service holds full interest in fee title, or partial interest such as easements.

Refuge Operating Needs System (RONS) – the Refuge Operating Needs System is a national database which contains the unfunded operational needs of each refuge. We include projects required to implement approved plans, and meet goals, objectives, and legal mandates.

restoration – the artificial manipulation of a habitat to restore it to something close to its natural state. Involves taking a degraded grassland and re-establishing habitat for native plants and animals. Restoration usually involves the planting of native grasses and forbs, and may include shrub removal and prescribed burning.

runoff – water from rain, melted snow, or agricultural or landscape irrigation that flows over the land surface into a water body.

Service presence – the existence of the Service through its programs and facilities which it directs or shares with other organizations; the public awareness of the Service as a sole or cooperative provider of programs and facilities.

species of concern – Species present in the watershed for whom the Refuge has a special management interest. The following criteria were used to identify “species of concern”:

1. Federally listed as threatened or endangered;
2. migratory bird, especially declining species, Neotropical migrants, colonial waterbirds, shorebirds, or waterfowl;
3. marine mammal;
4. sea turtle;
5. interjurisdictional fish;
6. State-listed as threatened, endangered, or special concern..

state land – public land owned by a state such as state parks or state wildlife management areas.

step-down management plans – step-down management plans describe management strategies and implementation schedules. Step-down management plans are a series of plans dealing with specific management subjects (e.g., croplands, wilderness, and fire) (Service Manual 602 FW 1.4).

stopover habitat – habitat used during bird migration for rest and feeding.

strategy – a specific action, tool, technique, or combination of actions, tools, and techniques used to meet unit objectives.

threatened species – a federally protected species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

tributary – a stream or river that flows into a larger stream, river or lake.

trust resource – one that through law or administrative act is held in trust for the people by the government. A federal trust resource is one for which trust responsibility is given in part to the federal government through federal legislation or administrative act. Generally, federal trust resources are those considered to be of national or international importance no matter where they occur, such as endangered species and species such as migratory birds and fish that regularly move across state lines. In addition to species, trust resources include cultural resources protected through federal historic preservation laws, nationally important and threatened habitats, notably wetlands, navigable waters, and public lands such as state parks and National Wildlife Refuges.

unfragmented habitat – large blocks of unbroken habitat of a particular type.

unit objective – desired conditions which must be accomplished to realize a desired outcome. Objectives are the basis for determining management strategies, monitoring refuge accomplishments, and measuring the success of the strategies. Objectives should be attainable and time-specific and may be stated quantitatively or qualitatively (Service Manual 602 FW 1.4).

universally accessible – a universally accessible recreation site is designed to accommodate people with physical disabilities. Interpretive materials at such a sight would be accessible to the visually impaired.

upland – dry ground; other than wetlands.

U.S. Fish and Wildlife Service Mission – our mission is to work with others to “conserve, protect, and enhance fish and wildlife, and their habitat for the continuing benefit of the American people.”

vernal pool – depressions holding water for a temporary period in the spring and used by a variety of amphibians for egg laying.

vision statement – concise statement of what the unit could be in the next 10 to 15 years (Region 7 Planning Staff).

visitor center – a permanently staffed building offering exhibits and interpretive information to the visiting public. Some visitor centers are co-located with refuge offices, other include additional facilities such as classrooms or wildlife viewing areas.

visitor contact station – compared to a visitor center, a contact station is a smaller facility which may not be permanently staffed.

watchable wildlife – all wildlife is watchable. A watchable wildlife program is a strategy to help maintain viable populations of all native fish and wildlife species by building an effective, well-informed constituency for conservation. Watchable wildlife programs are tools by which wildlife conservation goals can be met while at the same time fulfilling public demand for wildlife recreational activities (other than sport hunting, trapping or sport fishing).

watershed – the geographic area within which water drains into a particular river, stream or body of water. A watershed includes both the land and the body of water into which the land drains.

wet meadow – meadows located in moist low-lying areas, most often dominated by large colonies of reed

canary grass. They are often created by collapsed beaver dams and exposed old pond bottoms. Salt marsh meadows are subject to daily coastal tides.

wetlands – The U.S. Fish and Wildlife Service's definition of wetlands states that "Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water." (Cowardin et al 1979)

wilderness - The legal definition is found in the Wilderness Act of 1964 Section 2c (P.L. 88-577): "A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain." This legal definition places wilderness on the "untrammelled" or "primeval" end of the environmental modification spectrum. Wilderness is roadless lands, legally classified as component areas of the National Wilderness Preservation System, and managed so as to protect its qualities of naturalness, solitude and opportunity for primitive types of recreation (Hendee, 1990).

wilderness management - Government and citizen activity to identify–within the constraints of the Wilderness Act–goals and objectives for classified wildernesses and the planning, implementation, and administration of policies and management actions to achieve them. Involves the application of guidelines and principles to achieve established goals and objectives, including management of human use and influences to preserve naturalness and solitude (Hendee, 1990).

wildlife-dependent recreational use – "A use of a refuge involving hunting, fishing, wildlife observation and photography, or environmental education and interpretation." These are the six priority public uses of the System as established in the National Wildlife Refuge System Administration Act, as amended. Wildlife-dependent recreational uses, other than the six priority public uses, are those that depend on the presence of wildlife. We also will consider these other uses in the preparation of refuge CCPs, however, the six priority public uses always will take precedence.

wildlife management – the practice of manipulating wildlife populations, either directly through regulating the numbers, ages, and sex ratios harvested, or indirectly by providing favorable habitat conditions and alleviating limiting factors.

