Acronyms and Glossary



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ACRONYMS

ACC Aquinnah Cultural Center
ACJV Atlantic Coast Joint Venture
AHWP Annual Habitat Work Plan

ARPA Archaeological Resources Protection Act

BBS Breeding Bird Survey
BCR Bird Conservation Region
BMP best management practice

BP before present

BWSC Massachusetts Department of Environmental Protection,

Bureau of Waste Site Cleanup

CCP Comprehensive Conservation Plan CEQ Council on Environmental Quality

CERCLA Comprehensive Environmental Response, Compensation and

Liability Act

CFR Code of Federal Regulations
DDT dichlorodiphenyltrichloroethane

DOD Department of Defense
EA Environmental Assessment
EIS Environmental Impact Statement
EPA Environmental Protection Agency

ESA Endangered Species Act

FIFRA Federal Insecticide, Fungicide and Rodenticide Act

FONSI Finding of No Significant Impact HMP Habitat Management Plan IMP inventory and monitoring plan

IPCC Intergovernmental Panel on Climate Change

IPM integrated pest management LGM last glacial maximum

LIDAR Light Detection and Ranging

MA Massachusetts

MA CWCS Massachusetts Comprhensive Wildlife Conservation Strategy
MA DEP Massachusetts Department of Environmental Protection

MA DFG Massachusetts Department of Fish and Game
MA DFW Massachusetts Division of Fisheries and Wildlife
MA SHPO Massachusetts State Historical Preservation Office

MANEM Mid-Atlantic / New England / Maritimes

MassWildlife Massachusetts Division of Fisheries and Wildlife

MEC Munitions and Explosives of Concern MHC Massachusetts Historical Commission MOU Memorandum of Understanding

NAAQS National Ambient Air Quality Standards
NABCI North American Bird Conservation Initiative

NAC North Atlantic Coast

NAWCP North American Waterbird Conservation Plan

NAWMP North American Waterfowl Management Plan NECIA Northeast Climate Impacts Assessment

NED National Elevation Data

NEPA National Environmental Policy Act

NHRC National State Agency Herpetological Conservation Report

NMFS National Marine Fisheries Service

NWPS National Wilderness Preservaiton System

NWR National Wildlife Refuge

NWRS National Wildlife Refuge System

PARC Partners in Amphibian and Reptile Conservation

PIF Partners in Flight
PL Public Law

QA/QC quality assurance / quality control

RONS Refuge Operating Needs SAV submerged aquatic vegetation

SEANet Seabird Ecological Assessment Network
SEBS Supplemental Environmental Baseline Survey
SGCN species of greatest conservation need

Sea Level Affecting Marshes Model

SWG State Wildlife Grant Program
TNC The Nature Conservancy
TTOR The Trustees of Reservations

TWS The Wildlife Society USC United States Code

SLAMM

USFWS United States Fish and Wildlife Service

USGS United States Geological Survey

UST underground storage tank
UXO unexploded ordnance
WIA Wilderness Inventory Area
WSA Wilderness Study Area

Glossary

accessibility the state or quality of being easily approached or entered, particularly as it relates

to complying with the Americans With Disabilities Act

adaptive resource management

A process in which projects are implemented within a framework of scientifically driven experiments to test predictions and assumptions outlined within the comprehensive conservation plan. The analysis of the outcome of project implementation helps managers determine whether current management should continue as is, or whether they should modify it to achieve the desired conditions.

agricultural land nonforested land that is now or recently in orchards, pastures, crops, or other farm

products

alternative a reasonable way to fix an identified problem or satisfy a stated need [40 CFR

1500.2]

anadromous fish from the Greek, literally "up-running"; fish that spend a large portion of their life

cycle in the ocean and return to freshwater to breed

appropriate use a proposed or existing use on a refuge that meets at least one of the following three

conditions:

1. the use is a wildlife-dependent one;

 the use contributes to fulfilling the refuge purpose(s), the System mission, or goals or objectives described in a refuge management plan approved after October 9, 1997, the date the National Wildlife Refuge System Improvement Act was signed into law; or

3. the use has been determined to be appropriate as specified in section 1.11

of the act.

4.

aquatic growing in, living in, or dependent upon water

barrens a colloquial name given to habitats with sparse vegetation or low agricultural

productivity

basin the land surrounding and draining into a water body

benthic living at, in, or associated with structures on the bottom of a body of water

best management practices

land management practices that produce desired results; usually describing forestry or agricultural practices effective in reducing non-point source pollution, like

reseeding skidder trails or not storing manure in a flood plain

biological diversity or

biodiversity

the variety of life and its processes and includes the variety of living organisms, the genetic differences among them, and the 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

bird conservation region regions that encompass landscapes having similar bird communities, habitats, and

resource issues; used as an administrative tool to aid in the conservation of birds

and their habitats

bog a poorly drained area rich in plant residues, usually surrounded by an area of open

water, and having characteristic flora; a type of peatland

breeding habitat candidate species

habitat used by migratory birds or other animals during the breeding season species for which we have sufficient information on file about their biological vulnerability and threats to propose listing them as threatened or endangered

categorical exclusion [CE, CX, CATEX, CATX]

pursuant to the National Environmental Policy Act (NEPA), a category of Federal agency actions that do not individually or cumulatively have a significant effect on the human environment [40 CFR 1508.4]

CFR the Code of Federal Regulations

community the locality in which a group of people resides and shares the same government

community type a particular assemblage of plants and animals, named for its dominant characteristic

compatible use "The term 'compatible use' means a wildlife-dependent recreational use or any

other use of a refuge that, in the sound professional judgment of the Director, will not materially interfere with or detract from the fulfillment of the mission of the System or the purposes of the refuge."—National Wildlife Refuge System

Improvement Act of 1997 [Public Law 105-57; 111 Stat. 1253]

compatibility determination

a required determination for wildlife-dependent recreational uses or any other

public uses of a refuge

Comprehensive Conservation Plan mandated by the Improvement Act, a document that provides a description of the desired future conditions and long-range guidance for the project leader to accomplish purposes of the refuge system and the refuge. CCPs establish management direction to achieve refuge purposes. [P.L. 105-57; FWS Manual 602

FW 1.4]

conifer a tree or shrub in the phylum Gymnospermae whose seeds are borne in woody

cones. There are 500–600 species of living conifers

conservation managing natural resources to prevent loss or degradation; includes preservation,

restoration, and enhancement

critical habitat according to U.S. Federal law, the ecosystems upon which endangered and

threatened species depend

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

computerized

degradation the loss of native species and processes due to human activities such that only

certain components of the original biodiversity persist, often including significantly

altered natural communities

disturbance any relatively discrete event in time that disrupts ecosystem, community, or

population structure and changes resources, substrate availability, or the physical

environment

division an administrative unit of the refuge defined by a geographic feature, usually a river

or other body of water see biological integrity

early successional species, assemblages, structures, and processes associated with pioneering natural

communities that have recently experienced significant disturbance

ecological integrity see biological integrity

ecological processes a complex mix of interactions among animals, plants, and their environment that

ensures maintenance of an ecosystem's full range of biodiversity. Examples include population and predator-prey dynamics, pollination and seed dispersal, nutrient

cycling, migration, and dispersal

ecoregion a territory defined by a combination of biological, social, and geographic criteria,

rather than geopolitical considerations; generally, a system of related,

interconnected ecosystems

ecosystem a natural community of organisms interacting with its physical environment,

regarded as a unit

emergent wetland wetlands dominated by erect, rooted, herbaceous plants

endangered species a Federal- or State-listed protected species in danger of extinction throughout all

or a significant portion of its range

endemic a species or race native to a particular place and found only there

Environmental Assessment (EA) a public document that discusses the purpose and need for an action, its

alternatives, and provides sufficient evidence and analysis of its impacts to determine whether to prepare an environmental impact statement or a finding of

no significant impact [40 CFR 1508.9]

environmental education curriculum-based education aimed at producing a citizenry that is knowledgeable

about the biophysical environment and its associated problems, aware of how to

help solve those problems, and motivated to work toward solving them

environmental health the 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

Environmental Impact

Statement

(EIS) a detailed, written analysis of 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 ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from land

extinction the termination of any lineage of organisms, from subspecies to species and higher

> taxonomic categories from genera to phyla. Extinction can be local, in which one or more populations of a species or other unit vanish but others survive elsewhere, or

total (global), in which all the populations vanish

exotic species a species that is not native to an area and has been introduced intentionally or

unintentionally by humans; not all exotics become successfully established

status of a species or population that has completely vanished from a given area extirpated

but that continues to exist in some other location

Federal land public land owned by the Federal Government, including national forests, national

parks, and national wildlife refuges

Federal-listed species a species listed either as endangered, threatened, or a species at risk (formerly, a

"candidate species") under the Endangered Species Act of 1973, as amended

Federal-recognized Native

American tribe

A group of Native American Indians recognized by the United States as an Indian Tribe. This recognition establishes a tribe as an entity with the capacity to engage in government-to-government relations with the United States, or individual states, and also as one eligible to receive federal services. Federal recognition is established as a result of historical and continued existence of a tribal government; by Executive Order or Legislation; and through the federal recognition process

established by Congress.

Finding of No Significant

Impact

(FONSI) supported by an environmental assessment, a document 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]

the characteristic frequency, intensity, and spatial distribution of natural fires fire regime

within a given ecoregion or habitat

flat or nearly fl at land that may be submerged by floodwaters; a plain built up or floodplain

in the process of being built up by stream deposition

forbs flowering plants (excluding grasses, sedges, and rushes) that do not have a woody

stem and die back to the ground at the end of the growing season

forest land dominated by trees

fragmentation the disruption of extensive habitats into isolated and small patches. Fragmentation

has two negative components for biota: the loss of total habitat area; and, the

creation of smaller, more isolated patches of habitat remaining.

glacial till unsorted sediments directly deposited by a glacier, typically containing a mixture of

clay, sand, gravel and boulders

grassland a habitat type with landscapes dominated by grasses

groundwater water in the ground that is in the zone of saturation, from which wells and springs

and groundwater runoff are supplied

habitat fragmentation the 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 protecting an animal or plant 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.

herpetofauna / herpetological

reptiles and amphibians; relating to reptiles and/or amphibians

historic conditions the composition, structure and functioning of ecosystems resulting from natural

processes that we believe, based on sound professional judgment, were present

prior to substantial human-related changes to the landscape

hydrology the science of waters of the earth: their occurrences, distributions, and circulations;

their physical and chemical properties; and their reactions with the environment,

including living beings

impoundment a body of water, such as a pond, confined by a dam, dike, floodgate, or other barrier,

that is used to collect and store water for future use

indigenous native to an area

indigenous species a species that, other than as a result of an introduction, historically occurred or

currently occurs in a particular ecosystem

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.

interpretive facilities

structures that provide information about an event, place, or thing by a variety of means, including printed, audiovisual, or multimedia materials [e.g., kiosks that offer printed materials and audiovisuals, signs, and trail heads.]

interpretive materials

any tool used to provide or clarify information, explain events or things, or increase awareness and understanding of the events or things [e.g., printed materials like brochures, maps or curriculum materials; audio/visual materials like video and audio tapes, films, or slides; and, interactive multimedia materials, CD-ROM or other computer technology.]

intertidal

the area of land along a shoreline that is exposed to air during low tide but covered by water during high tide

invasive species

an alien species whose introduction causes or is likely to cause economic or environmental harm or harm to human health

invertebrate

any animal lacking a backbone or bony segment that encloses the central nerve

cord

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 concern, or the presence of an undesirable resource condition]. A CCP should document, describe, and analyze issues even if they cannot be resolved during the planning process (FWS Manual 602 FW 1.4).]

kettle hole

a generally circular hollow or depression in an outwash plain or moraine, believed to have formed where a large block of subsurface ice has melted

landform

the physical shape of the land reflecting geologic structure and processes of geomorphology that have sculpted the structure

landscape

an aggregate of landforms, together with its biological communities

local agencies

 $generally, \, municipal \,\, governments, \, regional \,\, planning \,\, commissions, \, or \,\, conservation$

groups

management alternative

a set of objectives and the strategies needed to accomplish each objective [FWS

Manual 602 FW 1.4]

management plan

a plan that guides future land management practices on a tract

management strategy

a general approach to meeting unit objectives. A strategy may be broad, or it may be detailed enough to guide implementation through specific actions, tasks, and

projects (FWS Manual 602 FW 1.4).

maritime relating to the ocean

Memorandum of Understanding

(MOU) a document that describes an agreement between partners where a set of expectations, actions or commitments are agreed upon

migratory birds species that generally migrate south each fall from breeding grounds to their

wintering grounds and vice versa in the spring

mission statement a succinct statement of the purpose for which the unit was established; its reason

for being

mitigation actions to compensate for the negative effects of a particular project [e.g., wetland

mitigation usually restores or enhances a previously damaged wetland or creates a

new wetland.]

monitoring the process of collecting information to track changes of selected parameters over

time

moraine a mass or ridge of earth scraped up by ice and deposited at the edge or end of a

glacier

National Environmental Policy Act of 1969

(NEPA) requires all Federal agencies to examine the environmental impacts of their actions, incorporate environmental information, and use public participation in planning and implementing environmental actions [Federal agencies must integrate NEPA with other planning requirements, and prepare appropriate NEPA documents

to facilitate better environmental decision-making (40 CFR 1500).]

National Wildlife Refuge Complex (Complex) National Wildlife Refuge System (System) an internal Service administrative linking of refuge units closely related by their purposes, goals, ecosystem, or geopolitical boundaries

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

native a species that, other than as a result of an introduction, historically occurred or

currently occurs in a particular ecosystem

native plant a plant that has grown in the region since the last glaciation, and occurred before

European settlement

natural disturbance event any natural event that significantly alters the structure, composition, or dynamics

of a natural community: e.g., floods, fires, and storms

non-native species see exotic species

Notice of Intent (NOI) an announcement we publish in the Federal Register that we will prepare and

review an environmental impact statement [40 CFR 1508.22]

Acronyms and Glossary

objective A concise, quantitative (where possible) target statement of what a plan will

achieve. The planners derive objectives from goals and they provide the basis for determining management strategies. Objectives should be attainable and time-

specific.

obligate species a species that must have access to a particular habitat type to persist

outwash plain the plain formed by deposits from a stream or river originating from the melting of

glacial ice that are distributed over a considerable area; generally coarser, heavier $% \left(1\right) =\left(1\right) \left(1\right) \left($

material is deposited nearer the ice and finer material carried further away

palustrine wetlands 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 less than 0.5 ppt (parts per thousand)

partnership a contract or agreement among two or more individuals, groups of individuals,

organizations, or agencies, in which each agrees to furnish a part of the capital or

some service in kind (e.g., labor) for a mutually beneficial enterprise

payment in lieu of taxes see Revenue Sharing Act of 1935, Chapter One, Legal Context

plant community a distinct assemblage of plants that develops on sites characterized by particular

climates and soils

preferred alternative The alternative determined by the decision-maker that best achieves the refuge's

purpose, vision, and goals; contributes to the Refuge System mission; addresses the significant issues; and is consistent with principles of sound fish and wildlife

management.

prescribed fire or burns the application of fire to wildland fuels, either by natural or intentional ignition, to

achieve identified land use objectives [FWS Manual 621 FW 1.7]

protection mechanisms that ensure land use and land management practices will remain

compatible with maintaining species populations at a site

public individuals, organizations, and non-government groups; officials of Federal, State,

and local government agencies; Native American tribes, and foreign nations

public involvement offering an opportunity to interested individuals and organizations whom our actions

or policies may affect to become informed; soliciting their opinions. We thoroughly study public input, and give it thoughtful consideration in shaping

decisions about managing refuges.

rare species species species identified for special management emphasis because of their uncommon

occurrence

Record of Decision

(ROD) a concise public record of a decision by a Federal agency pursuant to NEPA. A ROD includes

- the decision:
- all the alternatives considered:
- the environmentally preferable alternative;
- a summary of monitoring and enforcement, where applicable, for any
- mitigation; and,
- whether all practical means have been adopted to avoid or minimize environmental harm from the alternative selected (or if not, why not)

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 lands

lands in which the Service holds full interest in fee title or partial interest like an easement

Refuge Operating Needs System (RONS) 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.

refuge purposes

"The terms 'purposes of the refuge' and 'purposes of each refuge' mean 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, refuge unit, or refuge subunit."—National Wildlife Refuge System Improvement Act of 1997

relatively intact

the conservation status category indicating the least possible disruption of ecosystem processes. Natural communities are largely intact, with species and ecosystem processes occurring within their natural ranges of variation.

relatively stable

the conservation status category between vulnerable and relatively intact in which extensive areas of intact habitat remain, but local species declines and disruptions of ecological processes have occurred

riparian

referring to the interface between freshwater habitats and the terrestrial landscape

riparian habitat

habitat along the banks of a stream or river

runoff

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

scale

the magnitude of a region or process. Refers to both spatial size—for example, a (relatively small-scale) patch or a (relatively large-scale) landscape; and a temporal rate—for example, (relatively rapid) ecological succession or (relatively slow) evolutionary speciation

Acronyms and Glossary

Service presence Service programs and facilities that it directs or shares with other organizations;

public awareness of the Service as a sole or cooperative provider of programs and

facilities

shrublands habitats dominated by various species of shrubs

socioeconomic social and economic conditions and their interplay

species of concern species not Federal-listed as threatened or endangered, but about which we or

our partners are concerned

species richness a simple measure of species diversity calculated as the total number of species in a

habitat or community

staging area habitat used during bird migration for rest, feeding and congregating

stakeholder individuals, groups, organizations or agencies representing a broad spectrum of

interests offering business, tourism, conservation, recreation, and historical

perspectives.

State agencies natural resource agencies of State governments

State-listed species see "Federal-listed species"

status assessment a compilation of biological data and a description of past, present and likely future

threats to a species

step-down management

plan

a plan for dealing with specific refuge management subjects, strategies, and

schedules, e.g., cropland, wilderness, and fire [FWS Manual 602 FW 1.4]

strategy a specific action, tool, technique, or combination of actions, tools, and techniques

for meeting unit objectives

submerged aquatic

vegetation

(SAV) plants that live under water, such as seagrasses like eelgrass

succession the natural, sequential change of species composition of a community in a given

area

surface water all waters whose surface is naturally exposed to the atmosphere, or wells or other

collectors directly influenced by surface water

terrestrial living on land

threatened species a Federal-listed, protected species that is likely to become an endangered species

in all or a significant portion of its range

trust resource

a resource that the Government holds in trust for the people through law or administrative act. A Federal trust resource is one for which responsibility is given wholly or in part to the Federal Government by law or administrative act. Generally, Federal trust resources are nationally or internationally important no matter where they occur, like endangered species or migratory birds and fish that regularly move across state lines. They also include cultural resources protected by Federal historic preservation laws, and nationally important or threatened habitats, notably wetlands, navigable waters, and public lands like state parks and national wildlife refuges.

unexploded ordnance

explosive weapons (i.e., bombs, bullets, grenades, shells, land mines) that did not explode when they were deployed and that still pose a risk of explosion or detonation

upland

dry ground (i.e., other than wetlands)

vision statement

a concise statement of what the unit could achieve in the next 10 to 15 years

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 meadows

meadows located in moist, low-lying areas, often dominated by large colonies of reeds or grasses. Saltmarsh meadows are subject to daily coastal tides.

wetlands

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. These areas are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted to life in saturated soil conditions.

wilderness study areas

lands and waters identified by inventory as meeting the definition of wilderness and being evaluated for a recommendation they be included in the Wilderness System. A wilderness study area must meet these criteria:

- 1. generally appears to have been affected primarily by the forces of nature, with the imprint of human substantially unnoticeable;
- 2. has outstanding opportunities for solitude or a primitive and unconfined type of recreation;
- 3. has at least 5,000 contiguous, roadless acres, or sufficient size to make practicable its preservation and use in an unimpaired condition [FWS Manual 610 FW 1.5 (draft)].

wildfire

a free-burning fire requiring a suppression response; all fire other than prescribed fire that occurs on wildlands [FWS Manual 621 FW 1.7].

wildlife-dependent recreational use

a use of a national wildlife refuge involving hunting, fishing, wildlife observation and photography, or environmental education and interpretation (National Wildlife

Refuge System Administration Act of 1966).

wildlife management

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