

CHAPTER 5

GLOSSARY, ACRONYMS AND ABBREVIATIONS

Courtesy IDNR



MISSOURI RIVER FISH AND WILDLIFE MITIGATION PROJECT

FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

U.S. ARMY CORPS OF ENGINEERS
KANSAS CITY AND OMAHA DISTRICTS



Chapter 5

Glossary, Acronyms and Abbreviations

GLOSSARY

accretion	Gradual buildup of land on a shore due to wave action, currents, airborne materials, or alluvial deposits.
accretion land	Land that has been formed by the process of accretion.
alluvial morphology/ geomorphology	The process by which alluvial features such as sandbars are created, maintained, and destroyed.
alluvium	Sediments transported and deposited by streams and rivers.
aquifer	Rock or sediment in a formation, group of formations or part of a formation which is saturated and sufficiently permeable to transmit economic quantities of water to wells and springs.
bed	An area at the bottom of a water body, (e.g., streambed)
channel	A concave depression for drainage of surface runoff. The bed of a stream or river; the deeper part of a river.
Coordination Team	Representatives of the various state and federal agencies providing oversight and guidance of the Mitigation Project.
deposition	The process of laying down sediments after a transportation process (e.g., sedimentation).
downstream	The direction of current flow that goes from a higher point of potential energy to a lower point of potential energy.
drainage divide	Topographically high area that separates two surface drainage basins.
drought	Extended periods of unusually low (below average) precipitation.

ecosystem	A community of living organisms interacting with one another and with their physical environment, such as a floodplain forest, pond, or river.
endangered	A plant or animal species that is in danger of extinction throughout all or a significant portion of its range because its habitat is threatened with destruction, modification, or curtailment. The U. S. Fish and Wildlife Service or the National Marine Fisheries Service designates endangered species.
environmental justice	The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income within the development, implementation, and enforcement of environmental laws.
erosion	The wearing away of a land surface or river channel by water, wind, ice, gravity, or other geological activities.
floodplain	The generally flat area adjacent to a river channel, formed by erosion and deposition, and generally subject to flooding when a river overflows its banks.
floodplain dynamics	The interaction between soil, water, and vegetation in the floodplain.
groundwater	The water in interconnected pores below the water table in an unconfined aquifer or located in a confined aquifer.
groundwater divide	An area that separates groundwater basins. Groundwater within a given flow system does not flow across a groundwater divide. Groundwater divides within shallow groundwater systems are commonly approximately coincident with the surface water divides.
habitat	The environment occupied by individuals of a particular species, population, or community.
hydraulic conductivity	A measure of the ability of a fluid to flow through a porous medium. High hydraulic conductivity means that fluid flows readily through the medium; low hydraulic conductivity means the opposite. The actual rate of fluid flow through the porous medium depends on the hydraulic conductivity, the hydraulic gradient, and the porosity.
hydrologic	Of or pertaining to water movement.

hydrologic cycle	The solar-driven cycle of water movement between atmosphere, oceans, aquatic, and terrestrial environments.
impermeable layers	Layers of geologic material that do not allow relatively free flow of groundwater. Impermeable layers commonly consist of clay-rich sediments or unfractured solid rock.
jeopardy	Under the Endangered Species Act, jeopardy occurs when an action is reasonably expected to diminish a species' numbers, reproduction, or distribution so that the likelihood of survival and recovery in the wild is appreciably reduced.
levee	A dike or embankment that protects land from flooding.
loess	Fine-grained sediments deposited by wind, frequently in a proglacial environment.
Lower Missouri River	The reach of the Missouri River below Gavins Point Dam and the confluence with the Mississippi River.
Mainstem Reservoir System	A portion of the Missouri River from its headwaters to Gavins Point Dam that includes six large dams and their reservoirs.
Master Manual	Describes the operation of the Missouri River reservoir system including the Water Control Plan, which prescribes operation policy for the multiple project purposes of flood control, hydropower, water supply, water quality, irrigation, navigation, recreation and fish and wildlife.
mesic	Habitat or plants characterized by a moderate amount of water, transitional between wetland and upland.
Mitigation Project	The Missouri River Fish and Wildlife Mitigation Project originally authorized by the Water Resources Development Act of 1986, and modified by the Water Resources Development Act of 1999.
model	A mathematical function with parameters that can be adjusted so that the function closely describes a set of empirical data.
modified Mitigation Project	That portion of the Mitigation Project included in the Water Resources Development Act of 1999, namely the acquisition and development of

	up to 118,650 acres to mitigate the effects of the Bank Stabilization and Navigation Project.
native species	Species that are indigenous to a specific area.
navigation channel	A minimum nine-foot deep and 300-foot wide channel between Sioux City, Iowa and the mouth of the Missouri River at St. Louis, Missouri.
navigation season	Extensions of time that represent full and minimum navigation service. The length of a normal navigation season is eight months (April 1 through December 1).
navigation service	The release of water from the Mainstem Reservoir System at Gavins Point Dam necessary to maintain eight to nine feet of water depth in the navigation channel between Sioux City and St. Louis.
notching	The process of creating notches in a revetment, stream bank or levee through excavation or explosives.
original Mitigation Project	That portion of the Mitigation Project authorized by the Water Resources Development Act of 1986, namely the acquisition and development of up to 48,100 acres to mitigate the effects of the Bank Stabilization and Navigation Project.
permeable layers	Layers of geologic material that allow relatively free flow of groundwater due to the presence of highly interconnected pore or fracture systems.
Preferred Action	Acquisition and development of up to 118,650 acres of terrestrial and aquatic habitat, including 20,000 acres of shallow water habitat.
Region of Influence	Is the study area for the SEIS and is defined as the floodplain of the Lower Missouri River, or for some resources (e.g., socioeconomics) the 46 counties contiguous to the Lower Missouri River in Iowa, Kansas, Missouri, and Nebraska.
revetment	Stone walls or embankments used to fortify shorelines from erosion.
riparian habitat	The area including a stream channel, a lake, or wetland, and the adjacent land where the vegetation and microclimate conditions are influenced by perennial and/or intermittent surface water, associated high groundwater, and soils exhibiting wetness characteristics.

runoff	Precipitation that flows freely away from soil into streams.
sediment deposition	The settling of sediments being transported by water that occurs when the flow of water carrying the sediments slows. Areas of sediment deposition are often found at the point where a river enters a lake or some other pool of water.
stream degradation	The wearing down of a streambed from erosion.
specific yield	The ratio of the volume of water that drains from an aquifer or porous medium under the influences of gravity to the total volume of the aquifer. In an unconfined aquifer the specific yield is equivalent to the storage coefficient.
surface water	Water occurring at the earth's surface, such as rivers, lakes and streams.
suspended load	The portion of stream load that is carried in suspension by flowing water.
threatened	Legal status afforded to plant or animal species likely to become endangered with the foreseeable future throughout all or a portion of their range, as determined by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service.
Tribe	An American Indian Tribe, Band, Nation, Village, or Community that the U.S. Secretary of the Interior acknowledges to exist as an Indian Tribe pursuant to the Federally Recognized Tribe List Act of 1994, 25 U.S.C 479a.
turbidity	Measure of suspended matter.
unconfined groundwater	Groundwater flow systems in which the upper boundary of the flow system is the water flow systems table.
Water Control Plan	The details of the plan for operating the Missouri River Mainstem Reservoir System as described in the Master Manual.
water table	The upper surface of the zone of saturation in an unconfined aquifer. The surface in an unconfined aquifer at which the pore water pressure is atmospheric.

wetlands habitat Area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support vegetation adapted for life in saturated soil conditions.

wingdams A rock pier built from shore to control flow of water and maintain water depth

ACRONYMS AND ABBREVIATIONS

AAQS	Ambient Air Quality Standards
ATSDR	Agency for Toxic Substances and Disease Registry
BiOp	U.S. Fish and Wildlife Service Biological Opinion
BLM	Bureau of Land Management
BMP	Best Management Practices
BP	before present
BSNP	Missouri River Bank Stabilization and Navigation Project
C	degrees Celsius
CO	Carbon monoxide
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Act Information System
CFR	Code of Federal Regulations
cfs	cubic feet per second
Corps	U.S. Army Corps of Engineers
CRP	Conservation Reserve Program
CWA	Clean Water Act
DoD	Department of Defense
DPR	Definite Project Report
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Endangered Species Act
EWRP	Emergency Wetland Reserve Program
fps	feet per second
FWCA	Fish and Wildlife Coordination Act
FSA	Farm Service Agency
GIS	Geographic Information System

HDR	HDR Engineering, Inc.
HRS	Hazard Ranking System
IDNR	Iowa Department of Natural Resources
kcfs	thousand cubic feet per second
KDWP	Kansas Department of Wildlife and Parks
m	meters
MDC	Missouri Department of Conservation
MDNR	Missouri Department of Natural Resources
mg/l	milligrams per liter
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NCP	National Contingency Plan
NEPA	National Environmental Policy Act
NFWR	National Fish and Wildlife Refuge
NGPC	Nebraska Game and Parks Commission
NHPA	National Historic Preservation Act
NO ₂	Nitrogen Dioxide
NOI	Notice of Intent
NO _x	Nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List
NRC	National Research Council of the National Academy of Sciences
NRD	Natural Resource District in the State of Nebraska
NRCS	U.S. Department of Agriculture, Natural Resource Conservation Service
NRHP	National Register of Historic Places
NWD	Northwest Division, U.S. Army Corps of Engineers
NWI	National Wetland Inventory
NWR	National Wildlife Refuge
O ₃	Ozone
O&M	Operations and Maintenance
Pb	Lead

PILT	Payment in Lieu of Taxes
PM _{2.5}	Particulate Matter (particles under 2.5 microns in diameter)
PM ₁₀	Particulate Matter (particles under 10 microns in diameter)
ppm	Parts per Million
RCRA	Resource Conservation and Recovery Act
RHA	Rivers and Harbors Act
RM	river mile
ROD	Record of Decision
ROI	Region of Influence
SARA	Superfund Amendments and Reauthorization Act
SAST	Scientific Assessment and Strategy Team
SEIS	Supplemental Environmental Impact Statement
SHPO	State Historic Preservation Officer
spp.	Plural of species
SO ₂	Sulfur Dioxide
TMDL	total maximum daily load
TRS	Total Reduced Sulfur
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOCs	Volatile Organic Compounds
WRDA86	Water Resources Development Act of 1986
WRDA99	Water Resources Development Act of 1999
WRP	Wetland Reserve Program
µg/m ³	micrograms per cubic meter