Glossary of Terms

These definitions have been developed by the agencies involved in this agreement for the purpose of providing the reader a better understanding of the intent and scope of the agreement and supporting documents. The definitions may not coincide with established language in the Standard Specifications for Highway Construction.

Action - all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas. Examples include, but are not limited to: (a) actions intended to conserve listed species or their habitat; (b) the promulgation of regulations;(c) the granting of licenses, contracts, leases, easements, rights-of-way, permits, or grants-in-aid; or (d) actions directly or indirectly causing modifications to the land, water, or air. [50 CFR §402.02]

Action area - all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. [50 CFR §402.02]

Activity evaluation matrix (Matrix)– spreadsheet that lists the effect determination made for species by the project/construction activity type (Federal Species Evaluation Matrix and State Species Matrix).

Affect/effect - to affect (a verb) is to bring about a change ("The proposed action is likely to adversely affect piping plovers nesting on the shoreline"). The effect (usually a noun) is the result ("The proposed highway is likely to have the following effects on the Florida scrub jay"). **"Affect"** appears throughout section 7 regulations and documents in the phrases "may affect" and "likely to adversely affect." **"Effect"** appears throughout section 7 regulations and documents in the phrases "adverse effects," "beneficial effects," "effects of the action," and "no effect."

Applicant - any person (an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States) [ESA §3(12)] who requires formal approval or authorization from a Federal agency as a prerequisite to conducting the action. [50 CFR §402.02]

Barrier – barriers are natural or man-made diversion structures that prevent a plant or animal from moving across an otherwise permeable area. Barriers can be physical obstructions that physically prevent movement (such as walls or fences), or they can be behavioral obstructions that prevent movement due to a perception of danger or risk (for example, areas with substantial human activity or habitat transitions such as a forest edge. Physical barriers include:

- Fence - material strung between support structures at intervals; may be constructed from a variety of materials including wire (smooth or barbed), woven wire, chain link, rails or plastic mesh
- Jersey barrier - solid concrete barrier used to influence traffic direction
- Wall - a solid wall made of concrete, brick or wood
- Lipped Wall - a wall with a flanged top edge acting as a barrier or diversion to small animals such as amphibians; wall ends may extend underground
- Sound Wall – a solid wall used to absorb or deflect highway noise; made of brick, concrete, wood, or sheet piling
- Electric – high tensile or braided rope carrying an electrical charge

- In-Roadway Barrier – support structures for vehicles built over a pit; similar to a cattle guard, used to prevent wildlife access across a break in fencing or other barrier; also sometimes called a deer guard

Beneficial effects - are contemporaneous positive effects without any adverse effects to the species.

Best available scientific and commercial data - to assure the quality of the biological, ecological, and other information used in the implementation of the Act, it is the policy of the Services (U.S. Fish & Wildlife Service, National Marine Fisheries Service) to: (1) evaluate all scientific and other information used to ensure that it is reliable, credible, and represents the best scientific and commercial data available; (2) gather and impartially evaluate biological, ecological, and other information disputing official positions, decisions, and actions proposed or taken by the Services; (3) document their evaluation of comprehensive, technical information regarding the status and habitat requirements for a species throughout its range, whether it supports or does not support a position being proposed as an official agency position; (4) use primary and original sources of information as the basis for recommendations; (5) retain these sources referenced in the official document as part of the administrative record supporting an action; (6) collect, evaluate, and complete all reviews of biological, ecological, and other relevant information within the schedules established by the Act, appropriate regulations, and applicable policies; and (7) require management-level review of documents developed and drafted by Service biologists to verify and assure the quality of the science used to establish official positions, decisions, and actions taken by the Services during their implementation of the Act. [59 FR 34271 (July 1, 1994)]

Best Management Practices (BMPs) - methods, facilities, built elements, and techniques implemented or installed during project construction to reduce short- and long-term project impacts on listed and sensitive species and habitat. These measures are included as part of the federal agency's proposed action.

Biological Assessment (BA) - information prepared by, or under the direction of, a Federal agency to determine whether a proposed action is likely to: (1) adversely affect listed species or designated critical habitat; (2) jeopardize the continued existence of species that are proposed for listing; or (3) adversely modify proposed critical habitat. Biological assessments must be prepared for "major construction activities." See 50 CFR §402.02. The outcome of this biological assessment determines whether formal consultation or a conference is necessary. [50 CFR §402.02, 50 CFR §402.12]. Within this agreement, the Biological assessment is the application of the tools at the project level.

Biological Evaluation Process (BEP, Process) - document(s) that provides the rationale and process for how the program has been evaluated for potential effects to state and federally protected species and environmental statutes and have been programmatically addressed with implementation of CCs to make a NLAA determination. Within this agreement, BEP or Process refers to the holistic creation and implementation of the agreement, procedures, and tools developed as part of the programmatic consultation process.

Biological Evaluation (BE package) - a generic term for all types of biological analyses other than a BA

Biological opinion - document which includes: (1) the opinion of the Fish and Wildlife Service or the National Marine Fisheries Service as to whether or not a Federal action is likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of designated critical habitat; (2) a summary of the information on which the opinion is based; and (3) a detailed discussion of the effects of the action on listed species or designated critical habitat. [50 CFR §402.02, 50 CFR §402.14(h)]

Categorical Exclusion (CE) - an action that does not individually or cumulatively have a significant effect on the environment and, therefore, does not require an Environmental Assessment (EA) or an Environmental Impact Statement (EIS).

Candidate species - plant and animal taxa considered for possible addition to the List of Endangered and Threatened Species. These are taxa for which the Fish and Wildlife Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposal to list, but issuance of a proposed rule is currently precluded by higher priority listing actions. [61 FR 7596-7613 (February 28, 1996)]

Clearing and Grubbing – clearing refers to the removal and disposition of all unwanted material from the surface, such as trees, vegetation, boulders, and trash. Grubbing refers to the removal and disposition of all unwanted material from underground, such as sod, boulders, stumps, roots, buried logs, or other debris. This is performed using heavy equipment and can involve soil disturbance in the immediate area.

Code of Federal Regulations (CFR) - to ensure adequate public participation in the development of regulations, the federal government publishes notices of its rulemaking actions in the Federal Register. The CFR codifies all of the rules, policies, and procedures needed to carry out Federal programs.

Conference - a process of early interagency cooperation involving informal or formal discussions between a Federal agency and the Services pursuant to section 7(a)(4) of the Act regarding the likely impact of an action on proposed species or proposed critical habitat. Conferences are: (1) required for proposed Federal actions likely to jeopardize proposed species, or destroy or adversely modify proposed critical habitat; (2) designed to help Federal agencies identify and resolve potential conflicts between an action and species conservation early in a project's planning; and (3) designed to develop recommendations to minimize or avoid adverse effects to proposed species or proposed critical habitat. [50 CFR §402.02, 50 CFR §402.10]

Connectivity (Habitat/Wildlife/Landscape) - the degree to which an organism can move between patches of habitat having similar characteristics. Connectivity is most affected by how far apart habitat patches are and if there are barriers or filters to movement between them.

Conservation - the terms "conserve," "conserving" and "conservation" mean to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to [the] Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking. [ESA §3(3)]

Conservation Condition (CC) - measures implemented into programmatic transportation activities/projects that are required to minimize or offset potential impacts so that the project is not likely to adversely affect species or designated critical habitat.

Conservation measures - are actions to benefit or promote the recovery of listed species that are included by the Federal agency as an integral part of the proposed action. These actions will be taken by the Federal agency or applicant, and serve to minimize or compensate for, project effects on the species under review. These may include actions taken prior to the initiation of consultation, or actions which the Federal agency or applicant have committed to complete in a biological assessment or similar document.

Conservation recommendations - the Services' non-binding suggestions resulting from formal or informal consultation that: (1) identify discretionary measures a Federal agency can take to minimize or avoid the adverse effects of a proposed action on listed or proposed species, or designated or proposed critical habitat; (2) identify studies, monitoring, or research to develop new information on listed or proposed species, or designated or proposed critical habitat; and (3) include suggestions on how an action agency can assist species conservation as part of their action and in furtherance of their authorities under section 7(a)(1) of the Act. [50 CFR §402.02]

Physical and Biological Features (PBF) - physical and biological features of designated or proposed critical habitat essential to the conservation of the species, including, but not limited to: (1) space for individual and population growth, and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and (5) habitats that are protected from disturbance or are representative of the historic geographic and ecological distributions of a species. [ESA §3(5)(A)(i), 50 CFR §424.12(b)]

Consultation – project level agency coordination based on requirements of the Process

Corridor - (Engineering) - a strip of land within which traffic, topography, environment or other characteristics are evaluated for transportation purposes; (Biological) - a route that allows movement of organisms across, an otherwise, inhospitable landscape. Corridors may or may not provide all of the habitat characteristics required to support an individual over time, but do provide the habitat characteristics that allow an individual to move between suitable patches of habitat. For smaller, less mobile species, corridors may function as strips of habitat that provide for the flow of genetic material between larger patches of habitat over more than one generation

Cover - Cover is usually vegetation, but it can be structural as boulders or other topographical features. Any of several types of cover that wildlife require to stay alive and reproduce, including to stay warm or cool (thermal cover), to escape from enemies (escape cover), or to hide from perceived danger (hiding cover). Many animals will more readily cross an open area if hiding cover is available nearby to enable them to survey for danger before crossing.

Critical Habitat (CH) - for listed species consists of: (1) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Act, on which are found those physical or biological features (constituent elements) (a) essential to the conservation of the species and (b) which may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the Act, upon a determination by the Secretary that such areas are essential for the conservation of the species. [ESA §3 (5)(A)] Designated critical habitats are described in 50 CFR §17 and 226.

Critter-Crossing - the slang term that is used for a wildlife crossing structure (critter is also a generalized term for animal)

Crossing Structure (Wildlife) - any of several types of structures (overpasses-grade separation structure or underpasses—bridges/culverts) designed to allow safe passage of wildlife species across a road or highway. Passage structures can reduce direct animal mortality, improve highway safety and improve landscape permeability for species of concern.

Cumulative effects - are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation. [50 CFR §402.02] This definition applies only to section 7 analyses and should not be confused with the broader use of this term in the National Environmental Policy Act or other environmental laws.

> **NEPA's cumulative effects definition** - "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-federal) or person undertakes such other actions (40 CFR §1508.7)."

Designated non-Federal representative - the person, agency, or organization designated by the Federal agency as its representative to conduct informal consultation or prepare a biological assessment. The non-Federal representative must be designated by giving written notice to the Director. If a permit or license applicant is involved and is not the designated non-Federal representative, then the applicant and the Federal agency must agree on the choice of the designated non-Federal representative. [50 CFR §402.02, 50 CFR §402.08]

Destruction or adverse modification of critical habitat - a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical. [50 CFR §402.02]

Direct effects - are impacts caused by the proposed action that occur at the same time and place.

Discountable effects - are those extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur.

Dispersal - the movement of an organism from the area where it was born and reared (its natal home range) to an area that may provide the necessary habitat conditions for establishing an adult home range. For many species of animals, dispersal is the period in which it will undertake its longest distance movement and during which it is most likely to encounter a variety of risks and inhospitable habitat conditions, including crossing highways.

Disturbance - disturbance to wildlife is anything that causes them to deviate from their normal activities such that it makes it difficult to complete their life cycles. An example would be highway noise that discourages wildlife from approaching and crossing the road to reach foraging habitat

Effects of the action - the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action. These effects are considered along with the environmental baseline and the predicted cumulative effects to determine the overall effects to the species for purposes of preparing a biological opinion on the proposed action. [50 CFR §402.02] The environmental baseline covers past and present impacts of all Federal actions within the action area. This includes the effects of existing Federal projects that have not yet come in for their section 7 consultation.

Emergency - where emergency circumstances mandate the need to consult in an expedited manner, consultation may be conducted informally through alternative procedures that the Director determines to be consistent with the requirements of section 7(a)-(d) of the ESA. This provision applies to situations involving acts of God, disasters, casualties, national defense or security emergencies, etc. [50 CFR §402.05]

Endangered species - any species which is in danger of extinction throughout all or a significant portion of its range. [ESA §3(6)]

Endemic - native to a certain area, usually a relatively small area.

Environmental baseline - the past and present impacts of all Federal, State, or private actions and other human activities in an action area, the anticipated impacts of all proposed Federal projects in an action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions that are contemporaneous with the consultation in process. [50 CFR §402.02]

Environmental Assessment (EA) - an EA is a public document that provides sufficient evidence and analysis for determining the need to prepare an EIS or a FONSI. An EA provides a general overview of the project impact, without providing the extreme detail that would be found in an EIS.

Environmental Impact Statement (EIS) - an EIS is the document that provides a comprehensive assessment of the effects of a proposed project. Any negative impacts that may occur, due to the project, must either be mitigated or avoided.

Environmental Study Area - the area that may be directly impacted by the construction activities of the project (including alternatives), plus areas containing environmental resources that may be affected by proximity to the project. It is the equivalent of the Area of Potential Effect (APE).

ESA - the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq.

Escape Structure - a structure (usually an escape ramp, funnel fence or one-way gate) designed to allow an animal trapped by a diversion fence to exit the roadway. They are designed to allow passage in only one direction so animals can escape the highway but have difficulty getting onto the highway.

Extinction - human-caused or natural process whereby a species or population ceases to exist

Extirpation - local extinction; a species or subspecies disappearing from a locality or region without becoming extinct throughout its range

Federal agency - any department, agency, or instrumentality of the United States. [ESA §3(7)]

Federal nexus - a project with a federal nexus has either federal funding, requires federal permits, or takes place on federal lands.

Federal Species Evaluation Matrix and State Species Matrix - spreadsheet that lists the effect determination made for species by the project/construction activity type

Finding of No Significant Impact (FONSI) - a FONSI is a separate document that incorporates the environmental assessment and any other appropriate environmental documents to provide a written conclusion that shows no significant environmental impact will occur in the project area

Fish or wildlife - any member of the animal kingdom, including without limitation any mammal, fish, bird (including any migratory, nonmigratory, or endangered bird for which protection is also afforded by treaty or other international agreement), amphibian, reptile, mollusk, crustacean, arthropod or other invertebrate, and includes any part, product, egg, or offspring thereof, or the dead body or parts thereof. [ESA §3(8)]

Flow modification – the alteration of the amount, location, or timing of water in a stream course, waterway or channel

Formal consultation - a process between the Services and a Federal agency or applicant that: (1) determines whether a proposed Federal action is likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat; (2) begins with a Federal agency's written request and submittal of a complete initiation package; and (3) concludes with the issuance of a biological opinion and incidental take statement by either of the Services. If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Services concur, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat). [50 CFR §402.02, 50 CFR §402.14]

General Conservation Conditions – over-arching measures applicable to all transportation projects evaluated using the Process. In addition, there are General Conservation Conditions which are applicable to specific impacts or activities such as fencing, re-vegetation, species surveys, work in environmentally sensitive areas, refueling, and work in the Platte River basin.

Green Sheets – forms used to record and communicate the environmental commitments made by the project sponsor to avoid or minimize environmental impacts. The Green Sheet is prepared by the NEPA document preparer, routed for signature, and placed in the Plans, Specifications & Estimates (PS&E) Package and project file.

Habitat - the area a species needs for its basic life requirements, such as food, water, escape from predators, and reproduction

Habitat Conservation Plan - under section 10(a)(2)(A) of the Act, a planning document that is a mandatory component of an incidental take permit application, also known as a Conservation Plan.

Habitat Fragmentation – the process by which habitats are increasingly divided into smaller units. Habitat fragmentation results in increased isolation of habitat patches, a loss of total habitat area and a more substantial loss of core habitat conditions.

Harass (50 CFR Part 17) - an intentional or negligent act or omission that creates the likelihood of injury to wildlife by annoying to such an extent as to significantly disrupt normal behavior patterns, which include but are not limited to breeding, feeding, and sheltering.

Harm (50 CFR Part 17 - in the definition of take in the Endangered Species Act, an act that actually kills or injures wildlife, including habitat modification or degradation that significantly impairs essential behavioral patterns such as breeding, feeding, or sheltering.

Heavy equipment - heavy equipment is machinery required in the construction of infrastructure activities, and includes heavy duty vehicles such as bulldozers, cranes, dump trucks, earth movers, graders, road pavers, rollers, tractors, and asphalt lay-down machines.

Herp - slang term used to describe species of reptiles and amphibians. Herpetology is the study of reptiles and amphibians.

Hinge Point - the "Hinge Point" is the point of transition, in a fill section or cut section including a special ditch (>2.5 ft. depth), between the 1:6 (typical) slope safety shoulder and the steeper (typically 1:3) foreslope of the roadway embankment. In a cut section with an existing standard ditch (<2.5 ft. depth) or in a rural section where there is no hinge point, the location of the activity shall be limited to the area above the shoulder point. *See diagrams at the end of Section 2 Activity Definitions (Sources of Impact).* In general, the area above the hinge point consists of all fill material, and is subject to ongoing roadway maintenance, including mowing of the clear zone.

Hydric soil - soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation (US Department of Agriculture-Soil Conservation Service 1985). Hydric soils that occur in areas having positive indicators of hydrophytic vegetation and wetland hydrology are wetland soils.

Incidental take - take of listed fish or wildlife species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by a Federal agency or applicant. [50 CFR §402.02]

Indirect effects - those effects that are caused by or will result from the proposed action and are later in time, but are still reasonably certain to occur. [50 CFR §402.02]

Individual Biological Assessment (IBA) - a document that provides the format and guidance to use when a project does not fall within the parameters of the programmatic agreement; this is a stand-alone project-level biological assessment

Individual Project Level Evaluation (IPLE) - a document that provides the format and guidance for species-specific evaluations when needed for a project level evaluation; applies to species with a "may affect" determination made for the project (per the Matrix, when the conservation conditions identified by the matrix cannot be implemented for a project, or for species/critical habitat that have not yet been evaluated by the programmatic agreement.

Informal consultation - an optional process that includes all discussions and correspondence between the Services and a Federal agency or designated non-Federal representative, prior to formal consultation, to determine whether a proposed Federal action may affect listed species or critical habitat. This process allows the Federal agency to utilize the Services' expertise to evaluate the agency's assessment of potential effects or to suggest possible modifications to the proposed action which could avoid potentially adverse effects. If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Services concur, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat). [50 CFR §402.02, 50 CFR §402.13]

Insignificant effects - effects that should never reach the scale where take occurs. Based on best judgment, a person would not be able to meaningfully measure, detect, or evaluate insignificant effects.

Interdependent actions - actions having no independent utility apart from the proposed action. [50 CFR §402.02]

Interrelated actions - actions that are part of a larger action and depend on the larger action for their justification. [50 CFR §402.02]

Is likely to adversely affect - the appropriate finding in a biological assessment (or conclusion during informal consultation) if any adverse effect to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not: discountable, insignificant, or beneficial (see definition of "is not likely to adversely affect"). In the event the overall effect of the proposed action is beneficial to the listed species, but is also likely to cause some adverse effects, then the proposed action "is likely to adversely affect" the listed species. If incidental take is anticipated to occur as a result of the proposed action, an "is likely to adversely affect" determination should be made. An "is likely to adversely affect" determination requires the initiation of formal Section 7 consultation.

Is likely to jeopardize proposed species/adversely modify proposed critical habitat – the appropriate conclusion when the action agency or the Services identify situations where the proposed action is likely to jeopardize the proposed species or adversely modify the proposed critical habitat. If this conclusion is reached, conference is required.

Is not likely to adversely affect - the appropriate conclusion when effects on listed species are expected to be discountable, insignificant, or completely beneficial. ***For the BE Process this means that the Conservation Conditions have either been applied or modified so that NLAA determination is reached (See Conservation Conditions).***

Insignificant effects - relate to the size of the impact and should never reach the scale where take occurs.

Invasive Species - Executive Order (EO) 13112—defines an invasive species as ‘‘an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health.’’

Isolation – the degree to which animals are prevented from moving into a patch of habitat due to the landscape characteristics surrounding the patch--habitat patches can be isolated because they are far from other similar patches or because barriers or strong filters to animal movement surround them

Landscape - a relatively large area where the mix of local ecosystems and land uses is repeated in similar form. Landscapes or often referred to as forested, agricultural, urban or suburban landscapes

Letter - refers to all written correspondence, such as letters, memoranda, or electronic mail messages, relating to a formal or informal consultation.

Linkage or Linkage Zone - large segment of land that provides a suitable transit route for plants and animals as they cross from one inhabited area to another.

Listed species - any species of fish, wildlife or plant which has been determined to be endangered or threatened under ESA or NESCA.

Major construction activity - a construction project (or other undertaking having similar physical effects) which is a major Federal action significantly affecting the quality of the human environment as referred to in the National Environmental Policy Act (NEPA, 42 U.S.C. 4332(2)(C)). [50 CFR §402.02]

Matrix – see Federal Species Evaluation Matrix and State Species Matrix

May affect - the appropriate conclusion when a proposed action may pose **any** effects on listed species or designated critical habitat. When the Federal agency proposing the action determines that a "may affect" situation exists, then they must either initiate formal consultation or seek written concurrence from the Services that the action "is not likely to adversely affect" listed species. **In the BE Process, this generally initiates consultation; it does not necessarily mean that we will need to go through a formal consultation process.**

Minimization measure - measures that reduce the impact of the project on listed species.

National Environmental Policy Act (NEPA) - passed in 1970, NEPA is environmental legislation that mandates environmental review be completed when federal funding is used for a project. Any person using federal money to complete a project that could potentially impact the environment must perform an environmental assessment and possibly an environmental impact statement. This Act also created the Council on Environmental Quality, who with the USEPA are charged with administration, oversight, and review of the implementation of NEPA.

National Pollutant Discharge Elimination System (NPDES) - the provision in the federal Clean Water Act that requires point source dischargers of pollutants to obtain permits, called NPDES permits. In Nebraska, NPDES permits are administered by NDEE.

Native species – are those species that were in Nebraska before human settlement (Kaul, R.B., D.M. Sutherland, and S.B. Rolfsmeier. 2006. The Flora of Nebraska. Conservation and Survey Division, School of Natural Resources Institute of Agriculture and Natural Resources, University of Nebraska – Lincoln). NDOT's "Plan for the Roadside Environment" (2008) provides listings of native species appropriate for regions within Nebraska.

NESCA – Nebraska Endangered Species Conservation Act

No effect - the appropriate conclusion when the action agency determines its proposed action will not affect a listed species or designated critical habitat.

Non-native species (Introduced species) – are those species that arrived through human activities and were either deliberately or accidentally brought into Nebraska (Kaul, R.B., D.M. Sutherland, and S.B. Rolfsmeier. 2006. The Flora of Nebraska. Conservation and Survey Division, School of Natural Resources Institute of Agriculture and Natural Resources, University of Nebraska – Lincoln).

Non-Standard Conservation Conditions (Special or Unique CC's) - project specific conservation conditions to avoid or minimize impacts may be developed on a project-by-project basis, as needed.

Patch - a contiguous area with similar characteristics relative to the issues of concern. Patches may be defined differently depending on the questions being addressed; however, a patch will be the contiguous unit of area within a landscape with similar conditions based on the problem being considered.

Permeability (landscape or highway) - the ability of an animal to move through an area, including those with man-made structures such as highways. Areas with low permeability are difficult for an animal to move across and may be the result of inhospitable habitat conditions or the presence of barriers or filters.

Plant - any member of the plant kingdom, including seeds, roots, and other parts thereof. [ESA §3(14)]

Platte River Depletion / Platte River Depletion Status – these are activities that could reduce water flows to the Platte River and could have indirect effects on water-dependent species in the Platte River basin. The Lower Platte basin has been identified to be in a state of jeopardy and depletions within this area require individual consultation with the USFWS. Depletions within the Platte River Implementation Recovery Program (North, South and Middle Platte basins) would fall under the programmatic agreement for that area. In general, the following are considered *de minimis* depletions, but may still require agency coordination:

- a project that creates an annual depletion less than 0.1 acre-feet
- a project that creates a detention basin that detains water for less than 72 hours
- a project that returns any diverted water to its natural basin within 30 days
- a project that creates a one-time depletion of less than 10 acre-feet

Preliminary Engineering (PE) - the design phase of a project is called preliminary engineering. This involves the preparation of construction plans, specifications and cost estimates to be used for bidding and building a project. Plans and specifications must be prepared and stamped by an architect or engineer registered in the State of Nebraska. The PE phase of a project ends with the opening of construction bids.

Process – see Biological Evaluation Process

Programmatic Agreement - document outlining the agreements made and an overview of process under this program.

A programmatic agreement, or PA, is a document that spells out the terms of a formal, legally binding agreement between a state Department of Transportation (DOT) and other state and/or federal agencies. A PA establishes a process for consultation, review, and compliance with one or more federal laws, most often with those federal laws concerning historic preservation. There are two basic kinds of programmatic agreements:

- a PA that describes the actions that will be taken by the parties in order to meet their environmental compliance responsibilities for a specific transportation project, called project–specific PA

- a PA that establishes a process through which the parties will meet their compliance responsibilities for an agency program, a category of projects, or a particular type of resource, called a procedural PA

Programmatic biological assessment – a biological assessment that establishes conditions allowing specific activities that occur within general programs to proceed without individual concurrence from the Service (or allowing a shortened concurrence timeline).

Programmatic consultation – process of consulting on the tools, Programmatic Agreement, Programmatic Biological Assessment, etc. in a program-level fashion

Project Limits - project limits are defined as the area between the project beginning and end points, from right-of-way boundary to right-of-way boundary, as marked on the construction plans, including temporary construction easements, detours, and any designated waste, staging, stockpile or material sites.

Project vicinity - this term is used to denote a more expansive landscape context surrounding a given project.

Proposed critical habitat - habitat proposed in the Federal Register to be designated as critical habitat, or habitat proposed to be added to an existing critical habitat designation, under section 4 of the Act for any listed or proposed species. [50 CFR §402.02]

Proposed species - any species of fish, wildlife or plant that is proposed in the Federal Register to be listed under section 4 of the Act. [50 CFR §402.02]

Range (of a species) - the area or region over which an organism occurs.

Recovery - improvement in the status of listed species to the point at which listing is no longer appropriate under the criteria set out in section 4(a)(1) of the Act. [50 CFR §402.02]

Right-of-Way (ROW) - ROW is a general term denoting land, property, or interest therein, acquired for or devoted to a public use. ROW can be acquired through purchase, donation, or eminent domain in order to build or maintain a public project. ROW must be acquired prior to the CE phase of project development. Appraisal or acquisition of ROW cannot be started until the environmental documents are approved.

Roadway Prism – The three-dimensional area of a roadway from the toe-of-foreslope to toe-of-foreslope that has been previously disturbed by roadway construction as depicted in the NDOT Rationale of Unsuitable Habitat for the American Burying Beetle Within Roadway Prism memorandum.

Section 7 - the section of the Endangered Species Act of 1973, as amended, outlining procedures for interagency cooperation to conserve Federally listed species and designated critical habitats. Section 7(a)(1) requires Federal agencies to use their authorities to further the conservation of listed species. Section 7(a)(2) requires Federal agencies to consult with the Services to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Other paragraphs of this section establish the requirement to conduct conferences on proposed species; allow applicants to initiate early consultation; require FWS and NMFS to prepare biological opinions and issue incidental take

statements. Section 7 also establishes procedures for seeking exemptions from the requirements of section 7(a)(2) from the Endangered Species Committee. [ESA §7]

Section 7 consultation - the various section 7 processes, including both consultation and conference if proposed species are involved. [50 CFR §402]

Section 9 - the section of the Endangered Species Act of 1973, as amended, that prohibits the taking of endangered species of fish and wildlife. Additional prohibitions include: (1) import or export of endangered species or products made from endangered species; (2) interstate or foreign commerce in listed species or their products; and (3) possession of unlawfully taken endangered species. [ESA §9]

Section 10 - the section of the Endangered Species Act of 1973, as amended, that provides exceptions to section 9 prohibitions. The exceptions most relevant to section 7 consultations are takings allowed by two kinds of permits issued by the Services: (1) scientific take permits and (2) incidental take permits. The Services can issue permits to take listed species for scientific purposes, or to enhance the propagation or survival of listed species. The Services can also issue permits to take listed species incidental to otherwise legal activity. [ESA §10]

Similarity of appearance - a species may be treated as endangered or threatened if it in appearance a species which has been listed under Section 4 of the ESA and enforcement personnel would have difficulty distinguishing between the listed and the unlisted species; if the effect of this difficulty is an additional threat to the listed species; and if such treatment of the unlisted species would improve protection for the listed species. A similarity of appearance listing must be formalized by rule.

Sources of Impact Definitions - document that defines the activities found within the activity evaluation matrix, and also identifies which activities are related to others

Species - includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature. [ESA §3(16)]

Species of concern – a species, usually thought to be in decline that may be considered for federal candidate status in the future. This may include species for which the Services have determined, following a biological status review, that listing under the ESA is "not warranted," pursuant to ESA section 4(b)(3)(B)(i), but for which significant concerns or uncertainties remain regarding their status and/or threats. Species can qualify as both "species of concern" and "candidate species."

Species Evaluation Parameters (SEP) Form - “First-cut” for project-specific evaluations where the scope of work and location are documented and where suitable habitat for the species is evaluated.

Standard Conservation Conditions - Suitable habitat - the area where an organism, including a plant, animal or fish, naturally or normally lives and grows.

Take - to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. [ESA §3(19)]

> **Harass** is defined by FWS as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. [50 CFR §17.3]

Threatened species - any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. [ESA §3(20)]

Topographic Floodplain – the area along the sides of a stream or river that extends from bluff to bluff. On a topographic map, this boundary occurs where the contour lines get close together.

Urbanized – In developed and disturbed areas or those areas known not to support listed species within the limits of a municipality.