



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Nebraska Field Office
203 West Second Street
Grand Island, Nebraska 68801

May 27, 2011

FWS NE: 2010-169

Mr. John Snowdon
U.S. Army Corps of Engineers
Omaha District, Regulatory Branch
8901 South 154th Street
Omaha, NE 68138-3635

RE: Comments and Concurrence on Northeast Industrial Highway Project and New Proposed Mitigation Site, Madison and Stanton Counties, Nebraska.

Dear Mr. Snowdon:

The U.S. Fish and Wildlife Service (Service) has reviewed the proposed Northeast Industrial Highway project and revised wetland mitigation site determination dated May 5, 2011. The project proponent proposes to construct a three-phase highway in Madison and Stanton Counties, Nebraska. The project purpose is to safely accommodate current and projected traffic needs for the industrial area northeast of Norfolk with access to U.S. Highway 81 and Nebraska State Highway 35.

The comments on the proposed activity outlined below have been prepared under the following authorities: 1) Endangered Species Act of 1973 (ESA), 2) Fish and Wildlife Coordination Act (FWCA), 3) Bald and Golden Eagle Protection Act (Eagle Act), and 4) Migratory Bird Treaty Act (MBTA). The National Environmental Policy Act (NEPA) requires compliance with all of these statutes and regulations. The project proponent and lead federal agency are responsible for compliance with these federal laws. These comments are intended for the protection of fish and wildlife in the U.S. Army Corps of Engineer's public interest review (33 CFR Part 320.4) and in determining compliance with the Section 404(b)(1) Guidelines (Guidelines) (40 CFR Part 230). The Service's Mitigation Policy and the Guidelines emphasize that avoidance and minimization precede compensation, which is to be considered solely for unavoidable adverse impacts on fish and wildlife resources and supporting ecosystems.

ENDANGERED SPECIES ACT (ESA)

Based on the information submitted and a review of species records and life histories, the Service concurs with the Corps no affect determination regarding the impacts the proposed mitigation site and project would have to federally listed species.

Depletions to the Lower Platte River and Borrow Sites

Since 1978, the Service has concluded in all of its section 7 consultations on water projects in the Platte River basin that the Platte River ecosystem is in a state of jeopardy, and any federal action resulting in a water depletion to the Platte River system will further or continue the deterioration of the stressed habitat conditions. Due to the cumulative affect of many water depletion projects in the Platte River basin, the Service considers any depletion of flows (direct or indirect) from the Platte River system to be significant. Consequently, the Service has adopted a jeopardy standard for all section 7 consultations on federal actions which result in water depletions to the Platte River system. The Service considers the Platte River and its associated wetland habitats to be resources of national and international importance.

The Service understands that borrow sites have been identified and local material will be utilized. The project proponent has agreed to construct borrow sites so they do not contact ground water or pool water for longer than 72 hours. In addition, the project proponent has agreed to restore borrow locations to original conditions as practicable. Seed mixture recommended by the Service includes a Sand Prairie Mix or Mixed-grass Prairie Mix. A prairie restoration guide and list of plants are available from the Guide to Prairie and Wetland Restoration in Eastern Nebraska, Prairie Plains Resource Institute --Nebraska Game and Parks Commission, http://prairieplains.org/restoration_.htm

Construction Debris Use and Disposal

Debris material resulting from construction activities should be recycled as much as practicable. However, in most circumstances, the contractor takes ownership of the remaining construction debris and the material is then disposed of at the discretion of the construction contractor. Should it be determined that construction debris or spoil material will be utilized outside the project's scope, and not placed in a Service-reviewed disposal area, the Service should be contacted for further section 7 consultation prior to the placement of the material to be assured that no federally listed species are adversely impacted.

All federally listed species under ESA are also State-listed under the Nebraska Nongame and Endangered Species Conservation Act. However, there are also State-listed species that are not federally listed. To determine if the proposed project may affect State-listed species, the Service recommends that the project proponent contact Michelle Koch, Nebraska Game and Parks Commission, 2200 N. 33rd Street, Lincoln, NE 68503-0370

REVIEW, COMMENTS, AND RECOMMENDATIONS ON THE PROPOSED PROJECT ACTION UNDER OTHER FISH AND WILDLIFE STATUTES

Fish and Wildlife Coordination Act (FWCA)

1. Water Resources

The FWCA requires consultation with the Service and the state fish and wildlife agency for the purpose of giving equal consideration to fish and wildlife resources in the planning, implementation, and operation of federal and federally funded, permitted, or licensed water resource development projects. The FWCA requires that federal agencies take into consideration the effect that water related projects may have on fish and wildlife resources, to take action to avoid impact to these resources, and to provide for the enhancement of these resources. In addition, the Service recommends that the construction activities in the stream crossings follow Best Management Practices to avoid impacts to water quality of the stream (enclosed).

Based on a review of the information provided, native grassland/pasture resources are present in the proposed project area and are likely to be adversely affected and/or fragmented as a result of road construction and associated future development. Construction of roads and associated activities fragments large contiguous blocks of grassland and pastures and increases depredation rates on grassland bird eggs and young caused by edge-dependent species such as raccoons (*Procyon lotor*) and brown-headed cowbirds (*Molothrus ater*). Prairies surrounded by croplands and roads are susceptible to invasion by exotic plants, herbicide drift, erosion and loss of native species. Though relatively small and highly vulnerable, small prairies are important seed collecting sites and habitat for many species of plants, wildlife and pollinators. Grasslands also provide valuable ecological services for the public such as nutrient cycling and storage of substantial amounts of atmospheric carbon. Native grasslands and rangelands directly support the livestock industry and make up approximately 95 percent of the deeded acreage it takes to maintain beef cattle in the Great Plains and Western US (Connor, et.al. 2001).

Given these considerations, the Service has requested that permanent impacts to native prairie be mitigated using a 1:1 ratio. The project proponent has assessed the acreage amount of permanent impacts and will mitigate for 8.9 acres of native prairie in order to offset the fragmentation of native prairie caused by Phase 2 of the proposed road. The project proponent will contribute \$500.00 per acre of new right-of way for a total contribution of \$4450.00. The Norfolk District office of the Nebraska Game and Parks Commission has agreed to use the contribution to construct an outdoor classroom and restore a degraded prairie on-site, to showcase the importance of the prairie ecosystem.

2. Wetlands, Streams, and Riparian Habitats

Based on a review of the information provided, riparian habitats consisting of grassland/prairie, shrubland, and woodland resources are present in and along the proposed project area. The Service recommends that the project proponent consider the following as approaches to minimize impacts on riparian and other wildlife habitats such as grasslands.

- Use reseeded mixtures that consist of native species.
- Re-plant native tree species in areas only where existing large mature trees have previously been removed.
- Evaluations of the perennial herbaceous vegetation should be made regularly to ensure good germination and establishment.
- During installation of Rolled Erosion Controlled Products (RECP's) the Service recommends using designs available with aperture sizes and tensile strengths specifically designed to reduce animal entrapment, particularly snakes. Through proper selection and installation of RECPs, soil erosion benefits can be maximized while minimizing any potential problems initially posed to wildlife. Furthermore, woven natural fiber nettings may also offer a more wildlife-friendly solution for use in RECPs. For a good resource visit ECTC (Erosion Control Technology Council) website www.ectc.org for a list of manufacturers that carry the products mentioned above.

3. Animal Passage and Aquatic Biota

The Service recommends project proponents use the least environmentally damaging alternative when working in waters of the U.S. The Service has evaluated the proposed use of temporary causeways to perform work at bridge and culvert locations for the rail expansion project. The Service typically recommends the use of temporary bridges or working from the stream bank for

work taking place over streams, rivers, and wetlands, which avoids most impacts to wetlands and aquatic life during the project construction. Causeways temporarily eliminate the habitat provided by the vegetation and substrate and crush or smother animals such as mollusks and insect larvae dwelling within and upon the surface of the substrate covered by the construction materials. Causeways may affect hydrologic patterns within the stream even when openings are placed in the causeway to mitigate for this impact. Temporary causeways having limited pipe and culvert installation can act as a barrier to aquatic faunal movement (e.g., amphibians, fish, reptiles, and small mammals). Some species are reluctant to enter and move through pipes and culverts.

Culverts should be constructed at elevations so as to not impede animal/fish movement. The Service further recommends that the project proponent not alter or install culverts in any way that would result in reductions in current channel width. Enclosure 1 identifies recommended best management practices to minimize potential impacts to native fish and other aquatic resources, including spawning timeframes for Nebraska fish species. Upon the project's completion, the Service recommends that the project proponent document restoration with ground photographs of the restored areas during the following season in order to ensure that the vegetation has been re-established.

To determine if the proposed project may affect fish and wildlife resources of the State of Nebraska under the FWCA, the Service recommends that the project proponent contact Carey Grell, Nebraska Game and Parks Commission, 2200 N. 33rd Street, Lincoln, NE 68503-0370.

Bald and Golden Eagle Protection Act (BGEPA)

The BGEPA provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*). The golden eagle is found in arid, open country with grassland for foraging in western Nebraska and usually near buttes or canyons which serve as nesting sites. Golden eagles are often a permanent resident in the Pine Ridge area of Nebraska. Bald eagles utilize mature, forested riparian areas near rivers, streams, lakes, and wetlands and occur along all the major river systems in Nebraska, including the Missouri River. Additionally, many eagles nest in Nebraska from mid-February through mid-July. Disturbances within 0.5-mile of an active nest or within line-of-sight of the nest could cause adult eagles to discontinue nest building or to abandon eggs. After a review of our database, the Service finds that the proposed project will have no effect on bald or golden eagle nesting or wintering activity.

Migratory Bird Treaty Act (MBTA)

Under the Migratory Bird Treaty Act (16 U.S.C. 703-712: Ch. 128 *as amended*) construction activities in grassland, weedy edges, wetland, riparian (stream), shrubland and woodland habitats, and those that occur on bridges (e.g., which may affect swallow nests on bridge girders) that would otherwise result in the taking of migratory birds, eggs, young, and/or active nests should be **avoided**. Although the provisions of MBTA are applicable year-round, most migratory bird nesting activity in Nebraska occurs during the period of April 1 to July 15. However, some migratory birds are known to nest outside of the aforementioned primary nesting season period. For example, raptors can be expected to nest in woodland habitats during February 1 through July 15, whereas sedge wrens which occur in some wetland habitats normally nest from July 15 to September 10.

1. Avoidance

To prevent impacts to active nests, land-clearing activities, including the removal of structures as well as vegetation, should be scheduled to occur prior to or after the migratory bird nesting season (i.e., April 1 through July 15). All active nests should be left in place until the eggs have hatched and the young have fledged.

2. Migratory Bird Surveys and Reporting Procedures

Based on the information submitted it appears that several species of migratory birds are likely to be found breeding in the proposed project area and may be impacted by clearing and grubbing activities. Migratory bird species that may breed in the project area include but are not limited to, wood duck, eastern bluebird, common yellowthroat, brown thrasher, yellow warbler, dickcissel, grasshopper sparrow, western meadowlark, and others. If the proposed project or activity is planned to occur during the primary nesting season or at any other time during the year which may result in the take of nesting migratory birds, the Service recommends that the project proponent (and/or construction contractor) arrange to have a qualified bird surveyor conduct a field survey of the affected habitat(s) and structure(s) to determine the absence or presence of nesting migratory birds. Surveys must be conducted during the nesting season of the target bird species.

The Service further recommends that field surveys for nesting birds, along with information regarding the qualifications of the biologist(s) performing the surveys, be thoroughly documented and that such documentation be maintained on file by the project proponent (and/or construction contractor) until such time as the project or activity has been completed. Refer to the attached information for "Recommended Bird Surveyor Qualifications" (Enclosure 2).

The Service requests that the following be provided to this office prior to the initiation of the proposed project if the above conditions occur.

- a) A copy of the report documenting the results of a survey for migratory birds. As a minimum, the survey report should provide detailed information regarding identification of the bird surveyor and that person's qualifications, survey methods used, date/time/location of the survey, weather conditions at the time of the survey, species observed/heard relative to the proposed project site, and the location and number of active bird nests; and
- b) A written description of all the avoidance measures that are planned to be implemented at the proposed project site to avoid the take of migratory birds should active nests be found (e.g., survey efforts, inactive nest removal attempts outside of the primary nesting season, clearing/grubbing of vegetation, establishment of buffer zones around active nest sites, other work-around efforts, etc.);
- c) A written description of any/all conservation measures that benefit migratory birds (e.g., nesting habitat creation, restoration, enhancement, and/or acquisition for protection) to offset project impacts; or

The purpose of the requested documentation is to aid the Service in helping the project proponent avoid any potential take of migratory birds. It is advisable that the project proponent retain a copy of any negative or positive survey report (including bird surveyor qualifications information) on file until all work on the project has been completed as recommended above. In the event that no active migratory bird nests are found, the Service recommends that vegetation removal activities

commence within 3-5 days of the migratory bird survey as birds can and will build new nests in a relatively short time period.

The Service appreciates the opportunity to provide comments on the proposed Northeast Industrial Highway Project, Stanton and Madison Counties to protect federal trust fish and wildlife resources in Nebraska. Should you have any questions regarding these comments, please contact Ms. Jeanine Lackey within our office at (308) 382-6468, extension 14.

Sincerely,



John Cochran
Acting Nebraska Field Supervisor

Enclosures

cc: NGPC; Lincoln, NE (Attn: Carey Grell)
NGPC; Lincoln, NE (Attn: Michelle Koch)
MWA: Lincoln, NE (Attn: Tim Steffen)
Madison County, NE (Attn: Richard Johnson)

REFERENCES

Angermeier, P.L., A.P. Wheeler, A.E. Rosenberger, 2004. A conceptual framework for assessing impacts of roads on aquatic biota. *Fisheries Magazine*: 29(12) 19-29.

Connor, R., Seidl, L. VanTassell, and N. Wilkins. 2001. United States Grasslands and related resources: an economic and biological trends assessment. Texas A & M Univ., College Station, TX. At: www.landinfo.tamu.edu/presentations/

FISRWG. 1998. Stream Corridor Restoration: Principles, Processes, and Practices. By the Federal Interagency Stream Restoration Working Group (FISRWG) (15 Federal agencies of the U. S. Government). GPO item No. 0120-A; SuDocs No. A 57.6/2:EN 3/PT.653. ISBN-0-934213-59-3.

Herkert, James R. et al. 2003. Effects of Prairie Fragmentation on the Nest Success of Breeding Birds in the Midcontinental United States. *Conservation Biology*, Pages 587-594. Volume 17, No. 2.

ENCLOSURE 1

Recommended Best Management Practices for Proposed Construction Activities Associated with Streams/Rivers in Nebraska:

- Avoid earth moving activities or fill/bank armoring during native fish spawning periods from May 15 – July 31, construct stream crossings or other associated temporary embankments during low flow periods (likely August – October).
- Minimize work area at stream locations. The majority of the work (including heavy equipment and storage sites) should occur above the high bank line. Avoid driving equipment through the streambed.
- Implement comprehensive and effective erosion and sediment controls. These methods should be implemented and maintained for the duration of the project and considered at all stages of the project planning and design. Close attention is warranted for the placement and maintenance of temporary erosion control measures at the construction site to minimize sediment loading. These erosion/sediment control techniques should keep sediments from entering the stream and remain in place until work areas become re-vegetated and stable. Such erosion control measures may include properly placed sediment/silt screens or curtains and hay bales. Proper techniques are important to the placement of these types of structures and include trenching, staking and backfilling as well as using the appropriate number of bales. These techniques are best used in combination with each other rather than separately.
- Erosion and sediment controls should be monitored daily during construction to ensure effectiveness, particularly after storm events, and only the most effective techniques should be utilized. Clean, repair and replace structures as necessary.
- Exposed stream banks must be stabilized immediately after construction activity. Eroded surfaces should not be left exposed for greater than one day. If rain is predicted, no construction should commence unless eroded surfaces are immediately treated with geotextile fabric, mulch, seeding or some techniques that would stabilize the bank or exposed areas from eroding.
- Erosion repair and stream bank restoration should use appropriate bioengineering solutions.
- Develop and implement a hazardous materials safety protocol. This would include that all temporary storage facilities for petroleum products, other fuels and chemicals must be located and protected to prevent accidental spills from entering streams within the project area.

ENCLOSURE 2

Recommended Bird Surveyor Qualifications

It is recommended that a person possess the following qualifications to conduct a nesting bird survey in support of a proposed federal/state project or activity:

1. A degree in a biological science, ecology, natural resource management, or related discipline appropriate to the position. The degree must be obtained from an accredited college or university. Courses taken should include ornithology, population biology, ecology, botany, and statistics. Transcripts should be provided to the employer. *
-OR-
A combination of formal education and field experience equivalent to a major in one of the above mentioned fields, plus appropriate experience or additional education. Transcripts or certificates of courses completed should be provided to the employer along with description of duties performed for field experience qualifications.
2. Evidence is provided to the employer that the person conducting ornithological surveys has knowledge in the fields of either biology, ecology, wildlife management, or ecology and special knowledge and understanding of pertinent terrestrial and aquatic ecosystems, especially Great Plains ecosystems, particularly Nebraska.
3. Evidence of knowledge, skills, and ability is provided to the employer that demonstrates the person's experience to successfully perform the duties required. This evidence must show the person's ability to identify birds by sight, sound, and nests, including cavity nesters. Examples include: experience in the performance of research or other professional or scientific work involving birds, their abundance and distribution, characteristics, life processes and adaptations, and ecological relationships.
4. Evidence of knowledge, skills, and ability to identify method of bird survey to conduct (e.g., point counts, line transects, etc.), design of survey, data collection and analysis, and reporting.
5. Provide a list of projects or events to the employer, including the name of previous employers, their address and telephone numbers, where bird surveys were conducted and the surveyor's involvement. Include a list of publications if projects that were submitted and approved by scientific journals for inclusion.
6. Provide a list of references of those people who would be able testify to the bird surveyor's knowledge, skills, and abilities to conduct surveys for nesting birds. This list should include names, addresses, telephone numbers, and relationship to the subject surveyor.

* It is anticipated that the employer could be either the lead federal/state action agency or more likely, one of the action agency's contractors/sub-contractors performing work in support of the proposed project or activity.