

**DRAFT
ENVIRONMENTAL ASSESSMENT**

**US-169 &
Anderson County Prairie Preserve
Land Exchange**

Anderson County, Kansas

Prepared by:



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Division of Wildlife and Sport Fish Restoration
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DRAFT ENVIRONMENTAL ASSESSMENT
US-169 & Anderson County Prairie Preserve – Land Exchange
Anderson County, Kansas
Federal Aid Project No. NHPP-A238(001)
KDOT Project Nos. 169-2 KA-238-01 and 169-2 KA-238-02

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Chapter I PURPOSE AND NEED FOR ACTION

A. Introduction and Background

The Nature Conservancy (TNC) is requesting approval of the U.S. Fish and Wildlife Service's (Service) *Wildlife and Sport Fish Restoration (WSFR) Program* for an exchange of property from the Anderson County Prairie Preserve (the Preserve), purchased by TNC, and located in eastern Kansas. Although the Kansas Biological Survey (KBS) took over the management responsibilities of the Preserve in 2006, TNC still owns the property. The Preserve is located within the Osage Plains section of the Osage Plains/Flint Hills Prairie ecoregion and within the Anderson County Prairies Conservation Area, which contains 125,852 acres of the largest intact tallgrass prairie landscape remaining east of the Flint Hills (Busby, 2010). The federally threatened Mead's Milkweed (*Asclepias meadii*) has been identified on Preserve land and adjacent properties, and the area provides potential critical habitat for the species. In addition, the project area falls within critical habitat for the state-listed (threatened) Eastern Spotted Skunk (*Spilogale putorius*).

The core area of the Preserve, through which US-169 Highway travels, contains approximately 1,050 acres. The US-169 Highway project and the Preserve are located in the southeast-central part of Kansas as shown in **Figure 1**. Two satellite tracts of the Preserve, one located 2 miles south of the core tract and the other located 2.5 miles northwest of the core tract, contain approximately 160 acres each, and would not be affected by the US-169 project. The location of the Preserve core tract and the satellite tracts, in relation to US-169 Highway, are shown in **Figure 2**.

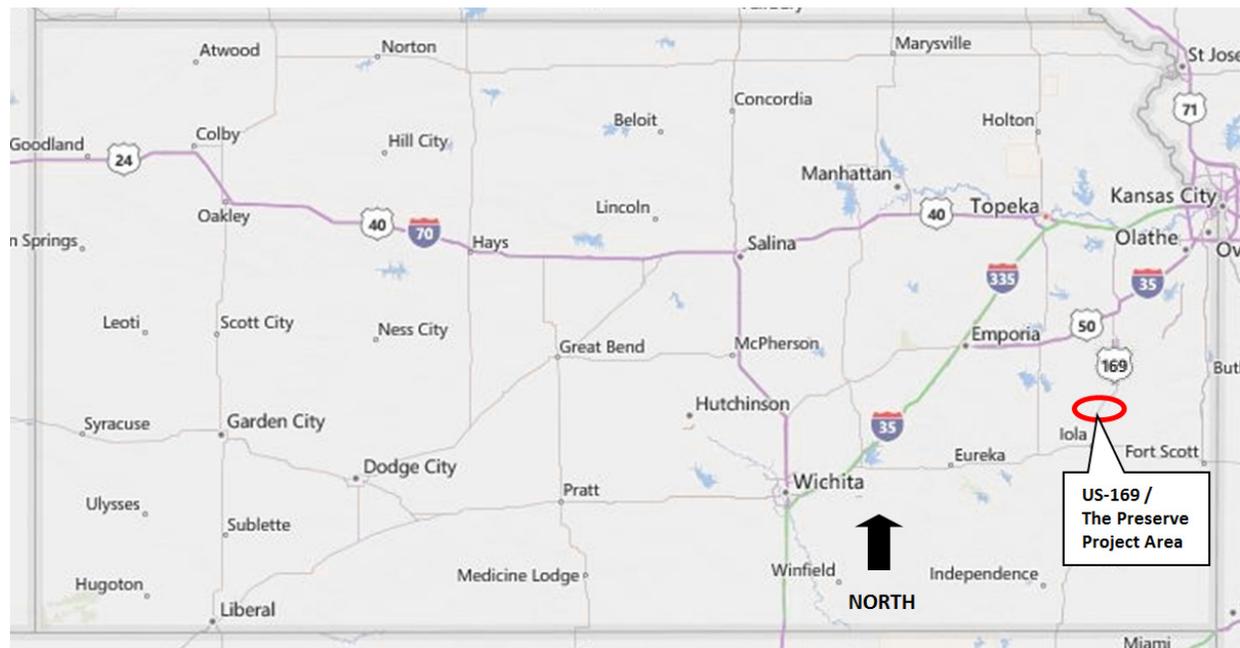


Figure 1 – Project Location Map (Source: Bing Maps – Microsoft Corp.)

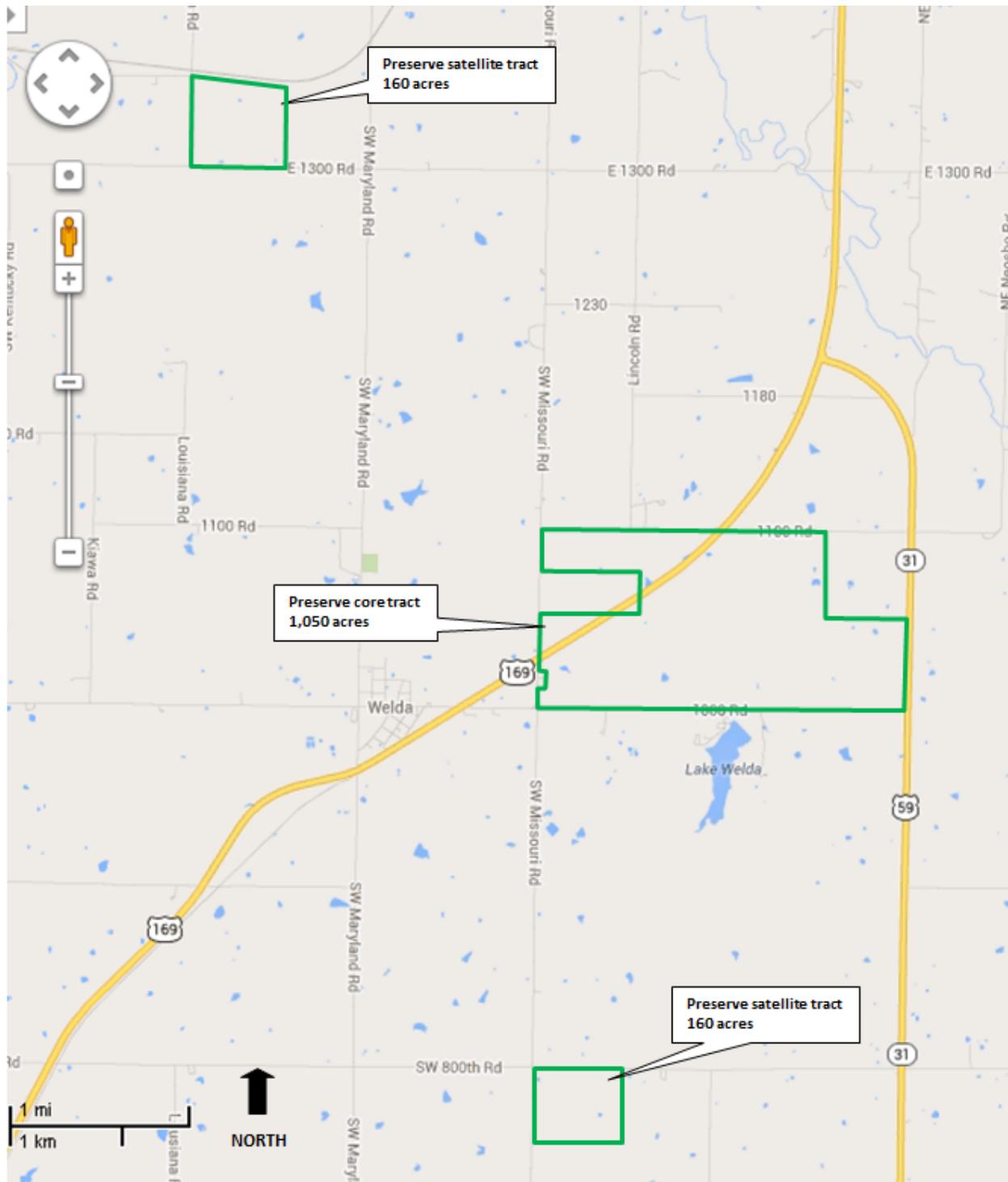


Figure 2 – Anderson County Prairie Preserve Tracts (Source: Google Maps 2014)

The entire US-169 widening improvement project travels from the Town of Welda, 7.4 miles north to the north US-169/US-59 junction, just south of the Town of Garnett (see **Exhibit 1** in **Appendix A**).

The US-169 widening project would require land from only the Preserve core tract, and would not require acquisition of land from the satellite tracts. Portions of the Preserve core tract were acquired by TNC with a *State Wildlife Grant* that was funded by the WSFR Program under Kansas Grant T-10-L-1 (in 1996, 1998, and 2003), which was administered by the Kansas Department of Wildlife, Parks and Tourism (KDWP) who acts as the state administrator of Service programs. These tracts extend along US-169 from SW Missouri Road at the west boundary of the Preserve, to 1100 Road at the north boundary of the Preserve, and north of 1000 Road between SW Missouri Road and US-59, with the exclusion of portions of privately-owned land adjacent to the west and east portions of the Preserve. In addition, Funding from the Service's *Partners for Wildlife Program* (Project T-22), a sub-grant of the federal State Wildlife Grants program, has also been used for invasive species management on areas of the Preserve (Busby et al., 2010).

If Preserve land is transferred for highway right-of-way, the land may be sold for fair market value, exchanged for property that serves an eligible Program purpose, or a combination of exchanging for other land, monetary payment, or services. Whatever is received must be equivalent to the current appraised market value of the property being disposed or transferred. **50 CFR 80.137 of "Administrative Requirements, Pittman-Robertson Wildlife Restoration and Dingell-Johnson Sport Fish Restoration Acts" states:**

If the director of the State fish and wildlife agency and the Regional Director jointly decide that grant-funded real property is no longer useful or needed for its original purpose under the grant, the director of the agency must:

(b) Request disposition instructions for the real property under the process described at 43 CFR 12.71, "Administrative and Audit Requirements and Cost Principles for Assistance Programs."

Therefore, KDOT and the FHWA have made a commitment to replace Preserve lands taken by the project, with land in a location desired by TNC and Preserve management personnel, as part of the US-169 Highway widening project.

TNC proposes to relinquish a total of approximately 14.93 acres of Preserve land (right-of-way to be acquired for road widening improvements), consisting of 14.84 acres along the corridor of US-169 Highway and 0.09 acre along County Road 1000 (an unofficial detour route), to the Kansas Department of Transportation (KDOT) in return for land purchased by KDOT for the exchange, totaling approximately 22.81 acres of land adjacent to the north boundary of the Preserve core tract.

The WSFR Program approval of the proposed exchange of the Preserve property constitutes a federal action subject to the provisions of the National Environmental Policy Act of 1969 (NEPA), as amended. The Service is therefore required to prepare an Environmental Assessment (EA) to analyze the effects on the human and natural environment and document the findings. The Service will use this Draft EA to determine if the Proposed Action is likely to result in significant impacts to the human and natural environment. If it is determined that there are no significant adverse impacts, the Service will issue a Finding of No Significant Impact (FONSI). If it is determined, conversely, that significant impacts might occur, the Service will be required to prepare an Environmental Impact Statement (EIS).

B. Purpose and Need

The purpose of the US-169 widening project is to improve safety by adding 10-foot paved shoulders and by changing the vertical alignment, which would improve sight distances and passing opportunities. The widening project is needed to accommodate the projected increase in traffic volumes (5,950 vehicles per day, in year 2037, along the Preserve area) and to reduce the overall accident rate, which is currently higher than the statewide average for similar roads.

The purpose of the land exchange is to provide KDOT the property necessary for widening the right-of-way of US-169 Highway through the Preserve core tract, and for replacement of a box culvert with a rigid frame box (RFB) bridge over Bradshaw Creek on the 1000 Road unofficial detour route. If implemented, the exchange of property would be in lieu of monetary payment from KDOT to TNC for right-of-way acquisition.

Through coordination with TNC, three properties in the immediate area were identified as possible lands that were suitable for exchange. However, only one was determined to be available from a willing seller (the Doering property).

The Doering property consists of two tracts of land containing a total of 22.81 acres of land located adjacent to the north side of the Preserve core tract, although separated by 1100 Road (see **Figure 3**). The larger tract (14.3 acres) is adjacent to the west side of US-169, and the smaller tract (8.51 acres) is adjacent to the east side of US-169 Highway. KDOT has purchased the Doering property and proposes to transfer it to TNC to replace the Preserve property needed as right-of-way for the US-169 Highway widening improvement project and as partial mitigation for impacts on the wildlife and habitat of the Preserve land. Of the 22.81 acres on the Doering property, 20.18 acres are grassland and the remaining 2.63 acres contain trees and shrubs.

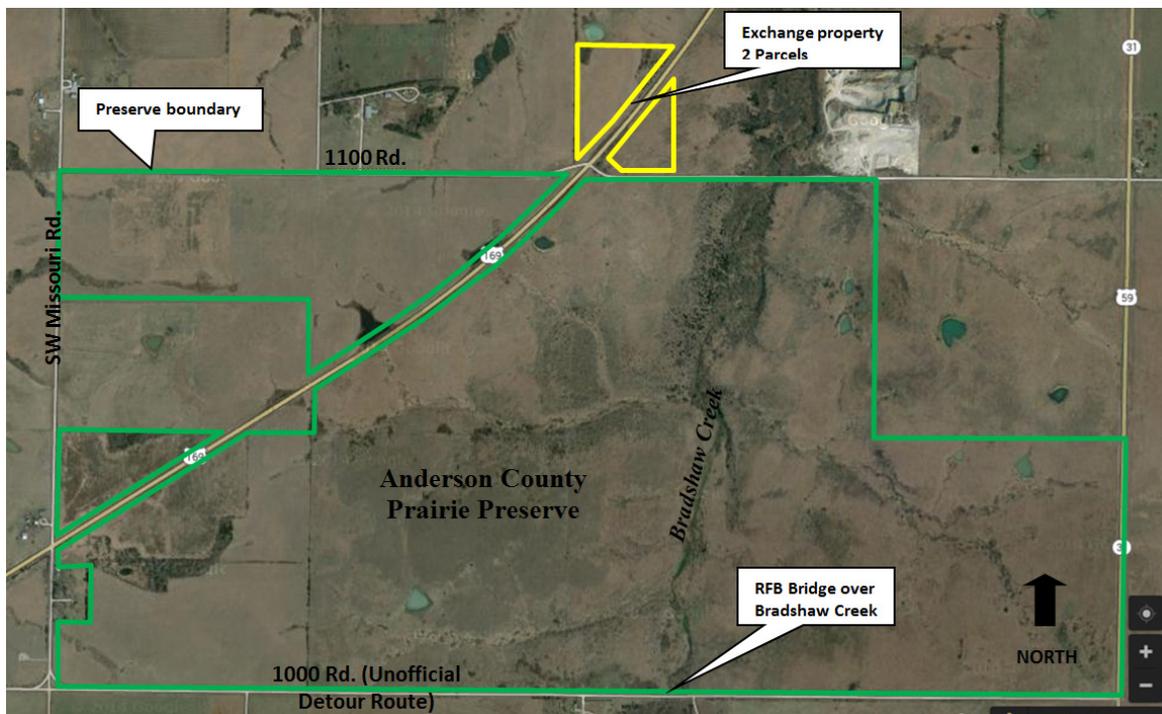


Figure 3 – Exchange Property (Source: Google Maps 2015)

Chapter II ALTERNATIVES

A. Proposed Action

The WSFR Program proposes to approve the transfer of approximately 14.93 acres of land in the Preserve core tract owned by TNC. The Preserve land owned by TNC would be transferred to KDOT, to provide right-of-way needed for the widening of US-169, in exchange for 22.81 acres of land owned by KDOT (see **Exhibits 2 and 3** in **Appendix A**).

Widening improvements to US-169 would include 2-lane reconstruction, vertical alignment changes, addition of 10-foot paved shoulders, replacement of drainage structures, and replacement of a concrete box culvert with a rigid frame box (RFB) bridge over Bradshaw Creek on the 1000 Road unofficial detour route. In order to construct the improvements, cut and fill slopes would infringe on, and require the acquisition of, 14.93 acres of Preserve land, 14.84 acres of which is along US-169 and 0.09 acre of which is along 1000 Road. An additional 3.99 acres of Preserve property will be used for temporary easements, 3.95 acres of which is along US-169 and 0.04 acre of which is along 1000 Road.

During preliminary profile review, KDOT considered three “options” for the US-169 improvements (as described below), all of which consisted of the addition of 10-foot shoulders. Option 2 was recommended as the Preferred Alternative.

Option 1 consisted of reconstruction on existing alignment for the entire length of the project, from Welda to just south of Garnett, using 3R criteria for mill and overlay work.

Option 2 consisted of reconstruction on existing alignment using AASHTO design criteria for the south half of the alignment (from Welda to the US-59-US-169 junction), and using 3R criteria on the north half of the alignment (from the US-59-US-169 junction to just south of Garnett).

Option 3 consisted of reconstruction of US-169 on existing alignment on the south half of the alignment (through the Preserve), and reconstruction on off-set alignment on the north half of the project.

In addition to complying with WSFR regulations, replacement of the land relinquished to KDOT would mitigate the impacts from the widening improvements to US-169 and 1000 Road that are adjacent to the Preserve.

B. No Action

The No Action Alternative would leave the existing roadway and associated infrastructure as it is today. There would be no widening improvements, vertical alignment changes, or replacement of drainage structures. There would also be no transfer of TNC property to KDOT, nor exchange of KDOT property for TNC property. The existing TNC property would remain in TNC ownership and the parcels considered for exchange would remain in KDOT ownership at the

present time. The No Action Alternative would not satisfy the purpose and need for the Proposed Action.

C. Alternative Considered but Dismissed

Another alternative considered, but dismissed, was that of TNC receiving monetary compensation for the required right-of-way on Preserve property, instead of receiving replacement land that possesses a similar function and habitat value. KDOT would pay TNC an amount based on an appraised fair market value of the 14.93 acres of Preserve property. These funds would have to be returned to the *State Wildlife Grant Fund* administered by the Service's *Wildlife and Sport Fish Restoration Program* for future obligation toward eligible *State Wildlife Grant Program* activities. The 22.81 acres on the two private parcels would remain in the ownership of KDOT at the present time. This alternative was dismissed from additional analysis because it did not meet one of the primary goals of TNC, which is to conserve disappearing native prairie habitat in Eastern Kansas.

Chapter III AFFECTED ENVIRONMENT

A. Anderson County Prairie Preserve (the Preserve) Property

1. Location

The Anderson County Prairie Preserve (the Preserve) property that would be subjected to the Proposed Action, is located along both the northwest and southeast sides of US-169 in Anderson County, Kansas; approximately 0.7 mile northeast of the Town of Welda, in the southeast portion of the state (see **Figures 1 and 2** in **Chapter I**). The legal description (section, township, range) of the Preserve property is detailed in **Appendix D**.

As shown on **Exhibits 2 and 3** in **Appendix A**, the majority of the Preserve property subjected to the Proposed Action is a narrow band of land located adjacent to each side of US-169 highway, and is approximately 1.1 miles in length from the west boundary of the Preserve to the north boundary, not including a 0.18-mile gap of private property. In addition, Preserve land is also adjacent to the north side of the 1000 Road unofficial detour route.

2. Topography

The topography of the Preserve land subjected to the Proposed Action is characterized by gently sloping terrain through a series of ridges and valleys. The terrain is mostly southwest facing in the southwest half of the property, and mostly southwest and northeast facing in the northeast half of the property.

3. Soils and Prime/Unique Farmland

According to information from the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) soil survey database (NRCS, 2013), most of the soils in the southwest half of the Preserve property subjected to the Proposed Action are generally silt loams with a small portion of gravelly silt loam. The northeast half contains mostly silty clay loams with smaller portions of silt loam and gravelly silt loam.

Some of the soils within the Preserve property subjected to the Proposed Action are also designated as Prime Farmland or Farmland of Statewide Importance, based on the NRCS soil survey database (see **Exhibit 2** in **Appendix A**). However, the Preserve property is currently not cultivated; rather it is used as native pasture or meadow. Although only a small amount of land is not designated as any type of farmland, the majority of land is designated as Farmland of Statewide Importance, and a minor amount is designated as Prime Farmland, as follows:

Prime Farmland

Kenoma silt loam, 1 to 3 percent slopes
Wagstaff silty clay loam, 1 to 3 percent slopes

Farmland of Statewide Importance

Eram-Clareson complex, 1 to 15 percent slopes
Kenoma-Olpe complex, 3 to 7 percent slopes
Summit silty clay loam, 3 to 7 percent slopes

4. Water Resources and Floodplain

Based on field investigations for water resources performed by KDOT's Environmental Services Section (ESS) on September 10, 2014 (see KDOT ESS Environmental Review in **Appendix B**), it was determined that the Preserve property subjected to the Proposed Action contains the following water resources (see **Exhibits 2 and 3** in **Appendix A**):

Ponds – Two ponds, one 1.1-acre pond (P-1) and one 0.8-acre pond (P-2), are located on the northwest side of US-169. The Preserve property contains 0.9 acre of Pond P-1 and 0.7 acre of Pond P-2. The remaining portions of the ponds are in the existing highway right-of-way.

Streams – The Preserve property subjected to the Proposed Action contains the following streams:

- Although Bradshaw Creek (S-1) is shown as an intermittent stream on the USGS base map, it is perennial at this location. It flows north through the Preserve and is located on the north side of 1000 Road, which crosses the creek. It has a channel width of approximately 28 feet at this location, which is the outlet area of the culvert under 1000 Road.
- An unnamed tributary (S-2), located near the west boundary of the Preserve property on the south side of US-169, flows to a culvert under SW Missouri Road. It is shown as intermittent on the USGS base map, but the channel is ephemeral at this location, with a width of approximately 2.5 feet.
- Two other ephemeral streams (S-3 and S-4) are located on the southeast side of US-169; one at each pond location, on the opposite side of the roadway. Both of these ephemeral streams have a narrow channel between 1.5 to 2 feet wide.

Wetlands – The Service's National Wetlands Inventory (NWI) database indicates that the two ponds mentioned above are mapped with the following designation: PABFh – Palustrine Aquatic Bed Semi-permanently Flooded Diked/Impounded. Based on the wetland investigations performed by KDOT's ESS, it was determined that Pond P-1 has a scrub-shrub wetland fringe (W-1) approximately 4 feet wide around the edge of the entire pond totaling approximately 0.15 acre, 0.12 acre of which is on the Preserve property. However, it was determined that Pond P-2 has no wetland fringe above its ordinary high water mark.

According to the Flood Hazard Boundary Map of the area, the Federal Emergency Management Agency (FEMA) has designated a 100-year floodplain along Bradshaw Creek. At the 1000 Road crossing of Bradshaw Creek, the floodplain on the Preserve property is approximately 100 feet wide on the north side of 1000 Road.

5. Vegetation

The Preserve property subjected to the Proposed Action is located within the Anderson County Prairies Conservation Area, which contains 125,852 acres of the largest intact tallgrass prairie landscape remaining east of the Flint Hills.

The Preserve property subjected to the Proposed Action contains mostly tallgrass prairie plant communities dominated by grasses, such as Big Bluestem (*Andropogon gerardii*), Little Bluestem (*Schizachyrium scoparium*), Indiangrass (*Sorghastrum nutans*), and Switchgrass (*Panicum virgatum*); interspersed with a mix of forb species, some of the most common of which are Leadplant (*Amorpha canescens*), Ashy Sunflower (*Helianthus mollis*), Bigflower Coreopsis (*Coreopsis grandiflora*), Azure Aster (*Aster oolentangiensis* var. *oolentangiensis*), Prairie Violet (*Viola pedatifida* var. *pedatifida*), and Slender Bush Clover (*Lespedeza virginica*).

After agreeing to take over the management responsibilities of the Preserve in 2006, KBS developed a plan to initiate conservation management to preserve the tallgrass prairie ecosystem. A report was prepared in 2010 titled *Monitoring and Habitat Management for Species of Greatest Conservation Need: Anderson County Prairie Preserve* (Busby, et al., 2010). The report included a list of 46 forb species that were inventoried on the Preserve lands (see **Table A** in **Appendix B**).

The 2010 report also summarized the results of a two-year project that included the following objectives: “1) establish baseline survey and monitoring of Species of Greatest Conservation Need (GCN) and vegetation, 2) control invasive species, and 3) initiate education and outreach with local landowners and natural resource professionals” (Busby, et al., 2010).

The KBS manages the Preserve lands as various management units, or uses of the land. The management units along the Preserve property subjected to the Proposed Action include the following:

- Old Field, Former Cropland – located in the southwest half of the Preserve along the northwest and southeast sides of US-169
- Native Hay Meadow – located in the northeast half of the Preserve along the northwest side of US-169
- Native Prairie, Former Meadow – located in the north-central portion of the Preserve along the northwest side of US-169
- Pasture, Native Range – located in the north-central portion of the Preserve along the southeast side of US-169; and on the north side of 1000 Road at the Bradshaw Creek crossing

In order to improve habitat conditions on the Preserve (and surrounding private lands), KBS has adopted ecologically beneficial grazing and burn practices, and has conducted outreach activities to provide this information to surrounding landowners for voluntary utilization on their own properties.

From 2006 through 2010, a private contractor was hired to spot spray herbicide and eradicate infestations and isolated areas of the state-listed noxious weed, Sericea Lespedeza (*Lespedeza*

cuneata) that were present on the Preserve lands. In addition, invasive trees were removed from the prairie upland areas (Busby et al., 2010).

Trees and shrubs that exist on the Preserve property subjected to the Proposed Action are few and scattered along the project corridor. The sparse woody vegetation that does exist is deciduous and consists of predominantly shrubs such as Roughleaf Dogwood (*Cornus drummondii*), Fragrant Sumac (*Rhus aromatica*), and Smooth Sumac (*Rhus glabra*); and trees such as Honey Locust (*Gleditsia triacanthos*), American Elm (*Ulmus americana*), Green Ash (*Fraxinus pennsylvanica*), Osage Orange (*Maclura pomifera*), and White Mulberry (*Morus alba*). The vegetation around the two ponds includes mostly Roughleaf Dogwood, as well as Buttonbush (*Cephalanthus occidentalis*) and a few Black Willow (*Salix nigra*) trees.

6. Fish Species

On the north side of the 1000 Road unofficial detour route, the Preserve property subjected to the Proposed Action contains Bradshaw Creek. This area of the creek is below the dam of Lake Welda and has the potential of providing habitat for common fish species such as Channel Catfish (*Ictalurus punctatus*), Yellow Bullhead (*Ameiurus natalis*), Bluegill (*Lepomis macrochirus*), and Green Sunfish (*Lepomis cyanellus*). Other common smaller fish that can occur in streams in the region may include species such as the Bluntnose Minnow (*Pimephales notatus*), the Fathead Minnow (*Pimephales promelas*), and the Red Shiner (*Cyprinella lutrensis*) (KDWP, 2006). These species have the potential of inhabiting the creek when overflow from the lake spillway occurs. During a visit to the creek crossing on 1000 Road in July 2015, six fish species (18 to 24 inches in length), with the appearance of Grass Carp (identity unconfirmed) were observed in the cloudy pool at the culvert outlet, although no other fish were observed. The remaining streams on the Preserve property are ephemeral and do not support the common fish species listed above.

The two ponds on the Preserve property were most likely farm stock ponds used for cattle watering before TNC acquired the land in 1998 and 2003. It is presumed that these ponds were not stocked with fish, and no fish were observed during a site visit in July 2015. TNC and KBS have no knowledge of any fish being present in the ponds (see email dated July 31, 2015 in **Appendix C**).

7. Wildlife

Some of the most common wildlife mammal species that inhabit the tallgrass prairies of eastern Kansas (NPS, 2014), which would include the Preserve property, include the Coyote (*Canis latrans*), the Striped Skunk (*Mephitis mephitis*), the American Badger (*Taxidea taxus*), the Raccoon (*Procyon lotor*), the Thirteen-lined Ground Squirrel (*Spermophilus tridecemlineatus*), the Prairie Vole (*Microtus ochrogaster*), the White-footed Mouse (*Peromyscus leucopus*), the Eastern Cottontail (*Sylvilagus floridanus*), and the Virginia Opossum (*Didelphis virginiana*). KBS surveys indicated that the dominant bird species at the Preserve include Grasshopper Sparrow (*Ammodramus savannarum*), Dickcissel (*Spiza americana*), Eastern Meadowlark (*Sturnella magna*), and Brown-headed Cowbird (*Molothrus ater*) (Busby et al., 2010).

8. Federal and State-Listed Endangered and Threatened Species

An initial review of the Service’s Endangered Species webpage for federally-listed endangered or threatened species was conducted (USFWS, 2014), as well as correspondence with KBS for a review of state and federally-listed endangered or threatened plant species in the US-169 project area (see correspondence dated June 21, 2005/February 14, 2005 and June 20, 2013 in **Appendix C**), and correspondence with KDWPT for a review of state and federally-listed endangered or threatened wildlife species in the US-169 project area (see letter dated June 13, 2014 in **Appendix C**). The results indicated that sensitive species (listed in **Table 1**) are known to occur or have the potential of occurring in the project area.

Table 1: Endangered and Threatened Species Listings for US-169 Project Area

Common Name	Scientific Name	State Listing	Federal Listing
Mead’s Milkweed	<i>Asclepias meadii</i>	Imperiled (S2) ¹	Threatened
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	None	Threatened
Eastern Spotted Skunk	<i>Spilogale putorius</i>	Threatened	None
Sprague’s Pipit	<i>Anthus spragueii</i>	None	Candidate

¹S2 – Imperiled in the state because of rarity or because of some factor(s) making it very vulnerable to extirpation from the state. Typically, 6 to 20 occurrences or few remaining individuals or acres. (KBS, 2014)

The habitat characteristics of the species listed in **Table 1** are as follows:

Mead’s Milkweed – The Mead's Milkweed is a long-lived tallgrass prairie perennial herb belonging to the milkweed family (*Asclepiadaceae*). This federally-threatened species is known to persist at 171 sites in 34 counties in eastern Kansas, Missouri, south-central Iowa, and southern Illinois. According to the Service’s Mead’s Milkweed Recovery Plan, occurrences of the species in Kansas are distributed among 13 counties, with most in Anderson, Douglas, and Franklin counties. “Almost all Mead’s milkweed sites in Kansas are currently being used as hay meadows with the exception of a few sites that are managed by different rotations”... being “...restricted to sites that have never been plowed and only lightly grazed, and hay meadows that are cropped annually for hay. As a result of fragmentation and destruction of the tall grass prairie, Mead's Milkweed populations have declined in Kansas, Missouri, Iowa, and Illinois" (USFWS, 2003). According to the KBS, Mead’s Milkweed was identified on prairies in the region in 1987 and 1988, and the Preserve contains one of the largest populations of Mead’s Milkweed in the world (see email dated June 20, 2013 in **Appendix C**). In 2013, KBS conducted a survey that confirmed the existence of Mead's Milkweed in the area proposed to be impacted by construction activities of the US-169 Highway widening adjacent to the Preserve property, as well as in two other locations on private property outside of the Preserve boundaries. “Approximately 20 ramets (some flowering, others vegetative) were counted adjacent to the (Preserve) within a distance of approximately 500 m” (Delisle, 2014).

The KBS also investigated the Preserve property on the north side of the 1000 Road unofficial detour route where a bridge replacement is proposed. No Mead’s Milkweed plants were found and KBS stated that the area is not suitable for the species (see email dated June 12, 2014 in **Appendix C**).

Northern Long-eared Bat – The Northern Long-eared Bat (NLEB) was recently (April 2015) listed as a federally-threatened species that could occur in Anderson County. During winter, NLEBs hibernate in caves or mines with constant temperatures, high humidity, and no air currents. In summer, NLEBs roost in cavities, crevices, or under bark of live or dead trees. It has also been rarely found roosting in barns or sheds (USFWS, 2015). The Preserve property subjected to the Proposed Action contains no structures and very few trees, all of which are isolated, as there is no contiguous forest habitat in the vicinity.

Eastern Spotted Skunk – Designated Critical Habitat for the state-threatened Eastern Spotted Skunk includes suitable habitat in Anderson County and is present in the US-169 project area. This species prefers upland prairie grasslands and forest edges. In addition, odd areas with abandoned structures are also utilized. Most of the Preserve property subjected to the Proposed Action contains upland prairie grassland, which is considered critical habitat for the species. Correspondence with KDWP confirmed the presence of Designated Critical Habitat in the project area (see letter dated June 13, 2014 in **Appendix C**).

Sprague's Pipit – Sprague's pipit is a grassland bird that prefers native prairie habitat and is considered an uncommon to rare migrant through Kansas, as it travels to its breeding range to the north and wintering range to the south (U.S. Fish and Wildlife Service, 2010). The KBS conducted a breeding bird monitoring program in each month of June from 2006 to 2009 and a breeding bird survey each June in 2008 and 2009 on the Preserve property, the results of which indicated that Sprague's Pipit was not present in the area (Busby, 2010). The native prairie areas in the project area contain potential habitat for feeding during the migration of the species. As a candidate species, there is no federally-designated Critical Habitat for Sprague's Pipit, nor has the KDWP designated state Critical Habitat for this avian species. In addition, KDWP does not list it as a threatened or endangered species, or a species in need of conservation (KDWP, 2016).

9. State Species of Greatest Conservation Need

The KBS 2010 report, *Monitoring and Habitat Management for Species of Greatest Conservation Need: Anderson County Prairie Preserve* (Busby et al., 2010), indicated that surveys and monitoring were conducted on and near the Preserve lands for 19 Species of GCN known or likely to occur at the Preserve, according to the Kansas Comprehensive Wildlife Conservation Plan (KDWP, 2005). A table included in the report (see **Table B** in **Appendix B**) listed those species by "tier", with Tier 1 being highest priority; and by "presence". The KBS surveys were conducted for breeding birds, amphibians, and butterfly populations. Information on reptiles was obtained incidental to other field work. No mammal surveys were conducted because no GCN mammal species are considered likely to occur on the Preserve.

Based on the results documented in the KBS 2010 report, the GCN species that were found to be present on or near Preserve lands are listed in **Table 2**.

Table 2: Species of Greatest Conservation Need Observed on or Near the Preserve

Group	Common Name	Scientific Name	Tier	Survey Observations
Amphibian	Crawfish Frog	<i>Rana areolata</i>	I	Present on Preserve lands
Bird	American Golden-Plover	<i>Pluvialis dominica</i>	I	Observed adjacent to Preserve in the past
Bird	Bell's Vireo	<i>Vireo bellii</i>	I	Present on Preserve lands
Bird	Greater Prairie-Chicken	<i>Typanuchus cupido</i>	I	Known to be present near Preserve lands
Bird	Henslow's Sparrow	<i>Ammodramus henslowii</i>	I	Present on Preserve lands
Bird	Loggerhead Shrike	<i>Lanius ludovicianus</i>	I	Present on Preserve lands
Bird	Short-eared Owl	<i>Asio flammeus</i>	I	Late-season migrant known to be present in the area in winter
Bird	Smith's Longspur	<i>Calcarius pictus</i>	I	Present on Preserve lands
Bird	Dickcissel	<i>Spiza americana</i>	II	Present on Preserve lands
Bird	Eastern Meadowlark	<i>Sturnella magna</i>	II	Present on Preserve lands
Bird	Scissor-tailed Flycatcher	<i>Tyrannus forficatus</i>	II	Present on Preserve lands
Bird	Northern Bobwhite	<i>Colinus virginianus</i>	III	Present on Preserve lands
Insect	Arogos Skipper	<i>Atrytone arogos</i>	II	Present on Preserve lands
Insect	Regal Fritillary	<i>Speyeria idalia</i>	II	Present on Preserve lands
Reptile	Massasauga	<i>Sistrurus catenatus</i>	II	Present on Preserve lands

10. Historical, Cultural, and Archeological Resources

The KDOT ESS performed a cultural resource investigation of the US-169 project area, which included the Preserve property, and submitted materials to the State Historic Preservation Office (SHPO) for review. In a letter dated March 11, 2014 (see **Appendix C**), the SHPO determined that the proposed project would not adversely affect any property listed, or eligible for listing in the National Register of Historic Places (NRHP). The Kansas State Historical Society (KSHS) Contract Archeology Program (CAP) also reviewed the project and on March 14, 2014 recommended a Phase II investigation of the project area (see signed Phase I Review in **Appendix C**). The CAP completed a Phase II field survey investigation in which ten archaeological sites in the project area were discovered and recorded. However, none were considered to represent significant cultural resources, and KSHS submitted the information to the SHPO and recommended that no further archaeological investigations were necessary. The SHPO concurred with the finding of no historic properties affected (see KSHS and SHPO letters dated June 25, 2014 in **Appendix C**).

In October of 2014, the KDOT ESS requested a Section 106 review by the KSHS/SHPO for the Preserve property subjected to the Proposed Action on the north side of the 1000 Road unofficial detour route. In a reply letter dated October 3, 2014 (see **Appendix C**), the SHPO determined that the proposed project will not adversely affect any historic/architectural property listed or determined eligible for listing in the NRHP. On October 7, 2014, the KSHS signed the Phase I archeology clearance, indicating that the property contains no archeological sites listed or eligible for listing in the NRHP (see Phase I Review in **Appendix C**).

11. Hazardous Material Sites

The KDOT ESS performed a search of the EPA Superfund (CERCLIS) and National Priorities List (NPL) databases, and the Kansas Department of Health and Environment (KDHE) Solid Waste data base, the results of which indicated that there were no registered landfills or identified/ listed hazardous material sites within the Preserve property subjected to the Proposed Action. The KDOT ESS also conducted a field inspection on August 26, 2014, which did not reveal any locations with the potential for encountering hazardous substances on the Preserve property subjected to the Proposed Action (see KDOT ESS Environmental Review in **Appendix B**).

12. Aesthetics, Recreation, and Access

The Preserve property subjected to the Proposed Action provides travelers on US-169 Highway and 1000 Road, with aesthetically pleasing views of prairie plant communities, with a mixture of native tall grasses interspersed with native wildflowers (forbs).

Although the Preserve property is adjacent to each side of the highway, it is not a public use area and there are no “designated” trails, pull-off areas, or access drives that allow for public hiking, hunting, or any other type of recreation. The public is not allowed to be on the property without an appointment and without a guide representing either TNC or KBS. The FHWA has determined that the Preserve does not meet the definition of a Section 4(f) property and as such, does not have special protection under the Section 4(f) regulations (see email dated July 22, 2014 in **Appendix C**).

Existing private access points (unpaved field entrances) located along US-169 are used by the KBS for maintenance purposes, or by farmers/ranchers that rent some of the land for cattle grazing and/or haying. Field entrances exist on each side of US-169 at three locations: (1) approximately 300 feet northeast of the intersection with SW Missouri Road, (2) approximately 3,100 feet northeast of the intersection with SW Missouri Road, and (3) approximately 800 feet southwest of the intersection with 1100 Road. A field entrance also exists on the east side of SW Missouri Road, just south of the intersection with US-169 (see **Exhibits 2 and 3** in **Appendix A**).

B. Kansas Department of Transportation (KDOT) Property

1. Location

The property that KDOT is in the process of purchasing (the KDOT property) is located on two parcels, approximately 2 miles northeast of the Town of Welda, Kansas; and adjacent to the north side of 1100 Road. The parcel on the west side of US-169 contains 14.3 acres and the parcel on the east side of US-169 contains 8.51 acres (see **Exhibits 2 and 3** in **Appendix A**). The legal description of the KDOT property is the SW 1/4, SW 1/4, Section 30, T21S, R20E.

2. Topography

The topography of the KDOT property is characterized by a ridge top running through the middle of the west parcel, with gently sloping terrain on each side of the ridge and a small drainage swale in the northwest corner. The east parcel is gently sloping and contains a drainage swale in the south half of the parcel.

3. Soils and Prime/Unique Farmland

According to information from the NRCS soil survey database, the soils in the KDOT property are generally silty clay loams. However, an area in the northeast corner of the west parcel and a smaller area in the north half of the east parcel are designated as “pits”, which were either previous borrow areas or quarried pits.

The KDOT property contains approximately 5.5 acres of land designated as “prime farmland” and approximately 13.0 acres of land designated as “farmland of statewide importance”. Most of the land in the west parcel is comprised of roughly equal amounts of Prime Farmland and Farmland of Statewide Importance, whereas most of the soils in the east parcel are designated as Farmland of Statewide Importance (see **Exhibit 2** in **Appendix A**). These farmland soils include the following types:

Prime Farmland – Wagstaff silty clay loam, 1 to 3 percent slopes

Farmland of Statewide Importance – Eram-Clareson complex, 1 to 15 percent slopes

The KDOT property is currently not cultivated, and was used as pasture for haying or cattle grazing by the previous owner.

4. Water Resources and Floodplain

Based on a site visit, it was determined that the east parcel of the KDOT Property contains a small ephemeral drainage channel (S-5), approximately 2.5 to 3 feet wide and 570 feet in length, located in the south half of the property (see **Exhibits 2** and **3** in **Appendix A**). There are no ponds or wetlands on the KDOT property and a review of FEMA’s Flood Hazard Boundary Map of the area indicated that there is no designated 100-year floodplain located on the KDOT Property.

5. Vegetation

The west parcel of the KDOT property is part of a large prairie complex comprised of over 650 acres, and is considered a high quality prairie (known as Welda Prairie North) with potential habitat for Mead’s Milkweed, although none was found on the property during a 2013 survey by KBS (see email dated June 20, 2013 in **Appendix C**). The 22.81 acres of the KDOT property contains a total of 20.18 acres of grassland and 2.63 acres of trees and shrubs. The west parcel contains approximately 11.77 acres of grassland and 2.53 acres of trees and shrubs, and the east parcel contains approximately 8.41 acres of grassland and 0.1 acre of trees and shrubs. The vegetation consists of tallgrass prairie plant communities dominated by grasses such as Big Bluestem (*Andropogon gerardii*), Little Bluestem (*Schizachyrium scoparium*), and Indiangrass (*Sorghastrum nutans*). The west parcel is also interspersed with a mix of forb species such as Pale Purple Coneflower (*Echinacea pallida*), Purple Prairie Clover (*Dalea purpurea* var. *purpurea*), Butterfly Milkweed (*Asclepias tuberosa*), Compass Plant (*Silphium laciniatum*), Lead Plant (*Amorpha canescens*), Grayhead Coneflower (*Ratibida pinnata*), Willowleaf Sunflower (*Helianthus salicifolius*), and Black-eyed Susan (*Rudbeckia hirta*). However, forb species, as well as trees and shrubs, are very sparse in the east parcel.

In the northwest corner of the west parcel, a small pocket of deciduous trees and shrubs exists and includes species such as American Elm (*Ulmus americana*), Black Walnut (*Juglans nigra*), Hackberry (*Celtis occidentalis*), Honey Locust (*Gleditsia triacanthos*), Chinkapin Oak (*Quercus muehlenbergii*), Roughleaf Dogwood (*Cornus drummondii*), and Indian Currant Coralberry (*Symphoricarpos orbiculatus*). The northeast corner of the west parcel could have been a previous borrow or quarried area, but now contains scattered evergreen Eastern Redcedar (*Juniperus virginiana*), and deciduous Fragrant Sumac (*Rhus aromatica*), and Roughleaf Dogwood (*Cornus drummondii*).

As stated previously, the KDOT property was used as pasture for haying and/or cattle grazing by the previous owner. In April 2015 (see email dated April 1, 2015 in **Appendix C**), the KDOT ESS investigated the east and west parcels of the KDOT property and found that there was no evidence of the state-listed noxious weed, Sericea Lespedeza (*Lespedeza cuneata*). In addition, representatives of TNC and the KBS inspected the KDOT property and approved of the purchase, on the condition that no spraying is to be done prior to the transaction (see email dated July 8, 2015 in **Appendix C**).

6. Fish Species

The KDOT property contains only the ephemeral drainage way described above; which is narrow, shallow, and dry much of the time. As such, it does not support fish species.

7. Wildlife

The KDOT property is located just north of the Preserve property, separated only by 1100 Road, and provides 22.81 acres of similar habitat for the same wildlife species as those discussed previously for the Preserve property.

8. Federal and State-Listed Endangered and Threatened Species

The KDOT property is relatively adjacent to the Preserve property (on the north side of 1100 Road), and as such, the federal and state-listed species that are relevant to the Preserve property (as discussed previously) are also relevant to the KDOT property. The sensitive species listed in **Table 1**, have the potential of occurring on the KDOT property as well.

The habitat characteristics of the species listed in **Table 1** are the same as those previously described for the Preserve property. These characteristics as they pertain to the KDOT property are as follows:

Mead's Milkweed – The KBS previously investigated native prairie areas along the US-169 project corridor to conduct a survey for locations of the federally-threatened Mead's Milkweed. The west parcel of the KDOT property is part of a large prairie complex comprised of over 650 acres, and is considered a high quality prairie (known as Welda Prairie North) with potential habitat for Mead's Milkweed. However, the species was not found during the survey (see email dated June 20, 2013 in **Appendix C**).

Northern Long-eared Bat – The KDOT property contains trees only in a small area at the northwest corner of the west parcel, in addition to relatively small cedar trees at the

northeast corner of the west parcel. As such, suitable habitat for the federally-threatened NLEB is very minimal.

Eastern Spotted Skunk – Designated Critical Habitat for the state-threatened Eastern Spotted Skunk is present in the US-169 project area. The KDOT property contains prairie grassland and as such, is considered critical habitat for the species.

Sprague’s Pipit – The KDOT property contains prairie grassland that may be potential feeding habitat as the species migrates to breeding and wintering areas.

9. State Species of Greatest Conservation Need

The KDOT property is relatively adjacent to the Preserve property (on the north side of 1100 Road), and as such, the state Species of Greatest Conservation Need (GCN) that are relevant to the Preserve property (as discussed previously and as shown in **Table 2**) are also relevant to the KDOT property, and have the potential of occurring on the KDOT property.

10. Historical, Cultural, and Archeological Resources

In March of 2015, the KDOT ESS requested a Section 106 review of the KDOT property by the KSHS/SHPO. On March 25, 2015, the KSHS signed the Phase I archeology clearance, indicating that the property contains no archeological sites listed or eligible for listing in the NRHP (see **Appendix C**). In a letter dated April 8, 2015 (see **Appendix C**), the SHPO determined that the proposed project (including the KDOT property) will not adversely affect any historic/architectural property listed or determined eligible for listing in the NRHP.

11. Hazardous Material Sites

Based on a search of the Kansas Department of Health and Environment (KDHE) and US Environmental Protection Agency (EPA) data bases, as well as a site visit, it was determined that there are no registered landfills or identified/listed hazardous material sites on the KDOT property.

12. Aesthetics, Recreation, and Access

The KDOT property is visually similar to the nearby Preserve land, and provides travelers on US-169 Highway aesthetically pleasing views of prairie plant communities, with a mixture of native grasses interspersed with wildflowers (forbs). The KDOT property has been privately owned and has no facilities that are used for public recreation. It is not a public use area and there are no “designated” trails, pull-off areas, or access drives that allow for public hiking, hunting, or any other type of recreation.

Private access points (unpaved field entrances) exist for the west parcel of the KDOT property at three locations: (1) off of the north side of 1100 Road, just west of the US-169/1100 Road intersection, (2) approximately 645 feet northeast of the intersection with 1100 Road on the west side of US-169, and (3) approximately 80 feet northeast of the northeast property corner of the west parcel (see **Exhibits 2 and 3** in **Appendix A**). There is currently no direct access onto the east parcel from either US-169 or 1100 Road.

Chapter IV ENVIRONMENTAL CONSEQUENCES

This chapter evaluates the impacts to each environmental component that was described in Chapter III Affected Environment, and addresses the differences in environmental impacts of the Proposed Action and No Action alternatives.

A. Proposed Action

The description of impacts below is based on the current land ownership for which the land exchange is proposed.

1. Soils and Prime/Unique Farmland

Preserve Property

Widening improvements to US-169 Highway and 1000 Road would result in the removal and manipulation of soils, and the permanent loss of approximately 4.4 acres of land designated as “prime farmland” and approximately 7.5 acres of land designated as “farmland of statewide importance”. A *Farmland Conversion Impact Rating Form AD-1006* was submitted to the NRCS on July 9, 2015. As stipulated in the Farmland Protection Policy Act (FPPA), the NRCS has 45 days to review Form AD-1006 and provide a response. However, no response was received; therefore, requirements of the FPPA have been satisfied.

KDOT Property

The Nature Conservancy and the KBS do not anticipate any grading or soil disturbing activities on this property after the exchange, other than potential activities related to habitat enhancement. Although 4.4 acres of prime farmland and 7.5 acres of statewide important farmland on the Preserve property will be disturbed by KDOT's road widening activities, the 5.5 acres of prime farmland and 13.0 acres of statewide important farmland on the KDOT property that will be transferred from KDOT to TNC will replace the converted farmland with more acreage that will now be preserved and protected by becoming a federal asset.

2. Water Resources and Floodplain

Preserve Property

Widening improvements of the Proposed Action would result in the replacement of a box culvert with a rigid frame box (RFB) bridge over Bradshaw Creek (S-1) on the north side of 1000 Road, and the placement of embankment fill and placing/extending culverts at three other stream crossings (S-2, S-3 and S-4) along US-169. The total linear impacts to stream channels on the Preserve property would equal approximately 527 linear feet. The impacts at each stream channel on the Preserve property are as follows:

- Stream S-1 (perennial) – 14 linear feet x 28 feet (channel width)
- Stream S-2 (ephemeral) – 272 linear feet x 2.5 feet (channel width)
- Stream S-3 (ephemeral) – 173 linear feet x 1.5 to 2 feet (channel width)
- Stream S-4 (ephemeral) – 68 linear feet x 1.5 to 2 feet (channel width)

Impacts to wetlands would occur as a result of mucking and backfilling Pond P-1 for widening of US-169. Fill material would be placed in 0.12 acre of scrub-shrub fringe wetland (W-1) on the Preserve property at Pond P-1. In addition, 0.9 acre of the 1.2 acres of Pond P-1 that would be filled is on the Preserve property. The project would also result in the filling of Pond P-2, 0.7 acre of which is on the Preserve property.

The widening improvements along the 1000 Road unofficial detour route would fill approximately 0.02 acre of the 100-year floodplain on the Preserve property subjected to the Proposed Action.

Since the addition of shoulders is necessary on both sides of US-169, impacts to water resources are unavoidable. However, minimization of impacts would be accomplished by utilizing methods such as changing embankment slopes to the steepest allowed by the Federal Highway Administration (FHWA).

Section 404 of the Clean Water Act (CWA) prohibits the discharge of dredged or fill material (i.e., rock, sand, soil, construction materials) into Waters of the U.S. without a permit from the U.S. Army Corps of Engineers (USACE). During the Section 404 Permit process for the Proposed Action improvements, which will take place in the final design stage, the USACE will determine which water resources are (jurisdictional) Waters of the U.S. If it is determined that mitigation for impacts to jurisdictional streams and wetlands is required, mitigation options will follow the hierarchy of using mitigation banks first, if available, and an in-lieu fee if banks are not available. If stream mitigation is required, the Kansas Stream Mitigation Guidelines will be followed.

In Anderson County, the Kansas Department of Agriculture, Division of Water Resources (DWR) has jurisdiction over streams having a drainage area over 640 acres. Construction or modification of bridges, culverts or other structures within the channel, changes made in the alignment or cross-section of a DWR jurisdictional stream, or fills placed within the 100-year floodplain would require a Stream Obstructions or Channel Changes permit and/or a Floodplain Fills permit.

KDOT Property

TNC does not anticipate filling or disturbing the ephemeral stream on the KDOT property, which is approximately 570 feet in length with a channel that is 2.5 to 3 feet wide.

3. Vegetation

Preserve Property

Widening improvements to US-169 Highway would result in the permanent alteration or removal of existing vegetation on the Preserve property subjected to the Proposed Action. Approximately 0.3 acre of deciduous trees and shrubs, and approximately 14.6 acres of herbaceous vegetation consisting of predominantly native grasses and forbs would be removed or altered. Disturbed areas outside of the constructed shoulders would be seeded with native grasses and forbs.

KDOT Property

Previously, the KDOT property was privately owned and the land was used for cattle grazing and haying. The land supports approximately 20 acres of grassland, which would be

managed for haying and for the benefit of providing native prairie habitat. If necessary, the KDOT property would also be subjected to the same invasive and noxious weed management procedures as those that KBS implements on the existing Preserve land.

4. Fish Species

Preserve Property

Widening improvements to US-169 Highway, including construction for the replacement of a box culvert on the 1000 Road unofficial detour route, would result in 14 linear feet of Bradshaw Creek being transferred from the Preserve property to highway right-of-way. However, this portion of the creek would be downstream of the new box culvert structure and would remain as an open perennial channel capable of supporting fish in that location.

KDOT Property

The KDOT property does not contain any water resources that are capable of supporting fish species.

5. Wildlife

Preserve Property

Approximately 14.9 acres of potential wildlife habitat would be disturbed due to the roadway widening. During construction of the widening improvements, wildlife would generally relocate and avoid the area because of habitat disturbance, noise, and equipment traffic; although wildlife would most likely return to the general area after construction is complete and vegetation has established.

KDOT Property

No wildlife habitat would be directly impacted on the KDOT property; however the property contains approximately 22.81 acres of wildlife habitat for the Preserve. During construction of the widening improvements, wildlife would generally relocate and avoid the area because of habitat disturbance, noise, and equipment traffic; although wildlife would most likely return to the general area after construction is complete and vegetation has established.

6. Federal-Listed Endangered, Threatened, or Proposed, and State-Listed Species

Preserve Property

The US-169 widening project would convert approximately 10 acres of prairie habitat (suitable for Mead's Milkweed) on the Preserve property to highway right-of-way, in addition to impacting individual Mead's Milkweed plants. In September 2013 and February 2014 the KDOT ESS met with the Service to discuss the US-169 project and its potential impact to Mead's Milkweed, the development of a Biological Assessment (BA) and detailed transplanting plan, and the need for formal Section 7 consultation. KDOT then prepared a BA, which can be found in **Appendix B**, to address impacts to the federally-threatened Mead's Milkweed. Impacts to Mead's Milkweed habitat were determined after avoidance/minimization was implemented, which included minimizing impacted areas by utilizing methods such as changing slopes to the steepest allowed by the FHWA.

KDOT conducted early and continued agency consultation in the development of a proposed transplanting plan for the Mead's Milkweed, as a means of mitigating for unavoidable

impacts. The KBS developed a preliminary draft Mead's Milkweed transplanting plan (March 20, 2014, titled *Mead's Milkweed Transplanting Project, Hwy 169 in Anderson County*), which was submitted to the Service by KDOT (see email dated March 24, 2014 in **Appendix C**). The Service reviewed the transplanting plan, recommended some changes to the plan, and requested that KDOT have FHWA send a letter to the Service requesting formal Section 7 consultation, along with the BA and a final version of the transplanting plan. The final draft of the Mead's Milkweed transplanting plan was verbally approved by the USFWS on July 7, 2014 and is included in **Appendix B**. The FHWA initially submitted the requested materials to the Service on July 9, 2014. After it was discovered that the Service had no records of the submittal, a second request was submitted by FHWA on January 22, 2015 (see letter in **Appendix C**). The Service sent a reply letter to FHWA to initiate Section 7 consultation, and stated that it would prepare a Biological Opinion (see letter dated January 30, 2015 in **Appendix C**).

In accordance with the Mead's Milkweed transplanting plan, KDOT is to work with the KBS and the Service to successfully salvage Mead's Milkweed plants that would be impacted by construction activities and attempt to move and reestablish a colony of the plants on a restoration site in Unit 12 in the northwest corner of the Preserve property, as well as collect seed for germination and transplanting in the restoration site. The University of Kansas Center for Research, Inc. (KUCR), on behalf of the KBS, sent a letter to KDOT including a proposed scope of work and cost estimate for the KBS to conduct the necessary activities stipulated in the Mead's Milkweed Transplanting Project plan (see letter dated April 15, 2014 in **Appendix C**). KDOT subsequently authorized and approved the proposed scope of work (see email dated June 2, 2014 in **Appendix C**).

The USFWS prepared a Biological Opinion (BO) which was transmitted to FHWA May 26, 2015 (see letter and BO in **Appendix C**). The BO stated that, although there is no federally – designated critical habitat at the project location, the US-169 widening project would result in impacts to the Mead's Milkweed by permanently converting up to 10 acres of prairie to roadway. The lost prairie habitat would be permanently unavailable to the species for recolonization or population expansion. As an alternative to losing existing plants through conversion of prairie to roadway use, the project would also result in the intentional removal and transplantation of existing plants to a protected area as a conservation measure. The BO indicated that the Service is authorizing the transplanting activities and also provided an update of the transplanting activities in accordance with the transplanting plan as follows:

It was proposed that approximately 50 ramets of Mead's Milkweed from three sites would be transplanted in 2014 and 2015. Transplanting was initiated in 2014, with Mead's ramets being flagged in the spring and summer. Thirty-two (32) rhizomes were then dug up and planted while dormant in the fall of 2014. Additional ramets will also be transplanted in the fall of 2015. In addition, seed produced by plants growing in the right-of-way adjacent to the Preserve property were collected in the fall of 2014 with the intent of germinating and growing additional plants in a greenhouse for translocation back to the Preserve restoration site in May of 2015. All transplants will be monitored on an annual basis for 5 years, beginning in May 2015, and if additional ramets are discovered, they will be moved in 2016.

Subsequent to the update provided in the BO, additional ramets were transplanted in 2015 and all the transplant work was completed in 2016.

The Service's BO stated that the proposed project is not likely to jeopardize the continued existence of Mead's Milkweed, based primarily on the availability of suitable habitat and known populations that occur outside the action area. The BO recommended that FHWA work with KDOT to implement the following conservation recommendations:

- Ensure that completion of the Mead's Milkweed transplanting is carried out, including monitoring of translocated plants for up to 5 years.
- Restrict or prohibit use of herbicides in roadside maintenance in any area of native prairie along this 7-mile highway corridor.
- If roadside mowing is necessary in native prairie, conduct it as late in the season as possible, preferably after September 20, to allow Mead's Milkweed to complete its seed dispersal.

Northern Long-eared Bat – Since the NLEB was listed as a federally-threatened species in April 2015, KDOT evaluated potential impacts to the species from tree clearing. In a letter dated May 8, 2015 (see **Appendix C**), FHWA concluded that limited tree clearing for the project would be covered under the Section 4(d) rule and is not likely to adversely affect the NLEB. In a letter dated May 11, 2015 (see **Appendix C**), the Service concurred with a determination that the project may affect but is not likely to adversely affect the NLEB, and stated that there was no further need of Section 7 consultation in regard to the NLEB.

Eastern Spotted Skunk – The KDWPT conducted a review of the US-169 project, which included the Preserve property subject to the Proposed Action. The KDWPT stated that the project would include construction activity within Designated Critical Habitat for the state-threatened Eastern Spotted Skunk, thereby requiring an Action Permit (see letter dated June 13, 2014 in **Appendix C**). KDOT obtained an Action Permit from KDWPT on December 4, 2015, which requires KDOT to implement measures such as reseeding disturbed areas with native warm-season grasses and forbs, and creating brush piles from shrubs and trees that will be removed or disturbed during construction of the project. The Action Permit is currently being kept active.

KDWPT also reviewed the Preserve property on the north side of the 1000 Road unofficial detour route where a culvert replacement is proposed. KDWPT indicated that the Eastern Spotted Skunk would not be significantly impacted as a result of the culvert replacement project, and that an Action Permit would not be required for that particular project. However, KDWPT recommended native seeding and construction of brush piles as a means to minimize potential impacts from project construction (see email dated October 17, 2013 in **Appendix C**).

Sprague's Pipit – The 10 acres of prairie habitat on the Preserve property that would be converted to highway right-of-way would reduce the overall feeding habitat of the 1,050 acres available on the Preserve property for this migrating candidate species. As such, the project is not likely to jeopardize the continued existence of this species.

The Preserve is an important prairie ecosystem in the Osage Plains section of the Osage Plains/Flint Hills Prairie ecoregion and within the Anderson County Prairies Conservation Area.

The Preserve provides critical habitat for the federally listed (threatened) Mead's Milkweed (*Asclepias meadii*) and critical habitat for the state-listed (threatened) Eastern Spotted Skunk (*Spilogale putorius*). Disappearing native prairie habitat in eastern Kansas continues to dwindle due to agricultural conversion and development. As such, the land exchange between TNC and KDOT would balance the loss of impacted Preserve property with a gain to TNC of prairie habitats with substantial and beneficial resource values.

KDOT Property

Although the KBS considers the west parcel of the KDOT property as "potential" habitat for Mead's Milkweed, the species has not been found on the property. In addition, the KDOT property contains very few trees that would be considered summer habitat for the NLEB, but tree removal would not occur in conjunction with the land exchange and there would be no impact to the NLEB. However, the property does contain upland prairie grassland which is Designated Critical Habitat for the state-threatened Eastern Spotted Skunk. This prairie grassland is also potential feeding habitat for Sprague's Pipit. TNC does not anticipate any type of land disturbance activities on the property that would impact these species. KDWPT also reviewed the KDOT property and indicated that crucial wildlife habitats, current state or federally-listed threatened species, endangered species, or Species in Need of Conservation (SINC) would not be adversely impacted as a result of the land exchange, and that an Action Permit and mitigation measures would not be required (see email dated April 6, 2015 in **Appendix C**).

7. State Species of Greatest Conservation Need

Preserve Property

The US-169 widening project, which included the Preserve property subjected to the Proposed Action, was reviewed by KDWPT for potential impacts to species in need of conservation (as well as crucial wildlife habitats and state-listed threatened and endangered species). Correspondence from KDWPT did not indicate that the project would adversely impact any Species of Greatest Conservation Need (see letter dated June 13, 2014 in **Appendix C**).

KDOT Property

KDWPT also reviewed the KDOT property and indicated that species in need of conservation (SINC) (as well as crucial wildlife habitats and current state or federally-listed threatened species) would not be adversely impacted as a result of the land exchange (see email dated April 6, 2015 in **Appendix C**).

8. Historical, Cultural, and Archeological Resources

Preserve Property

The KSHS and the SHPO determined that there are no historic or archeological sites listed or eligible for listing in the National Register of Historic Places (NRHP) within the Preserve property subjected to the Proposed Action, therefore, there would be no impacts to such sites (see letters and correspondence dated March 11, 2014; March 14, 2014, June 25, 2014; October 3, 2014; and October 7, 2014 in **Appendix C**). However, if archaeological deposits are encountered during construction of the project, the deposits would be left in place and the KSHS would be immediately contacted.

KDOT Property

The KSHS and the SHPO determined that the KDOT property does not contain historic or archeological sites listed or eligible for listing in the NRHP (see correspondence dated March 25, 2015 and April 8, 2015 in **Appendix C**). Therefore, there would be no impacts to such sites.

9. Hazardous Material Sites***Preserve Property***

There are no hazardous material sites within the Preserve property subjected to the Proposed Action; therefore there would be no impacts either to or from such sites.

KDOT Property

The KDOT property contains no hazardous material sites; therefore, there would be no impacts either to or from such sites.

10. Aesthetics, Recreation, and Access***Preserve Property***

Widening improvements to US-169 Highway would not adversely impact the aesthetically pleasing views adjacent to the highway. Although the Proposed Action would widen the highway with the addition of shoulders, the views to the adjacent prairie landscape of the Preserve would remain unobstructed. The Preserve property subjected to the Proposed Action is not accessible to the public for hiking, hunting, or any other type of recreation; therefore there would be no impacts to recreation.

Widening improvements to US-169 Highway would result in impacts to some of the field entrances as follows:

- The field entrances located approximately 300 feet northeast of the intersection with SW Missouri Road would remain open on the southeast side of US-169, but would be closed on the northwest side of the highway. However, an existing field entrance located to the north, off of the east side of SW Missouri Road, would still provide access to the Preserve property on the northwest side of the highway.
- The field entrance on the east side of SW Missouri Road, 165 feet south of the intersection with US-169 would be closed.
- The field entrance located approximately 3,100 feet northeast of the intersection with SW Missouri Road, would be closed on the southeast side of the highway. However, other field entrances located off of the southeast side of US-169 would remain open and would provide access to this portion of the Preserve property.
- The field entrances located approximately 800 feet southwest of the intersection with 1100 Road would remain open on the southeast side of US-169, but would be closed on the northwest side of the highway. However, an existing field entrance located along the south side of 1100 Road, west of the intersection with US-169, would still provide access to this portion of the Preserve property.

KDOT Property

The KDOT property would continue to provide travelers on US-169 Highway with aesthetically pleasing views of prairie plant communities, with a mixture of native tall grasses interspersed with native wildflowers (forbs). The KDOT property currently has no facilities that are used for

public recreation, and is not accessible to the public for hiking, hunting, or any other type of recreation; therefore, there would be no impacts to recreation. Although the KDOT property is adjacent to each side of the US-169 highway, it will not be a public use area and there will be no “designated” trails, pull-off areas, or access drives that would allow for public recreation.

The field entrance to the west parcel of the KDOT property that is located 645 feet northeast of the 1100 Road intersection, off of US-169 highway, would be closed. However, the field entrance located 80 feet northeast of the northeast corner of the west parcel would remain open. The field entrance off of the north side of 1100 Road would be relocated farther to the west, off of the realigned 1100 Road to provide access to the west parcel. A new field entrance would be added off of 1100 Road east of the US-169 intersection to allow access to the east parcel.

11. Cumulative Impacts

A cumulative impact is defined in 40 C.F.R. §1508.7 as "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. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

Preserve Property

Widening improvements for US-169 Highway would eventually improve public safety and traffic flow along the highway for travelers, local residents, and commercial carriers. KDOT estimated that traffic volumes were projected to increase by approximately 37% between 2017 and 2037. Wildlife movement across the highway would continue and it is anticipated that vehicle-wildlife collisions are likely to continue to occur, and may potentially increase as traffic increases. With the removal of a narrow band of approximately 14.8 acres of Preserve property adjacent to existing US-169, wildlife populations are not anticipated to significantly decrease, since adequate suitable habitat is available directly adjacent to the Preserve property subject to the Proposed Action.

If future roadway improvements, beyond the limits of the Proposed Action, were to take place in the future, additional impacts to the Preserve property would similarly require KDOT to provide suitable replacement land as mitigation.

Future land acquisition of Preserve property for roadway use, as well as the use of herbicides to control roadside vegetation, would also have the potential to impact Mead’s Milkweed that may be growing on the Preserve property or within the road right-of-way. In addition, changes in agricultural practices on private land that would include ground disturbance or mowing that disrupts the sexual reproductive cycle of the species, as well as roadside mowing, could adversely affect the species.

KDOT Property

The cumulative impacts discussed above for the Preserve property would also apply to the KDOT property. Beyond that, cumulative impacts to the KDOT property are expected to be minimal because TNC would take the land out of private ownership, would preserve and enhance the habitat that exists on the property, and manage the areas to control or eliminate

invasive and noxious plants. These measures would thereby encourage the rejuvenation of native plant growth and diversity, which will provide improved habitat for Mead's Milkweed establishment and more valuable wildlife habitat on the property.

B. No Action

The following discussion of impacts to each environmental resource presumes that, for the No Action Alternative, the Preserve property would not be acquired or disturbed for US-169 widening improvements. In addition, it is presumed that the KDOT property would remain in KDOT ownership at the present time.

In addition to the environmental impacts described below, the No Action alternative would also have an impact on traffic and safety. If the road is not widened, the purpose and need of the project (see Chapter 1) would not be met and the existing roadway would not be able to safely accommodate the projected increase in traffic volumes. Safety would not be increased and the current overall accident rate, which is higher than the statewide average, would not be reduced.

1. Soils and Prime/Unique Farmland

Preserve Property

The Preserve property would most likely remain undisturbed at the present time, with no anticipated impacts to the soils, including prime and statewide important farmland.

KDOT Property

The KDOT property would most likely remain undisturbed at the present time, with no anticipated impacts to the soils, including prime and statewide important farmland.

2. Water Resources and Floodplain

Preserve Property

The Preserve property would most likely remain undisturbed with no anticipated impacts to streams, wetlands, ponds, and the floodplain area at the present time.

KDOT Property

The KDOT property would most likely remain undisturbed with no anticipated impacts to the ephemeral stream at the present time.

3. Vegetation

Preserve Property

The Preserve property would most likely remain undisturbed at the present time with no impacts to the vegetation.

KDOT Property

The KDOT property would most likely remain undisturbed at the present time with no impacts to the vegetation on the property.

4. Fish Species

Preserve Property

The Preserve property would most likely remain undisturbed at the present time with no impacts to fish species.

KDOT Property

The KDOT property does not contain a water resource supporting fish species, therefore there would be no such impacts.

5. Wildlife

Preserve Property

The Preserve property would most likely remain undisturbed with no anticipated impacts to wildlife.

KDOT Property

The KDOT property would most likely remain undisturbed with no anticipated impacts to wildlife.

6. Federal-Listed Endangered, Threatened, or Candidate, and State-Listed Species

Preserve Property

The Preserve property would most likely remain undisturbed with no anticipated impacts to federal or state-listed species.

KDOT Property

The KDOT property would most likely remain undisturbed with no anticipated impacts to federal or state-listed species.

7. State Species of Greatest Conservation Need

Preserve Property

The Preserve property would most likely remain undisturbed with no anticipated impacts to State Species of Greatest Conservation Need.

KDOT Property

The KDOT property would most likely remain undisturbed with no anticipated impacts to State Species of Greatest Conservation Need.

8. Historical, Cultural, and Archeological Resources

Preserve Property and KDOT Property

Neither the Preserve property nor the KDOT property contain historic or archeological sites listed or eligible for listing in the NRHP; therefore, there would be no impacts to such sites.

9. Hazardous Material Sites

Preserve Property and KDOT Property

Neither the Preserve property nor the KDOT property contain hazardous material sites, therefore there would be no impacts to or from such sites.

10. Aesthetics, Recreation, and Access

Preserve Property

The KDOT property would most likely remain undisturbed with no anticipated impacts to aesthetics or access. There are no recreation activities in conjunction with the Preserve property, therefore there would be no recreation impacts.

KDOT Property

The KDOT property would most likely remain undisturbed with no anticipated impacts to aesthetics or access. There are no recreation activities in conjunction with the KDOT property, therefore there would be no recreation impacts.

11. Cumulative Impacts

Preserve Property

The cumulative impacts of the No Action Alternative to the Preserve property would include impacts on traffic and safety. If the road is not widened, the existing roadway would not be able to safely accommodate the projected increase in traffic volumes. Safety would not be increased and the current overall accident rate would not be reduced. Wildlife movement across the highway would continue and it is anticipated that vehicle-wildlife collisions are likely to continue to occur, and may potentially increase as traffic increases.

The potential use of herbicides to control roadside vegetation would also impact Mead's Milkweed that may be growing on the Preserve property or within the road right-of-way. In addition, roadside mowing could adversely affect the species.

KDOT Property

The cumulative impacts to the KDOT property would be the same as those described under the Preserve property. If the KDOT property would remain undisturbed, the vegetation and wildlife would continue to function in a manner similar to that of current conditions. However, the property would not be subjected to the enhancements or management practices that would be conducted if under the ownership and management of TNC/KBS. Therefore, the result could be reduced potential for providing suitable habitat for Mead's Milkweed establishment.

As KDOT property, there is also a potential for the land to eventually be disturbed in relation to highway construction operations, such as staging or borrow areas. If that were to occur, KDOT would first obtain all required environmental permits, while practicing avoidance, minimization, and mitigation of impacts.

If the KDOT property were to be sold back to a private owner, it has the potential of being subjected to agricultural practices that could include herbicide use, ground disturbance, or mowing that could adversely affect native prairie plant species.

Chapter V

COORDINATION AND CONSULTATION

A. Public Involvement

KDOT actively solicited public comment on the US-169 widening improvement project during an advertised public open house/meeting that was held at the Welda Community Center on February 27, 2014 (see advertisement in **Appendix B**). This initial public meeting attracted 69 people, 57 of which signed in. Seven written comments were returned at the public meeting. In addition, discussions between KDOT staff and individuals from the public were held during the meeting. In general, the public was not opposed to the project improvements, realizing that the addition of shoulders and improving sight distances are necessary to improve the safety along this stretch of the roadway. Most people wanted to know the details about how the project would impact their property, and ensure they would still have access to their property and be fairly compensated for any acquisition or replacement of impacted features on their property. Some people were also concerned about access and detours during construction. However, only one discussion pertained to the Preserve property. One of the KDOT staff spoke with a man who rented Preserve property along US-169 and uses some of the land for cattle grazing. He was concerned that he would not be able to access the land when road closure occurs during construction. He was told that the contractor would work with him so he could access the land when necessary.

B. Tribal Correspondence

In conjunction with the US-169 widening project, in December 2011, KDOT sent letters to the following five Native American Tribes: the Citizen Potawatomi Nation, the Osage Nation of Oklahoma, the Seneca-Cayuga Tribe of Oklahoma, the Wichita and Affiliated Tribes, and the Kaw Nation of Oklahoma. One response was received from the Osage Nation, requesting that a cultural resources survey be conducted, and that the resulting survey report be sent to the Osage Nation to review (see letters dated December 1, 2011 and February 13, 2012 in **Appendix C**).

C. Agency Coordination

In addition to the correspondence indicated in Chapters III and IV regarding specific environmental resources, agency coordination was also conducted to discuss the requirements involved in the land exchange.

1. The Service, KDWPT, and KDOT

On April 25, 2014, coordination took place between the Service and KDOT; and among the Service, KDWPT, and KDOT to discuss land exchange issues, as summarized below (see emails dated April 25, 2014 in **Appendix C**):

- Determination of whether to use a monetary exchange or a land exchange for the Preserve property to be acquired. The goal of TNC is to preserve land.

- An Environmental Assessment (EA) document would still be required, no matter which option is decided upon, and no other options are available. The purchase of the land used federal funds, and as such, there can be no disposal or condemnation of the property without Service approval through an Environmental Assessment (EA) or Environmental Impact Statement (EIS).

2. The Service, KDWPT, TNC, and KDOT

A conference call was held with officials from the Service, KDWPT, TNC, and KDOT on July 8, 2014 to further discuss project issues dealing with monetary transfer or land exchange, as summarized below (see email in **Appendix C**):

- A land exchange for the Preserve property to be acquired must be equivalent current appraised value and equivalent habitat value, and 100 percent would go to TNC.
- KDOT's preference was to use a monetary transfer for the Preserve property to be acquired.
- TNC knew of two landowners with property they would like to acquire for an exchange, and was to provide background and contact information to KDOT.

A follow-up email from TNC was sent to KDOT on July 9, 2014 (see **Appendix C**), indicating that TNC prefers the land exchange option to offset the loss of land from the Preserve.

3. KDWPT, KDOT, and TNC

A meeting with officials from KDWPT, KDOT, and TNC was held on July 23, 2014 (see meeting memo in **Appendix C**). The following is a summary of pertinent items discussed:

- The area KDOT would be acquiring for project right-of-way was deemed to be high quality prairie.
- TNC had originally identified three properties for possible exchange. However, only one was currently available. The property consisted of high quality native prairie that contained Mead's Milkweed. KDWPT and the Service were satisfied with the property for the exchange.
- KDOT must acquire the property prior to completion of an Environmental Assessment.

Subsequently, the owner decided not to sell his property for the land exchange. As a result, TNC looked at other adjacent or nearby properties and decided to pursue the Doering property, which was approved by TNC and KBS, as indicated in an email dated July 8, 2015 (see **Appendix C**). KDOT finalized the purchase of the Doering property for the land exchange on January 25, 2017.

Chapter VI
PUBLIC COMMENT

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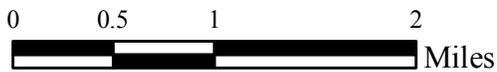
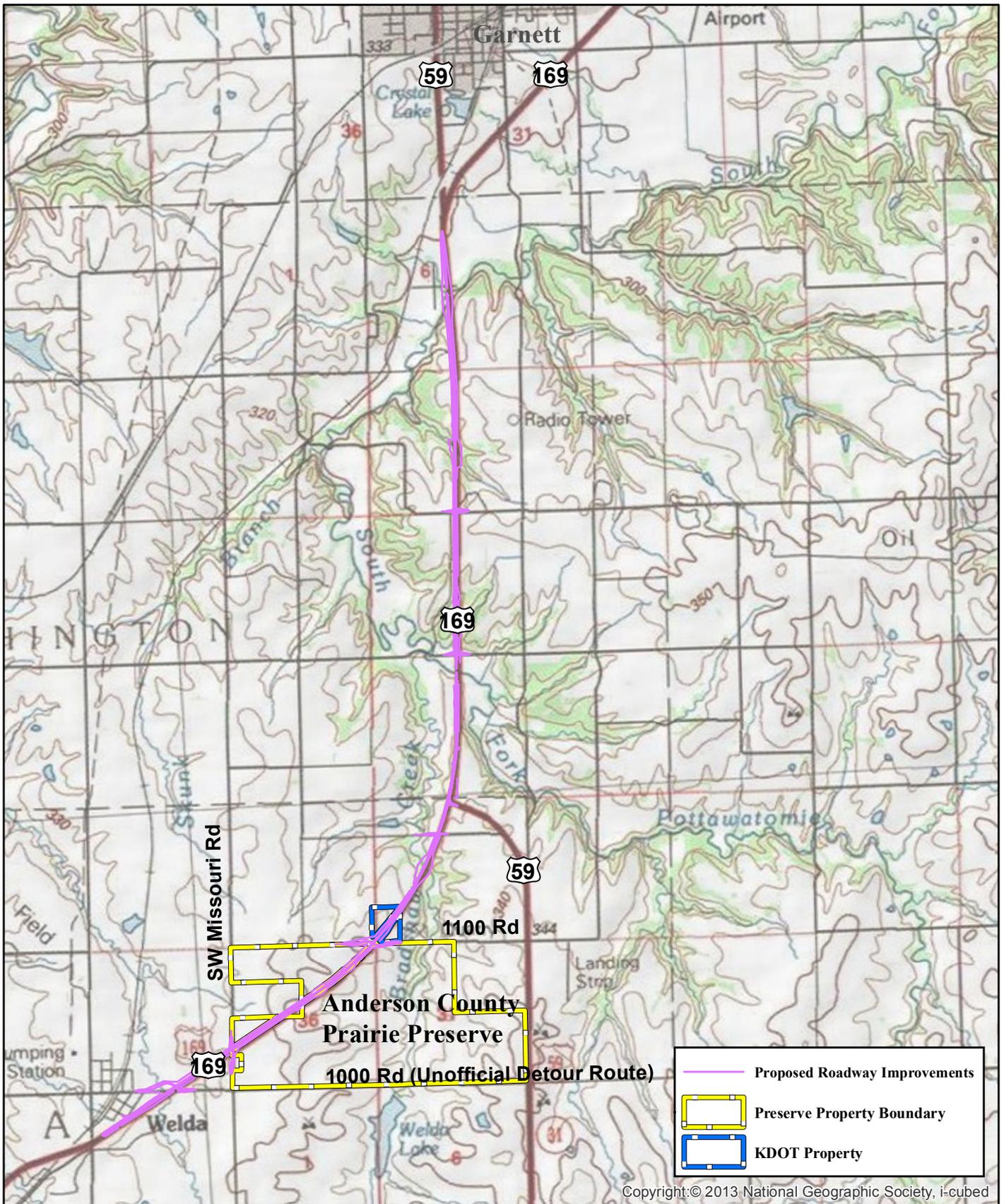
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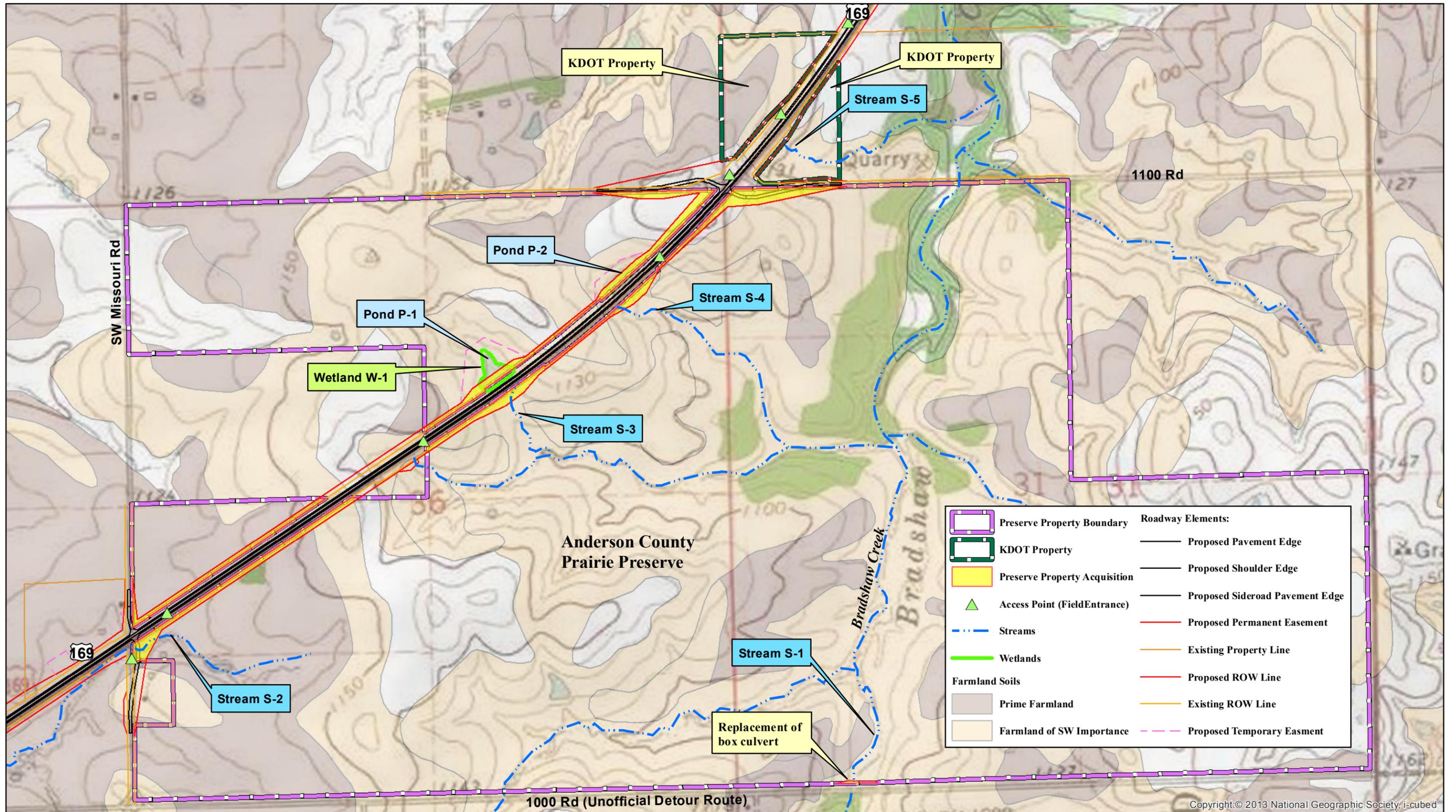
Appendix A

EXHIBITS

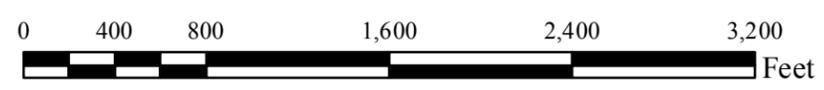


US-169 &
Anderson County Prairie Preserve
Land Exchange EA
Anderson County, Kansas

Exhibit 1
US-169 Corridor
Project Map

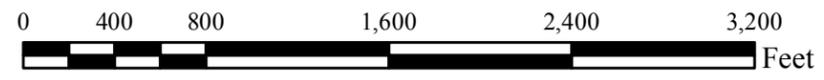
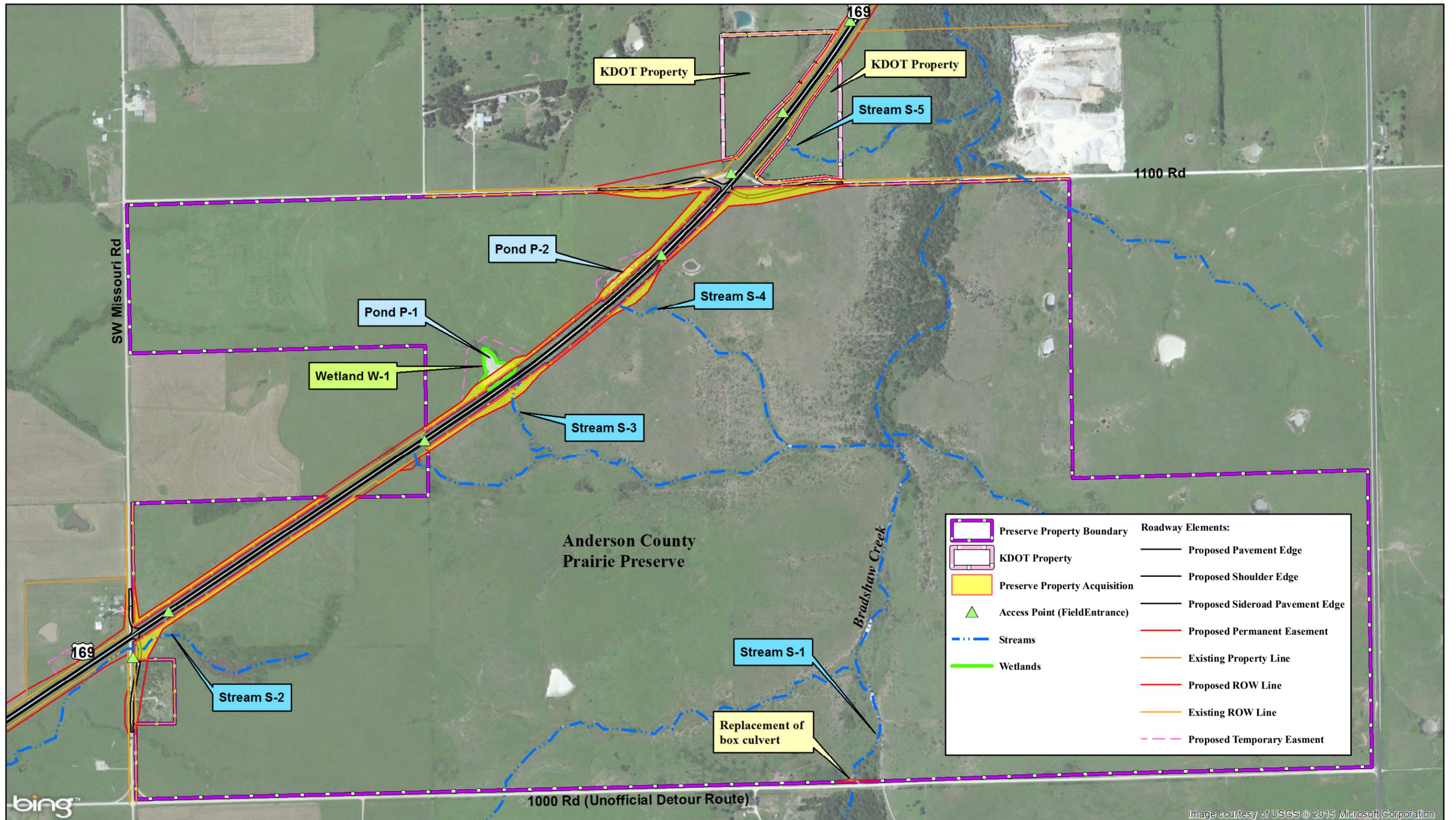


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**US-169 & Anderson County Prairie Preserve
Land Exchange EA
Anderson County, Kansas**

**Exhibit 2
USGS Map**



**US-169 & Anderson County Prairie Preserve
Land Exchange EA
Anderson County, Kansas**

**Exhibit 3
Impact Area**

Image courtesy of USGS © 2015 Microsoft Corporation

Appendix B

SUPPORTING INFORMATION

KDOT ESS Environmental Review
Project 169-2 KA-2380-01
September 10, 2014

Hazardous Waste, Farmland, Wetland and Stream Summary

Hazardous Waste:

The EPA Superfund (CERCLIS) and National Priorities List (NPL) databases did not identify any sites within either The Nature Conservancy impacted lands or the entire projects' proposed right of way.

The Kansas Department of Health & Environment (KDHE) Solid Waste database did not identify any landfills within The Nature Conservancy impacted lands or the entire projects' proposed right of way.

A field inspection conducted on August 26, 2014 did not reveal any locations within either The Nature Conservancy impacted lands or the entire projects' proposed right of way with potential for encountering hazardous substances.

Farmland:

The area designated is currently used for agriculture purposes. Since federal funds are being utilized and the design will require the acquisition of more than 5 acres per mile of additional right of way, the project will need to be evaluated for its farmland conversion impact rating (in accordance with USDA regulations). Since the area is pastureland rather than utilized for row crops, more than likely the project will be approved. Form AD 1006 will be completed.

WETLANDS:

The Nature Conservancy land impacted by the proposed project was inspected for wetlands and streams on September 10, 2014. There are two ponds in the NE ¼ Section 36-T21S-R19E that will be impacted. The pond at station 734 left has a wetland fringe approximately 4 foot wide around the edge of the entire pond totaling approximately 0.15 acre of scrub-shrub wetland. The pond at station 748 left has no wetland fringe above its OHW mark. This is the only jurisdictional wetland on The Nature Conservancy property.

The Francis E. Hermann land has been identified as potential replacement property for The Nature Conservancy impacted ground. The portion of the Hermann property that will be impacted by the proposed project has a 0.31 acre emergent wetland on the NW ¼ Sec 36-T21S-R19E at Station 722 left that is potentially USACE jurisdictional. The remainder of the Hermann property that KDOT is currently considering to acquire for replacement land contains no other jurisdictional wetlands.

Section 404 of the Clean Water Act (CWA) prohibits the discharge of dredged or fill material (i.e., rock, sand, soil, construction materials) into waters of the United States without a permit from the U.S. Army Corps of Engineers and mitigation may be required. Mitigation for wetland impacts will follow the hierarchy of using mitigation banks first if available and in-lieu fee mitigation if banks are not available.

STREAMS:

The project area crosses one USGS-mapped intermittent stream and 3 other unmapped potentially USACE jurisdictional streams on The Nature Conservancy property. The mapped intermittent stream is an unnamed tributary located at the SW ¼ Sec 36-T21S-R19E station 695 right and crosses SW Missouri Road. The other 3 potentially jurisdictional streams cross US-169 at stations 724, 735, and 746.

Section 404 of the Clean Water Act (CWA) prohibits the discharge of dredged or fill material (i.e., rock, sand, soil, construction materials) into waters of the United States without a permit from the U.S. Army Corps of Engineers and mitigation may be required. Stream mitigation will adhere to the Kansas Stream Mitigation Guidelines.

In Anderson County the Kansas Department of Agriculture, Division of Water Resources (DWR) has jurisdiction over streams having a drainage area over 640 acres. Construction or modification of bridges, culverts or other structures within the channel, or changes made in the alignment or cross-section of a DWR jurisdictional stream would require a Stream Obstructions or Channel Changes permit. The DWR requires a 50-foot vegetated buffer on both sides of new channels.

Wetland and Stream jurisdictional determinations and impacts for the entire KA-2380-01 project will be done at a later date.

Table A – List of Forb Species Monitored at ACP

Family	Scientific Name	Common Name	C value
Asclepiadaceae	<i>Asclepias meadii</i>	Mead's milkweed	10
Scrophulariaceae	<i>Buchnera americana</i>	blue hearts	9
Rhamnaceae	<i>Ceanothus americanus</i>	American ceanothus	9
Asteraceae	<i>Aster oolentangiensis</i> var. <i>oolentangiensis</i>	azure aster	8
Rhamnaceae	<i>Ceanothus herbaceus</i>	inland ceanothus	8
Asteraceae	<i>Coreopsis grandiflora</i>	bigflower coreopsis	8
Gentianaceae	<i>Gentiana puberulenta</i>	downy gentian	8
Polygalaceae	<i>Polygala incarnata</i>	slender milkwort	8
Polygalaceae	<i>Polygala sanguinea</i>	blood milkwort	8
Asteraceae	<i>Prenanthes aspera</i>	rough rattlesnake-root	8
Scrophulariaceae	<i>Veronicastrum virginicum</i>	Culver's-root	8
Fabaceae	<i>Amorpha canescens</i>	leadplant	7
Asclepiadaceae	<i>Asclepias hirtella</i>	prairie milkweed	7
Asclepiadaceae	<i>Asclepias stenophylla</i>	narrow-leaf milkweed	7
Asteraceae	<i>Coreopsis palmata</i>	finger coreopsis	7
Fabaceae	<i>Dalea candida</i> var. <i>candida</i>	white prairie-clover	7
Fabaceae	<i>Dalea purpurea</i> var. <i>purpurea</i>	purple prairie-clover	7
Fabaceae	<i>Desmodium sessilifolium</i>	sessile-leaf tickclover	7
Asteraceae	<i>Echinacea pallida</i>	pale purple-coneflower	7
Apiaceae	<i>Eryngium yuccifolium</i> var. <i>yuccifolium</i>	button snake-root eryngo	7
Asteraceae	<i>Helianthus mollis</i>	ashy sunflower	7
Asteraceae	<i>Liatris pycnostachya</i>	thick-spike gayfeather	7
Fabaceae	<i>Pedimelum esculentum</i>	bread-root scurf-pea	7
Polemoniaceae	<i>Phlox pilosa</i> subsp. <i>fulgida</i>	prairie phlox	7
Asteraceae	<i>Arnoglossum (Cacalia) plantagineum</i>	tuberous Indian-plantain	6
Asclepiadaceae	<i>Asclepias tuberosa</i> subsp. <i>interior</i>	butterfly milkweed	6
Fabaceae	<i>Lespedeza capitata</i>	round-head bush-clover	6
Asteraceae	<i>Liatris aspera</i>	button gayfeather	6
Campanulaceae	<i>Lobelia spicata</i> var. <i>leptostachys</i>	pale-spike lobelia	6
Violaceae	<i>Viola pedatifida</i> var. <i>pedatifida</i>	prairie violet	6
Asteraceae	<i>Helianthus salicifolius</i>	willowleaf sunflower	6
Fabaceae	<i>Baptisia bracteata</i> var. <i>leucophaea</i>	plains wild-indigo	6
Fabaceae	<i>Baptisia australis</i>	blue wild-indigo	6
Fabaceae	<i>Mimosa quadrivalvis</i>	cat-claw mimosa	6
Fabaceae	<i>Baptisia alba</i> var. <i>macrophylla</i>	white wild-indigo	5
Fabaceae	<i>Desmodium illinoense</i>	Illinois tick-clover	5
Asteraceae	<i>Helianthus pauciflorus</i> var. <i>pauciflorus</i>	stiff sunflower	5
Commelinaceae	<i>Tradescantia ohioensis</i>	Ohio spiderwort	5
Asteraceae	<i>Liatris mucronata</i>	pointed gayfeather	5
Lamiaceae	<i>Physostegia angustifolia</i>	false dragonhead	5
Fabaceae	<i>Lespedeza virginica</i>	slender bush clover	5
Asteraceae	<i>Hieracium longipilum</i>	longbeard hawkweed	5
Asteraceae	<i>Silphium laciniatum</i>	compassplant	4
Scrophulariaceae	<i>Penstemon digitalis</i>	smooth beardtongue	4
Fabaceae	<i>Psoralidium tenuiflorum</i>	narrow-leaf scurf-pea	3
Scrophulariaceae	<i>Penstemon tubiflorus</i>	tube beardtongue	3

Source: *Monitoring and Habitat Management for Species of Greatest Conservation Need: Anderson County Prairie Preserve*. Open-file Report No. 164. Kansas Biological Survey, Lawrence, KS

NOTE: List of 46 forb species included in forb monitoring at Anderson County Prairie Preserve in 2008 - 2009. C = Coefficient of Conservatism value for Kansas. Low coefficient values (0–3) denote taxa often found in highly-disturbed habitats and without a strong affinity for natural communities. High coefficient values (7–10) denote species that tolerate only limited disturbance and usually are found in natural communities.

Table B: ACPPTallgrass Prairie Species of Greatest Conservation Need

Group	Common Name	Scientific Name	Tier	Presence*	Seasonal Status
Amphibian	Crawfish Frog	<i>Rana areolata</i>	I	A	Resident
Bird	American Golden-Plover	<i>Pluvialis dominica</i>	I	A	Migrant
Bird	Bell's Vireo	<i>Vireo bellii</i>	I	A	Breeder
Bird	Greater Prairie-Chicken	<i>Tyrannuchus cupido</i>	I	A	Resident
Bird	Henslow's Sparrow	<i>Ammodramus henslowii</i>	I	A	Breeder
Bird	Loggerhead Shrike	<i>Lanius ludovicianus</i>	I	A	Breeder
Bird	Short-eared Owl	<i>Asio flammeus</i>	I	B	Migrant
Bird	Smith's Longspur	<i>Calcarius pictus</i>	I	A	Migrant
Insect	Prairie Mole Cricket	<i>Gryllotalpa major</i>	I	B	Resident
Reptile	Massasauga	<i>Sistrurus catenatus</i>	II	A	Resident
Bird	Dickcissel	<i>Spiza americana</i>	II	A	Breeder
Bird	Eastern Meadowlark	<i>Sturnella magna</i>	II	A	Resident
Bird	Grasshopper Sparrow	<i>Ammodramus savannarum</i>	II	A	Breeder
Bird	Scissor-tailed Flycatcher	<i>Tyrannus forficatus</i>	II	A	Breeder
Insect	Arogos Skipper	<i>Atrytone arogos</i>	II	A	Resident
Insect	Byssus Skipper	<i>Probema byssus</i>	II	C	Resident?
Insect	Ottoe Skipper	<i>Hesperia ottoe</i>	II	C	Resident?
Insect	Regal Fritillary	<i>Speyeria idalia</i>	II	A	Resident
Bird	Northern Bobwhite	<i>Colinus virginianus</i>	III	A	Resident

*Presence Codes: A = verified on ACPPT; B = verified in Anderson County; C = potentially occurs on ACPPT.

Sources (as shown in KBS 2010 report): KBS Ecological Reserves records, Kansas Natural Heritage Inventory database, Ely et. al.1986.

**169-2 KA-2380-01
Kansas Department of Transportation**

**On US-169, 1.5 miles South of RS 11 to the North Junction US-169/US-59, Anderson County,
Kansas**

Sections 2, T22S-R19E to Section 6, T21S-R20E in Anderson County

Bureau of Right of Way, Environmental Services Section (785) 296-0853

Introduction

The purpose of this biological assessment is to review Federal Aide Project 169-2 KA-2380-01 in sufficient detail to determine whether the proposed action may affect any of the threatened, endangered, or proposed species listed below. This biological assessment is prepared in accordance with legal requirements set forth under Section 7 of the Endangered Species Act (16 U.S.C. 1536 (c)), and follows the standards established in the Kansas Department of Transportation's (KDOT) NEPA guidance.

Threatened, Endangered, Proposed Threatened or Proposed Endangered Species

The species considered in this document are the Mead's Milkweed (*Asclepias meadii*) Threatened, and the Northern Long-Eared Bat (*Myotis septentrionalis*), proposed. The Kansas Department of Wildlife, Parks, and Tourism (KDWP) has listed the Eastern Spotted Skunk (*Spilogale putouris*) as State threatened and has defined areas along KDOT right-of-way as critical habitat.

Critical Habitat

The action addressed within this biological assessment falls within a county (Anderson) listed as potential critical habitat for the Mead's Milkweed (*Asclepias meadii*). No critical habitat rules have been published. The U.S. Fish and Wildlife Service (USFWS) states that critical habitat exists wherever the species is found. Due to the Northern Long-Eared Bat (*Myotis septentrionalis*) proposed status there is no critical habitat listed. By the time of project letting the Northern Long-Eared Bat listing status will be determined and KDOT will follow all requirements instructed by the USFWS to protect the species. The action addressed does fall within state listed critical habitat for the Eastern Spotted Skunk (*Spilogale putorius*). The Kansas Department of Wildlife, Parks, and Tourism has been contacted concerning this species and mitigation plans have been developed.

KDOT Project 169-2 KA-2380-01 (see Title Sheet) is located in Anderson County, Kansas which is one of 13 counties in Kansas in which Mead's Milkweed is known or is believed to exist. As such, KDOT consulted with the Kansas Biological Survey (KBS). A survey completed in 2013 confirmed the existence of Mead's Milkweed in the Highway 169 right-of-way and in two other locations on private land that would be impacted by the highway widening project. A map showing the confirmed locations is attached to this Biological Assessment.

Consultation to Date

On May 14, 2012 KDOT Environmental Services met with our engineering road squad to discuss the project and possible impacts to threatened and endangered species.

Jennifer Delisle of the KBS was emailed on June 8, 2012 concerning possible impacts. Several high quality hay meadows could potentially be impacted and it was determined that site visits were warranted. On June 14, 2013 KDOT Environmental Services and road squad met with KBS staff to survey the project area, map potential Mead's Milkweed areas, and GPS known plants and suitable areas within the project boundaries. A second site visit on June 19, 2013 was performed to find additional plant locations.

On June 20, 2013 KBS created a map of suitable native prairies with GPS coordinates of known plants. Areas containing Mead's Milkweed plants consisted of KDOT right-of-way, private land, and lands owned by The Nature Conservancy.

On July 1, 2013 potential Mead's Milkweed habitat impacted was estimated to be between 8 and 10 acres. This was determined after avoidance/minimization was implemented as well as reducing areas impacted by methods such as changing slopes to the steepest allowed by the Federal Highway Administration (FHWA).

The first draft of the Mead's Milkweed transplanting project was developed on August 28, 2013 by Jennifer Delisle and Dean Kettle of the KBS.

KDOT met with USFWS in Manhattan, KS on September 26, 2013 to discuss project 169-2 KA-2380-01 and its potential impact to Mead's Milkweed. It was agreed to develop a more in depth transplanting plan and to meet again to decide if formal Section 7 consultation would be required.

The second draft of the transplanting plan was developed by KBS on February 13, 2014.

KDOT met with the USFWS on February 21, 2014 to discuss the second draft and determine changes needed to the plan, such as seed collection and subsequent years of surveying if new plants are found. KDOT was requested to have FHWA send a new letter requesting a formal Section 7 consultation along with a Biological Assessment and a final version of the approved Mead's Milkweed Transplanting Plan.

On March 11, 2014 KDOT road squad/consultant conducted a field check and reviewed all KBS identified potential Mead's Milkweed areas for the ultimate minimized design footprint.

The final draft of the transplanting plan was approved by Dan Mulhern of the USFWS on March 20, 2014.

On April 7, 2014 Jim Hays of The Nature Conservancy informed KDOT that The Nature Conservancy land was purchased with State Wildlife Grant funds which is Federal grant money. The USFWS will require an Environmental Assessment prior to land purchase/transfer. KDOT's consultant will be completing the Environmental Assessment for the project.

KA-2380-02 is a bridge project over Bradshaw Creek approximately 2 miles East of Welda on 1000 Rd. This project is funded by KDOT and will be constructed by the local unit of government as an unofficial detour for KDOT project 169-2 KA-2380-01.

On June 12, 2014 we received an email from Jennifer Delisle of the KBS that on June 11th she conducted a survey of the KA-2380-02 project area. She stated there were no Mead's Milkweed present and that it was unsuitable habitat.

Also on June 12, 2014 KDOT received an email from W. Dean Kettle, Ph.D. of KBS stating he looked at the KA-2380-02 area in late May and agreed with Jennifer Delisle's findings.

Current Management Direction

The T-WORKS transportation program was passed by the 2010 Legislature. The programs main goals are for preservation of Kansas highways and bridges, economic opportunities, safety by modernizing the system, and to create jobs. It appears that we will be required to obligate these funds within a short time frame. The 169-2 KA-2380-01 project has numerous safety and economic benefits. As such, this project is a candidate for utilizing these funds for construction of the project.

Description of the Proposed Action

The purpose of the 169-2 KA-2380-01 project is 2-lane reconstruction, including replacement of drainage structures and ditch improvements on US-169 from 1.5 miles south of Welda proceeding north to the north junction of US-169/US-59 in Anderson County. A 10 foot composite shoulder will be provided the length of the project for safety reasons. Improving US-169 will provide improved safety, accommodate projected traffic volumes and provide continuity with other projects in the area.

The implementation schedule of the project currently has a 03/16/2017 Let date and construction could begin in 2017. The contractor who is awarded the bid at the time of letting will conduct the action under authority of the KDOT Construction Manager in the district. Various types of construction equipment will be used to complete the project. Equipment such as bull dozers, track hoes, scrapers, pile drivers, and other heavy and light duty equipment are commonly used for constructing highways.

Numerous conservation measures have been employed throughout the early design process of this project in order to reduce impacts to, and potentially improve habitat for the Mead's Milkweed (*Asclepias meadii*). These measures include early and continued consultation with agencies to receive their input regarding the proposed Mead's Milkweed transplanting plan.

KDOT will work hand in hand with the KBS and the USFWS to successfully transplant Mead's Milkweed plants that will be impacted and attempt to reestablish a colony on the Anderson County Prairie Preserve (ACPP) restoration site.. KDOT has applied to KDWP for an Action Permit to protect the Eastern Spotted Skunk (*Spilogale putorius*). The Action Permit will instruct KDOT to replant disturbed areas and filled ponds with native vegetation and create brush piles with cleared trees and shrubs. Other typical best management practices will be employed in order to reduce erosion throughout the project area.

Species Accounts and Habitat Status

The Mead's Milkweed (*Asclepias meadii*) is a long-lived tallgrass prairie perennial herb belonging to the milkweed family (Asclepiadaceae). This federally threatened species is known to persist at 171 sites in 34 counties in eastern Kansas, Missouri, south-central Iowa, and southern Illinois.

"The 101 Kansas occurrences are distributed among 13 counties with most in Anderson, Douglas, and Franklin counties" (Jennifer Delisle, Kansas Biological Survey, pers.comm. 2002). "Almost all Mead's Milkweed sites in Kansas are currently being used as hay meadows with the exception of a few sites that are managed by different rotations. Seventy-five percent of the Mead's Milkweed populations occur in the Osage Plains Physiographic Region, and the majority of those occur in Kansas." (U.S. Fish and Wildlife Mead's Milkweed Recovery Plan)

The USFWS Mead's Milkweed (*Asclepias meadii*) Recovery Plan further states "This plant is essentially restricted to sites that have never been plowed and only lightly grazed, and hay meadows that are cropped annually for hay. As a result of fragmentation and destruction of the tallgrass prairie, Mead's Milkweed populations have declined in Kansas, Missouri, Iowa, and Illinois."

The Northern Long-Eared Bat (*Myotis septentiohas*) (NLEB), has been proposed to be listed as an endangered species. The determination should occur in the Spring of 2015. The summer habitat includes live or dead trees with cavities or crevices typically with DBH of 3 inches or greater. Impacts to the NLEB will be evaluated if the listing occurs and includes Anderson County as habitat.

The Kansas listed Eastern Spotted Skunk (*Spilogale putorius*) may be impacted by 169-2 KA-2380-01. Eastern Spotted skunks prefer prairie grassland with forest edges. Odd areas with abandoned structures are also utilized. An action permit with KDWPT has been applied for and mitigation should include planting of disturbed areas with native vegetation and the creation of brush piles from shrubs and trees that were disturbed.

Existing Environment

Surrounding land use is largely warm season grasslands with riparian woodlands present along with some cultivated crop fields. The project will impact primarily warm season grass with additional impacts to some riparian corridors and streams. Portions of the project are also reconstructed over the existing alignment of US-169. The portion of the project where Mead's Milkweed will be impacted in KDOT existing right-of-way is located next to the Anderson County Prairie Preserve (ACPP). The ACPP is owned by The Nature Conservancy and managed by the Kansas Biological Survey. The ACPP is 1370 acres and is managed to preserve the tallgrass prairie.

Effects

The largest anticipated direct impact to the Mead's Milkweed (*Asclepias meadii*) by this project is the transplanting of approximately 50 ramets from the 3 sites. The ramets were marked in 2013 and 2014 and transplanting will be done in 2014 and 2015. In 2014 any seed produced by plants growing in the right-of-way adjacent to the ACPP will be collected and sent to the USDA Plants Material Center in Manhattan

for germination and transplanting back to the ACPP. The rhizomes will be transplanted on the ACCP in Unit 12. All transplants will be monitored for 5 years and if additional ramets are discovered they will be moved in 2016.

Cumulative Effects (state and private actions)

The USFWS Recovery Plan states, "Mead's Milkweed is threatened by the destruction and alteration of tallgrass prairie due to intense agricultural use, urban growth, and urban residential, industrial, and commercial development, recreation use of sites, and hay mowing that disrupts the species' sexual reproductive cycle." The 3 known sites where Mead's Milkweed ramets were found are all susceptible to such disruption. The one site on KDOT right-of-way is always in danger from inadvertent highway maintenance. The 2 sites on private land are susceptible to a change in agricultural practices. If the transplanting is successful the Mead's Milkweed community will be protected on the Anderson County Prairie Preserve for years to come.

Conclusion and Determination

Although we are not aware of any other attempts to successfully transplant Mead's Milkweed we are very hopeful for its success. This may provide a new method of protecting communities of Mead's milkweed that are in danger of destruction. KDOT cannot insure that this transplanting project will be a success, however we believe it gives the 3 known extant communities the best chance for survival. KDOT further feels that the impacts of this project will not adversely impact the survival of the Mead's Milkweed. The Mead's Milkweed transplanting project plan submitted by KBS is attached.

Literature Cited

Mead's Milkweed Recovery Plan. U.S. Fish and Wildlife Service. September 2003.

Mead's Milkweed transplanting project, Hwy 169 Anderson County. 20 March 2014. Jennifer M. Delisle and W. Dean Kettle, Kansas Biological Survey.

Mead's milkweed transplanting project, Hwy 169 in Anderson County

Submitted by: Jennifer M. Delisle and W. Dean Kettle, Kansas Biological Survey

Date: 20 March 2014

Introduction

Mead's milkweed (*Asclepias meadii*) is a federally protected plant species listed as threatened under the U.S. Endangered Species Act. During a survey conducted for the Kansas Department of Transportation (KDOT) in 2013, the Kansas Biological Survey (KBS) confirmed the existence of Mead's milkweed in the Hwy 169 right-of-way adjacent to the Anderson County Prairie Preserve (ACPP) and in two other locations. These plants will be destroyed by construction activities associated with a highway widening project slated to begin in 2017. The purpose of this project is to attempt to salvage plants growing in the right-of-way and move them to a restoration plot on the ACPP. The USFWS will be consulted for approval and permits prior to the start of any work.

The Anderson County Prairie Preserve comprises 1,370 acres (554 ha) in eastern Kansas between the towns of Garnett and Welda in Anderson County. The Nature Conservancy (TNC) acquired the initial 80-acre (32-ha) Welda Prairie Preserve in 1996 and an adjacent 50 acres (20 ha) in 1998. An additional 1,192 acres (482 ha) was purchased in 2003. Under a 2006 agreement with TNC, management of the Preserve became the responsibility of the Kansas Biological Survey. The Preserve contains a core area of about 1,050 acres (425 ha) and two, 160-acre (65-ha) satellite sites located within 3.5 miles of the core. The central core area is bounded or intersected by two U.S. highways. The majority of the acreage (1,082 acres; 438 ha) has been utilized as pasture/native rangeland. The remaining land includes native hay meadows, restored prairie, and some former cropland (Kettle et al. 2007).

In June 2013 KBS was contracted by KDOT to conduct a survey for Mead's milkweed in the area proposed to be impacted by construction activities associated with the widening of Hwy 169 between Garnett and Welda. Earlier surveys had identified Mead's milkweed on three sites in or near the construction zone. The 2013 survey confirmed existence of these populations. One population occurs in the right-of-way adjacent to the ACPP, the other two occur on private property. Approximately 20 ramets (some flowering, others vegetative) were counted adjacent to the ACPP within a distance of approximately 500 m. Approximately 20 ramets were counted on one of the private property sites and 10-12 were counted on the second private property site. As non-flowering stems are often difficult to observe (Alexander et al. 1997; Alexander et

al. 2009; Kettle et al. 2000), it is highly likely that some stems were missed at all sites. Researchers at KBS have extensive research with Mead's milkweed at the ACP, including model estimates of detection probabilities when conducting field surveys for the species (Alexander et al. 2012).

Methods

Transplanting

Work in 2014 will focus on the area adjacent to the ACP. Plants from the two private property sites will be relocated after easements have been acquired by KDOT, most likely in 2015.

In spring 2014 Mead's milkweed ramets growing in the right-of-way adjacent to the ACP will be marked with flags. Flagging effort will focus on the 500 m length of right-of-way in which plants were identified in 2013. During the dormant season (late fall to early spring) KDOT will supply staff and a backhoe to dig plants, with a goal of digging at a minimum of 20 flagged locations. Additional plants will be dug if time allows. An effort will be made to dig as much of the rhizomes as possible, recognizing that the thin, rocky soils may make it difficult to extract entire below-ground rootstock. Plants that cannot be reached with the backhoe will be hand-dug if possible.

In spring 2015 Mead's milkweed ramets growing in the right-of-way at the two private property sites will be marked with flags. Plants will be dug and transplanted according to the procedures used in 2014 unless there is a need to alter the methodology. Any changes will be approved by the USFWS.

All rhizomes will be transplanted at the restoration area on the Anderson County Prairie Preserve (Unit 12). The restoration area formerly was cropped and is bordered on the east and west by Preserve property in native prairie. Property to the north is in native prairie and is in private ownership; property to the south also is in private ownership and is a mix of cropland and pasture. The restoration site was seeded initially in 1999, burned in 2000 and 2002, rested (no management) 2003 – 2007, and then was hayed or burned (or both hayed and burned) from 2008 onward. The site periodically is spot-sprayed with herbicide for control of sericea lespedeza (*Lespedeza cuneata*). The restoration site will continue to be managed with periodic burning and haying although the transplants will be protected from haying the first year.

Rhizomes will be planted within 48 hours of digging. Holes approx. 2 m apart will be dug with a backhoe in soil that is somewhat moist. Soil plugs containing Mead's milkweed rhizomes will be deposited into the holes with as little disturbance to the integrity of the plugs as possible. A handheld GPS unit will be used to record the location of the transplant site. To facilitate following the fate of each transplant,

locations will be identified with a flag and a metal pin following established methods for the species (Kettle et al. 2000).

Routine horticultural techniques will be used to promote success of the transplants (e.g., initial watering, light mulching, protecting plants from mowing, and reducing competition of other plants). Although we have not tried direct transplanting of wild-growing Mead's milkweed, we have worked with the USDA Plant Materials Center at Kansas State University (John M. Row and others) in restoration efforts for Mead's milkweed. This has included raising plants from seed and then transplanting them out into garden or simulated prairie conditions (e.g., Row et al. 1999; Wynia and Row 2014). Wynia and Row (2014) report that Mead's milkweed planted into habitat with reduced competition matured in three growing seasons whereas plants in more natural "competitive" conditions remained in juvenile condition. We will reduce plant competition in the immediate area of the transplants to provide the transplants with a competitive advantage. In a recent restoration study of Mead's milkweed grown from seed and then transplanted at the Marais des Cygnes National Wildlife Refuge (relatively near the ACPP in eastern Kansas), survival of transplants was estimated at 80% after one year and 72% after 3 years (Wynia and Row 2014).

Seed harvesting

In summer 2014, any seed produced by plants growing in the right-of-way adjacent to the ACPP will be collected. Seed produced by plants growing at the two private property sites will be collected in summer 2015. Seed will be delivered to the USDA Plant Materials Center in Manhattan, Kansas to be grown out for later transplantation into the restoration plot at ACPP.

Outcomes

We are not aware of any instances where Mead's milkweed has been established by transplanting rhizomes (Marlin Bowles, Richard Wynia, pers. comm.). Other work has demonstrated the feasibility of transplanting Mead's milkweed grown from seed (Kindscher et al. 2008).

Due to the structure of the soil, it likely will be difficult to extract entire rhizomes, and probably will not be possible to retain all the associated soil. These circumstances may have a negative impact on the survival of the transplants.

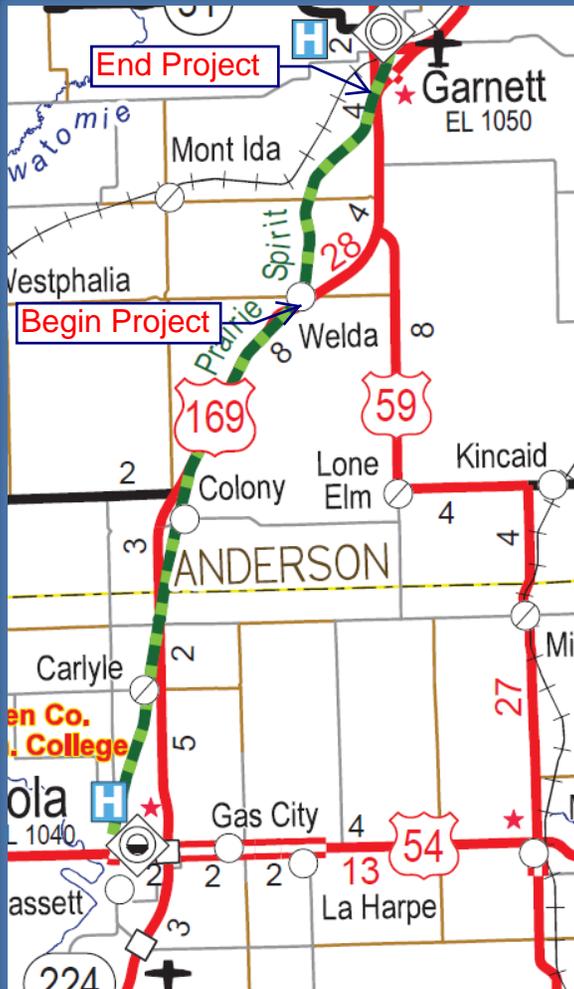
All transplants will be monitored annually for five years. Depending on the success of the transplanting effort the first two years, additional stems growing in the right-of-way may be relocated in 2016 if additional funding is available. It is known that not all stems of Mead's milkweed are visible above-ground every year (Alexander et al. 1997; Kettle et al. 2000; Alexander et al. 2009).

References

- Alexander, H. M., A. W. Reed, W. D. Kettle, N. A. Slade, S. A. Bodbyl Roels, C. D. Collins, and V. Salisbury. 2012. Detection and plant monitoring programs: lessons from an intensive survey of *Asclepias meadii* with five observers. PLOS ONE 7(12): e52762. doi:10.1371/journal.pone.0052762.
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- Alexander, H. M., N. A. Slade, W. Kettle. 1997. Application of mark-recapture models to estimation of the population size of plants. Ecology 78(4):1230-1237.
- Kettle, W., H. M. Alexander, G. Pittman. 2000. An 11-year ecological study of a rare prairie perennial: Implications for monitoring and management. American Midland Naturalist 144:66-7.
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- Kindscher, K., Q. Long and L. Byczynski. 2008. Mead's milkweed reintroduction plan for Marais des Cygnes National Wildlife Refuge. Kansas Biological Survey, Lawrence, KS Open-file Report No. 152:12 pp.
- Row, J. M., R. L. Wynia, T. C. Conway, and K. Kindscher. 1999. Propagation of Mead's milkweed. Pp. 235-242 in J.T. Springer (ed.), Proceedings of the 16th North American Prairie Conference, University of Nebraska-Kearney, Kearney, NE, July 26-28, 1998.
- Wynia, R. L., and J. M. Row. 2014. Mead's milkweed (*Asclepias meadii* Torrey) germination, propagation, and field establishment in Kansas. Kansas Natural Resources Conference, January 30-31, 2014, Wichita, KS. Abstract.

US-169 RECONSTRUCTION WELDA TO GARNETT

Anderson County



OPEN-HOUSE
ON THURSDAY, FEBRUARY 27TH 2014 FROM 5-7pm
AT THE WELDA COMMUNITY CENTER
LOCATED AT THE INTERSECTION OF 1000 ROAD AND
TIOGA STREET IN WELDA

PROJECT LOCATION AND DESCRIPTION

7.5 Miles of reconstruction and rehabilitation on US-169 from Welda to the roundabout south of Garnett.

WORK DESCRIPTION

Welda to US-59 Junction: This section will be fully reconstructed with two 12-foot lanes and 10-foot shoulders.

US-59 Junction to Roundabout: Existing two lanes will be rehabilitated and 10-foot shoulders will be added.

TRAFFIC HANDLING

Welda to US-59 Junction: This Section will be closed during construction and traffic will be detoured using US-54 and US-59.

US-59 Junction to Roundabout: Traffic will be carried through construction. One lane will be closed for construction and the remaining lane will be used for northbound and southbound traffic.

GENERAL TOPICS OF INTEREST

Here are some of the items we will be discussing at the open-house.

- Wider Shoulders
- Flatter Roadway
- Intersection Improvements
- Lane Addition
- Right-of-Way Impacts
- Improved Safety
- Access

Please stop by the Welda Community Center on Thursday February 27, 2014 to learn about how the proposed improvements will impact you and enhance safety and capacity on US-169.

PROJECT SCHEDULE

KDOT Project Number: **169-2 KA-2380-01**
50% Design Complete: **3/2014**

Right-of-way Appraisal Period: **8/2014 to 4/2015**
Right-of-way Negotiations Complete: **01/2016**
Construction Start: **Spring 2017**
Construction Completion: **Spring 2019**
These dates are subject to change without notice.

KDOT will be contacting impacted property owners prior to appraisals to request permission to enter private property to stake the needed right-of-way.

Get more information at: www.ksdot.org/tworks

KDOT CONTACT

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Priscilla@ksdot.org



Appendix C

CORRESPONDENCE AND COORDINATION (Letters/Memos/Emails)

(In Chronological Order)

Michael Fletcher

From: Steven Lesslie
Sent: Tuesday, June 21, 2005 9:46 AM
To: Michael Fletcher
Subject: FW: Mead's Milkweed/Anderson County

From: Delisle, Jennifer Marie [<mailto:JDELISLE@mail.ku.edu>]
Sent: Monday, February 14, 2005 5:02 PM
To: Steven Lesslie
Subject: RE: Mead's Milkweed/Anderson County

Hi Steve:

We have not conducted surveys in that particular area. From the 2003 aerial photo it looks like section 31 is mostly cropland and residential development, but there are a couple of small areas that could potentially be Mead's habitat. Our botanist Craig Freeman will be back in the office on Wednesday and I'll ask him if he has any personal knowledge of the area. Can you be more specific about the area that will be impacted? Is this construction of a new roadway or improvements to an existing road?

We don't like to give out maps showing locations of rare species simply for the reason you indicate - they continue to be used long after they become outdated. We continue to find new locations of Mead's (we've found several new locations in Miami county last year) and the old maps do not reflect this new information.

Our preferred method of providing clients with current information is through a data subscription, whereby we provide you with updated digital data on a regular basis that can be uploaded into your GIS system. If you are interested in this I can have Craig Freeman provide you with the details and give you a cost estimate. In the meantime, I am always happy to provide you with information on a project-by-project basis.

If you can give me a better idea of the area to be affected by this proposed project I'll see if I can give you a more definitive answer about potential impacts. Thanks.

Jennifer

Jennifer M. Delisle, Information Manager
Kansas Natural Heritage Inventory
Kansas Biological Survey
2101 Constant Ave., Takeru Higuchi Bldg.
Lawrence, Kansas 66047
785-864-1538

-----Original Message-----

From: Steven Lesslie [<mailto:stevenl@ksdot.org>]
Sent: Monday, February 14, 2005 3:40 PM
To: Delisle, Jennifer Marie
Subject: Mead's Milkweed/Anderson County

Ms. Delisle –

I am an Environmental Scientist for the Kansas Department of Transportation. We are doing a preliminary review for a proposed project just South of Garnett, KS. The project will have impacts in Section 31, T20S, R20E in Anderson County. The latest information that we have shows that Mead's Milkweed has been found

approximately 2 ½ miles South of this location. We were trying to find out if Section 31, T20S, R20E had been surveyed for Mead's Milkweed and if the KBS thought we ought to be concerned about impacts in this area. I was also wondering if a more recent Kansas Natural Heritage Map for Mead's Milkweed and the Western Prairie Fringed Orchid was available. The maps we are currently using are dated July 13, 2001. Any help you could give us would be appreciated.

Steve Lesslie
Environmental Scientist II
Kansas Department of Transportation
785/296-0162

Dwight D. Eisenhower State Office Building
700 S.W. Harrison Street
Topeka, KS 66603-3745

Deb Miller, Secretary
Jim L. Kowach, P.E., Chief

Kansas
Department of Transportation
Bureau of Design

Phone: 785-296-3531
Fax: 785-296-6946
Hearing Impaired - 711
publicinfo@ksdot.org
<http://www.ksdot.org>

Sam Brownback, Governor

December 1, 2011

Stacy S Coon, Collections Manager & THPO
Citizen Potawatomi Nation
Business Committee
1601 S. Gordon Cooper Dr.
Shawnee, OK 74801

Dear Ms. Coon:

Subject: 169-2 KA-2380-01
ACNHS-A238(001)
Anderson County

In accordance with the National Historic Preservation Act we are contacting your tribe to identify any potential impacts the referenced project may have on properties that have religious and cultural significance. This project will also be reviewed by professional archeologists and by the Kansas State Historic Preservation Office. You will be notified if any sites of potential interest are identified during their review.

Attached is a map showing the location of the project. A general description of the project is as follows: Reconstruct driving lanes, add shoulders and remove hills on US-169: from 1.5 miles south of RS 11, north to north junction US-169/US-59 in Anderson County, Kansas.

If you have any questions I can be reached by phone at (785) 296-8414 or my Email address is blackwell@ksdot.org.

Please send any comments on this project to me using either the address shown above or my Email address, if preferred, within 60 days of the date of this letter.

Sincerely,
Jim L. Kowach, P.E.
Chief, Bureau of Design



T.D. Blackwell
for
Scott P. Vogel, Chief
Environmental Services Section

Encl

Dwight D. Eisenhower State Office Building
700 S.W. Harrison Street
Topeka, KS 66603-3745

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<http://www.ksdot.org>

Sam Brownback, Governor

December 1, 2011

Andrea A. Hunter, Tribal Historic Preservation Officer
Osage Nation of Oklahoma
627 Grandview
Pawhuska, OK 74056

Dear Dr. Hunter:

Subject: 169-2 KA-2380-01
ACNHS-A238(001)
Anderson County

In accordance with the National Historic Preservation Act we are contacting your tribe to identify any potential impacts the referenced project may have on properties that have religious and cultural significance. This project will also be reviewed by professional archeologists and by the Kansas State Historic Preservation Office. You will be notified if any sites of potential interest are identified during their review.

Attached is a map showing the location of the project. A general description of the project is as follows: Reconstruct driving lanes, add shoulders and remove hills on US-169: from 1.5 miles south of RS 11, north to north junction US-169/US-59 in Anderson County, Kansas.

If you have any questions I can be reached by phone at (785) 296-8414 or my Email address is blackwell@ksdot.org.

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Sincerely,
Jim L. Kowach, P.E.
Chief, Bureau of Design



T.D. Blackwell
for
Scott P. Vogel, Chief
Environmental Services Section

Encl

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Topeka, KS 66603-3745

Deb Miller, Secretary
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<http://www.ksdot.org>

Sam Brownback, Governor

December 1, 2011

Jerry R. Dillner, Chief
Seneca-Cayuga Tribe of Oklahoma
P.O. Box 1283
Miami, OK 74355

Dear Chief Dillner:

Subject: 169-2 KA-2380-01
ACNHS-A238(001)
Anderson County

In accordance with the National Historic Preservation Act we are contacting your tribe to identify any potential impacts the referenced project may have on properties that have religious and cultural significance. This project will also be reviewed by professional archeologists and by the Kansas State Historic Preservation Office. You will be notified if any sites of potential interest are identified during their review.

Attached is a map showing the location of the project. A general description of the project is as follows: Reconstruct driving lanes, add shoulders and remove hills on US-169: from 1.5 miles south of RS 11, north to north junction US-169/US-59 in Anderson County, Kansas.

If you have any questions I can be reached by phone at (785) 296-8414 or my Email address is blackwell@ksdot.org.

Please send any comments on this project to me using either the address shown above or my Email address, if preferred, within 60 days of the date of this letter.

Sincerely,
Jim L. Kowach, P.E.
Chief, Bureau of Design



T.D. Blackwell
for
Scott P. Vogel, Chief
Environmental Services Section

Encl

Dwight D. Eisenhower State Office Building
700 S.W. Harrison Street
Topeka, KS 66603-3745

Deb Miller, Secretary
Jim L. Kowach, P.E., Chief

Kansas
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<http://www.ksdot.org>

Sam Brownback, Governor

December 1, 2011

Gary McAdams, President
Wichita and Affiliated Tribes
P.O. Box 729
Anadarko, OK 73005

Dear Mr. McAdams:

Subject: 169-2 KA-2380-01
ACNHS-A238(001)
Anderson County

In accordance with the National Historic Preservation Act we are contacting your tribe to identify any potential impacts the referenced project may have on properties that have religious and cultural significance. This project will also be reviewed by professional archeologists and by the Kansas State Historic Preservation Office. You will be notified if any sites of potential interest are identified during their review.

Attached is a map showing the location of the project. A general description of the project is as follows: Reconstruct driving lanes, add shoulders and remove hills on US-169: from 1.5 miles south of RS 11, north to north junction US-169/US-59 in Anderson County, Kansas.

If you have any questions I can be reached by phone at (785) 296-8414 or my Email address is blackwell@ksdot.org.

Please send any comments on this project to me using either the address shown above or my Email address, if preferred, within 60 days of the date of this letter.

Sincerely,
Jim L. Kowach, P.E.
Chief, Bureau of Design



T.D. Blackwell
for
Scott P. Vogel, Chief
Environmental Services Section

Encl

Dwight D. Eisenhower State Office Building
700 S.W. Harrison Street
Topeka, KS 66603-3745

Deb Miller, Secretary
Jim L. Kowach, P.E., Chief

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publicinfo@ksdot.org
<http://www.ksdot.org>

Sam Brownback, Governor

December 1, 2011

Guy Munroe, Chairperson
Kaw Nation of Oklahoma
PO Box 50
Kaw City, OK 74641

Dear Mr. Munroe:

Subject: 169-2 KA-2380-01
ACNHS-A238(001)
Anderson County

In accordance with the National Historic Preservation Act we are contacting your tribe to identify any potential impacts the referenced project may have on properties that have religious and cultural significance. This project will also be reviewed by professional archeologists and by the Kansas State Historic Preservation Office. You will be notified if any sites of potential interest are identified during their review.

Attached is a map showing the location of the project. A general description of the project is as follows: Reconstruct driving lanes, add shoulders and remove hills on US-169: from 1.5 miles south of RS 11, north to north junction US-169/US-59 in Anderson County, Kansas.

If you have any questions I can be reached by phone at (785) 296-8414 or my Email address is blackwell@ksdot.org.

Please send any comments on this project to me using either the address shown above or my Email address, if preferred, within 60 days of the date of this letter.

Sincerely,
Jim L. Kowach, P.E.
Chief, Bureau of Design



T.D. Blackwell
for
Scott P. Vogel, Chief
Environmental Services Section

Encl



TRIBAL HISTORIC PRESERVATION OFFICE

Date: February 13, 2012

File: 1112-351KS-2

RE: KDOT 169-2 KA-2380-01; Reconstruct driving lanes, add shoulders and remove hills on US-169 in Anderson County, Kansas

Kansas Department of Transportation
Terry Blackwell
700 S.W. Harrison Street
Topeka, KS 66603-3745

Dear Mr. Blackwell,

The Osage Nation Historic Preservation Office has received notification of the proposed project listed as KDOT 169-2 KA-2380-01; Reconstruct driving lanes, add shoulders and remove hills on US-169 in Anderson County, Kansas.

In accordance with the National Historic Preservation Act, (NHPA) [16 U.S.C. 470 §§ 470-470w-6] 1966, undertakings subject to the review process are referred to in S101 (d)(6)(A), which clarifies that historic properties may have religious and cultural significance to Indian tribes. Additionally, Section 106 of NHPA requires Federal agencies to consider the effects of their actions on historic properties (36 CFR Part 800) as does the National Environmental Policy Act (43 U.S.C. 4321 and 4331-35 and 40 CFR 1501.7(a) of 1969).

The Osage Nation has a vital interest in protecting its historic and ancestral cultural resources. The Osage Nation requests that a cultural reconnaissance survey be conducted for the proposed KDOT 169-2 KA-2380-01; Reconstruct driving lanes, add shoulders and remove hills on US-169 in Anderson County, Kansas.

Please contact the Osage Nation Historic Preservation Office with your response to this request. The Osage Nation looks forward to receiving and reviewing the cultural resource survey report for the KDOT 169-2 KA-2380-01; Reconstruct driving lanes, add shoulders and remove hills on US-169 in Anderson County, Kansas. The Osage Nation requires that cultural resource survey personnel and reports follow the Secretary of Interior's standards and guidelines. Please provide a detailed topographic map depicting the locations of the shovel tests and test units excavated during the survey along with a table indicating their depth, soils, the amount and type of material found, and reason for termination.

Should you have any questions or need any additional information please feel free to contact me at the number listed below. Thank you for consulting with the Osage Nation on this matter.


James Munkres
Archaeologist I

RECEIVED

FEB 17 2012



From: Delisle, Jennifer <jdelisle@ku.edu>
Sent: Thursday, June 20, 2013 1:36 PM
To: Cliff Ehrlich
Cc: Jim F. Hays; Kettle, Dean
Subject: RE: KA-2380-01 Anderson County
Attachments: Meads_locations_19June2013.txt; Hwy169 prairies.jpg

Hi Cliff;

It was good to meet you and Ryan last Friday, June 14 to look at the native prairies along this project route. I have attached a text file with the coordinates of the Mead's milkweed plants identified along the route. I also have attached a map showing the native prairies we visited. As it turns out, a couple other folks from KBS went down there on Wednesday and they recorded a few more locations in the hwy right-of-way at the Anderson County Preserve.

Below I have provided a summary of what we know about Mead's milkweed known and potential habitat along the project route. See accompanying map for named locations. I think if you zoom in on the map you'll be able to see the boundaries of the prairies. If not, I can send you individual maps of each of the prairies.

The Garnett Prairie occurs on both sides of Highway 169. Mead's milkweed was first identified on this site in 1988, on both sides of the highway. We found a number of plants on this site during the current survey.

The Two Highway Prairie occurs at the intersection of Hwy 169 and Hwy 59. Mead's milkweed was found at this site in 1987. We did not find the species during the current survey but the site is still considered potential habitat.

The Welda Prairie North site is part of a large prairie complex comprising over 650 acres. Mead's milkweed was not found on this tract during the current survey. I do not know if the site had been surveyed previously. This site is of good quality and is considered potential habitat for the species.

The Anderson County Prairie Preserve is part of the large complex of prairies mentioned above. It is owned by The Nature Conservancy and managed by the Kansas Biological Survey. The site is known to contain one of the largest populations of Mead's milkweed in the world. It is continuously monitored so we did not attempt to record individual plants during the current survey. The entire prairie depicted on the attached map is considered habitat for the species. Mead's milkweed also occurs on the east side of the highway in the road ditch and into the adjacent grazed pasture. Not all of the ditch has been surveyed and Mead's milkweed could occur elsewhere. All of the road ditch adjacent to the Preserve is considered potential habitat for the species.

As we discussed, not all plants are visible above-ground every year. Areas labeled "Known Mead's milkweed location" could contain plants in addition to the ones seen on June 14. Also, areas labeled "Potential habitat" also could contain Mead's milkweed.

Let me know if you have any questions or if these comments need clarification. Thanks for joining us on the field survey (sorry we didn't have time for lunch!).

Jennifer

Jennifer M. Delisle, Information Manager
Kansas Natural Heritage Inventory
Kansas Biological Survey

Takeru Higuchi Bldg.
2101 Constant Ave.
Lawrence, KS 66047
785-864-1538
jdelsile@ku.edu

From: Cliff Ehrlich [<mailto:cliffe@ksdot.org>]
Sent: Tuesday, May 29, 2012 12:57 PM
To: Delisle, Jennifer
Subject: KA-2380-01 Anderson County

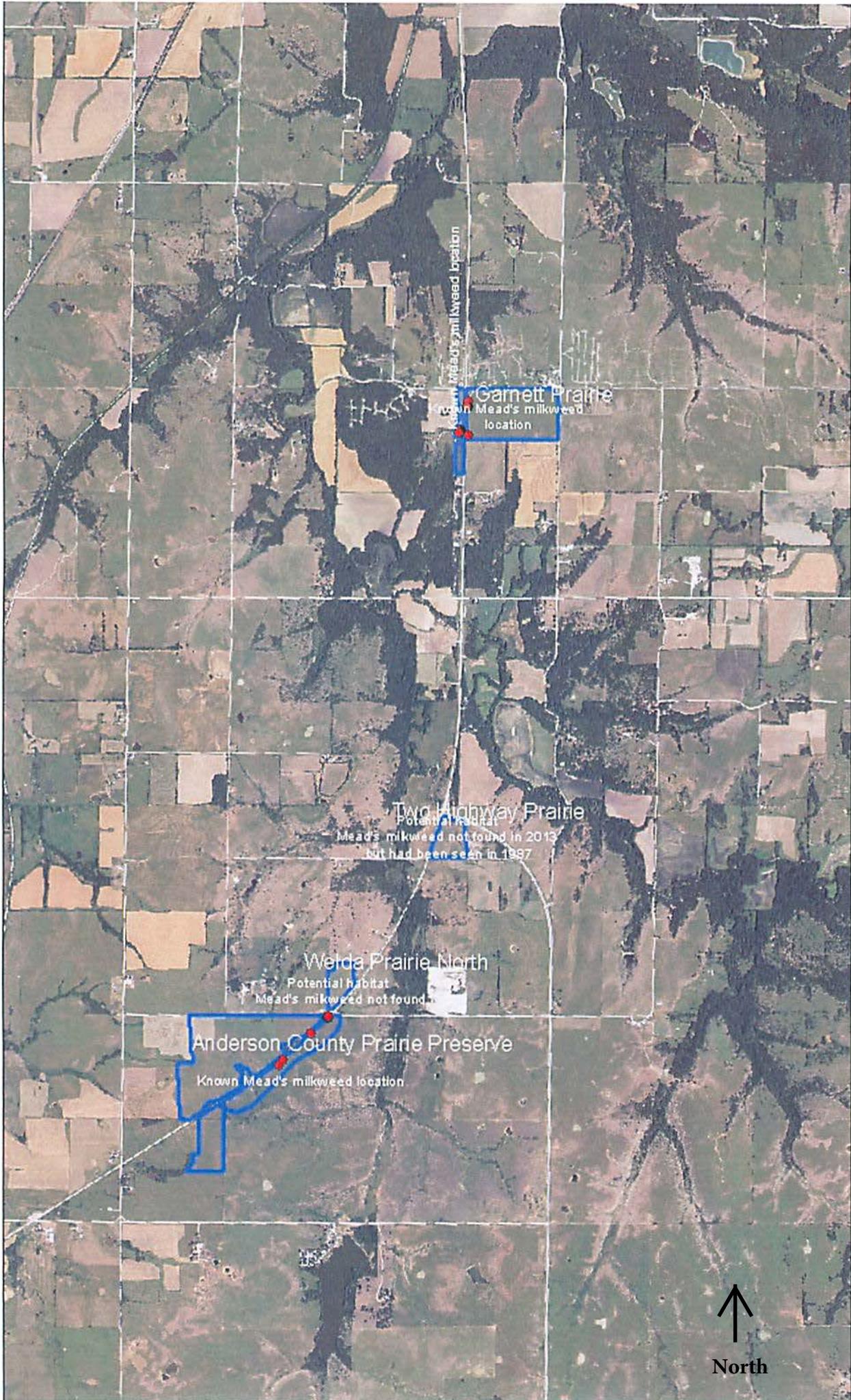
Jennifer,

We have a project in Anderson County that is currently in the design stages and I hoped we could get Mead's Milkweed known locations early on in the process to assist us in avoiding these areas. The project is on US-169 and begins just South of Welda and runs north to just south of the Roundabout south of Garnett. The project consist of reconstruction of the roadway and the addition of shoulders which will require new/wider right-of-way in some areas. I am attaching the current preliminary layout of the plans.

Please let me know if I can get you any other information that would assist you.

Thank you,

Cliff Ehrlich
Environmental Services
KS Dept. of Transportation
(785) 296 - 8415



Warren, Chris

From: Bartels, Brian [brian.bartels@ksoutdoors.com]
Sent: Thursday, October 17, 2013 2:39 PM
To: Warren, Chris
Cc: Paul Liechti; Brady Hedstrom; Lester Welsh
Subject: ECA Project Review: Bridge Replacement and Floodplain Fill in Anderson Co.; T21/22S-R20E-Sec.31/06 (ECA: 2013333; Track: 20130548-2; Ref: D2.0202)

Mr. Warren:

We have reviewed the information for the **proposed bridge (RCB) replacement and floodplain fill in, along, and across Bradshaw Creek in Anderson County**. The project was reviewed for potential impacts on crucial wildlife habitats, current state-listed threatened and endangered species and species in need of conservation, and Kansas Department of Wildlife, Parks, and Tourism managed areas for which this agency has administrative authority.

Considering Lake Welda is directly upstream from the project location, we have no objections to the proposed project. Also, Critical Habitat is designated within Anderson County for the State-threatened Eastern Spotted Skunk (*Spilogale putorius*). However, after viewing aerial images (back to 1992), we have determined that the aforementioned species will not be significantly impacted as a result of this project. As such, an Action Permit from our department will not be required. Lastly, we provide the following recommendations to minimize any potential impacts from project construction:

- Utilize woody plant species removed as a result of construction activities to construct a brush pile nearby the project area.
- Minimize instream construction activities during general spawning dates, April 1 through July 31.
- Avoid impacts to wetlands by minimizing the removal of native upland and riparian vegetation.
- Implement and maintain standard erosion-control Best-Management-Practices.
- Reseed with native warm-season grasses and forbs. We recommend selecting from Rare and Declining Habitat, Mix 9/NRCS 643.

Results of our review indicate there will be no significant impacts to crucial wildlife habitats; therefore, no special mitigation measures are recommended. The project will not impact any public recreational areas, nor could we document any potential impacts to currently-listed threatened or endangered species or species in need of conservation. No Department of Wildlife, Parks, and Tourism permits or special authorizations will be needed if construction is started within one year, and no design changes are made in the project plans.

Since the Department's recreational land obligations and the State's species listings periodically change, if construction has not started within one year of this date, or if design changes are made in the project plans, the project sponsor must contact this office to verify continued applicability of this assessment report. For our purposes, we consider construction started when advertisements for bids are distributed.

WATER RESOURCES
RECEIVED

OCT 17 2013

Thank you for the opportunity to provide these comments and recommendations. Please consider this email our official review of this project. If you have any questions please contact me.

Brian

Brian Bartels, Ecologist
Ecological Services
Kansas Dept. of Wildlife, Parks, and Tourism
512 SE 25th Ave., Pratt, KS 67124
office: 620-672-0746
cell: 620-770-6628
fax: 620-672-2972

WATER RESOURCES
RECEIVED

OCT 17 2013

KS DEPT OF AGRICULTURE

6425 SW 6th Avenue
Topeka, KS 66615



phone: 785-272-8681
fax: 785-272-8682
cultural_resources@kshs.org

Kansas Historical Society

Sam Brownback, Governor
Jennie Chinn, Executive Director

KSR&C # 14-03-054
March 11, 2014

Scott Vogel
KDOT
Via Email

Re: 169-2 KA-2380-01 - Anderson County

We have reviewed the materials received March 11, 2014 regarding the above-referenced project in accordance with 36 CFR Part 800. In reviews of this nature, the SHPO determines whether a federally funded, licensed, or permitted project will adversely affect properties that are listed or determined eligible for listing in the National Register of Historic Places. The SHPO has determined that the proposed project will not adversely affect any property listed or eligible for listing in the National Register. As far as this office is concerned the project may proceed.

Thank you for giving us the opportunity to comment on this proposal. Please refer to the Kansas State Review & Compliance number (KSR&C#) listed above on any future correspondence. Please submit any comments or questions regarding this review to Kim Gant at 785-272-8681, ext. 225 or kgant@kshs.org.

Sincerely,

Jennie Chinn
State Historic Preservation Officer

Patrick Zollner
Director, Cultural Resources Division
Deputy State Historic Preservation Officer

Phase I Review

Kansas State Historical Society
Contract Archeology Program

KSHS Database Number KA-2380-ENHC-01	KDOT Project Number 169-2 KA-2380-01	Phase I request date 4/11/2014	Received 3/11/2014
District 4	County Anderson	Legal Description Multiple Sections. T21S, R19E & R20E. T22S, R19E.	

Review Resources

Project Plans Provided	County Map Anderson	County Atlases Northwest Publishing Co. 1901
USGS topo Welda, Bush City, Garnett	Map of Historic Trails GLO	

Any recommendation made here is with the understanding that due to the nature of archeological manifestations, it is always possible that cultural deposits could be encountered during the course of the project. If that occurs, the remains should be left in place and the State Archeologist contacted immediately so that the appropriate mitigative measures can be carried out as soon as possible. Thank you for your cooperation in helping to preserve the State's archeological resources.

Phase I Clearance

Background Research has been conducted by consulting resources listed above. The results indicate that there are no recorded prehistoric or historic archeological sites in the project area and that there is a low potential for the occurrence of sites eligible for listing on the National Register of Historic Places. We therefore see no need for further archeological investigations.

Phase II Recommended

Background research has been conducted by consulting resources listed above. Results indicate either the presence of recorded sites of a high potential for the occurrence of sites eligible for listing on the National Register of Historic Places. We therefore recommend a phase II investigation of all or parts of the project area.

Travis Wagner

Highway Archeologist

3/14/14

Date

Timothy Weston

SHPO Archeologist

3/14/14

Date

Michael Fletcher

From: Cliff Ehrlich
Sent: Monday, March 24, 2014 11:09 AM
To: Dan_Mulhern@fws.gov
Cc: Michael Fletcher
Subject: Final KBS transplanting plan for review
Attachments: Mead's transplanting project revised 20March2014.docx

Dan,

I have attached the revised plan that we have contracted KBS to complete for you review. This plan includes the seed collecting and efforts to move All known plants in a two to three year period as we discussed in our meeting at your office on 2/21/2014.

Please review the plan and let me know if this is the plan that will be approved for submission with our Biological Assessment and letter from FHWA requesting the Formal Section 7 consultation like we had discussed.

Also wanted to let you know that Scott Vogel has retired and Michael Fletcher from our office has accepted his position. Please feel free to share this information with those in your office.

Thanks and have a good day,

Cliff Ehrlich
Environmental Services Section
Natural Environment/Permits Unit
Kansas Department of Transportation
(785) 296 - 8415

April 15, 2014

Cliff Ehrlich
Environmental Services Section
Natural Environment/Permits Unit
Kansas Department of Transportation
Eisenhower State Office Bldg
700 SW Harrison
Topeka, KS 66603

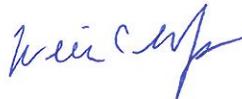
RE: Cost proposal and scope of work, University of Kansas Center for Research

Dear Mr. Ehrlich:

Enclosed please find a cost estimate and scope of work for the proposed project entitled "Mead's milkweed transplanting project, Hwy 169 in Anderson County" under the direction of Jennifer M. Delisle of the Kansas Biological Survey. This proposed work is submitted according to the terms outlined in a cooperative agreement for field survey of threatened and endangered species between the Kansas Department of Transportation and the University of Kansas Center for Research, Inc. effective May 10, 2000.

If I can be of any assistance regarding this agreement, please feel free to contact me directly at (785) 864-7430 or wsharp@ku.edu.

Sincerely,



William Sharp
Assistant Director
Research Administration

Encl: Scope of Work: Mead's milkweed transplanting project, Hwy 169 in Anderson County
Proposed Budget, 5/15/2014-12/31/2014

CC: Jennifer M. Delisle
Jennifer Holladay

Michael Fletcher

From: Michael Fletcher
Sent: Friday, April 25, 2014 10:46 AM
To: 'Schmidt, Anna'
Cc: David McGillivary; Otto Jose; Jacque Trout
Subject: RE: WSFR funds Cherokee County State Wildlife Restoration and Anderson County State Wildlife Grant Funds

Anna,

Thanks so much for your quick response.

Yes, this is what I had thought but I was requested to confirm there were no other options. KDOT will get a consultant on-board and then set up a meeting/conference call with you, Carl, and The Nature Conservancy so everybody understands your requirements. I really appreciate your help.

We will continue to work with the FWS Manhattan Office. The plan is for us to complete the BA for review by their office.

Thanks
Mike

From: Schmidt, Anna [mailto:anna_schmidt@fws.gov]
Sent: Friday, April 25, 2014 10:22 AM
To: Michael Fletcher
Cc: David McGillivary; Otto Jose; Jacque Trout
Subject: Re: WSFR funds Cherokee County State Wildlife Restoration and Anderson County State Wildlife Grant Funds

Thanks again Mike for coordinating with us.

As per my previous email, an EA is required for all disposal of land purchased with WSFR funds because there is no Categorical Exclusion for land disposal under NEPA. It doesn't matter if the land disposal is via money paid back to the program or a land exchange, an EA is still required. We are happy to work with your consultant to get an EA completed as efficiently as possible. With the Cherokee County land disposal, using an existing EA (like the BWWA) as a template will be advantageous to the process.

With the Anderson County property, it is important to note that although TNC (third party) holds fee title of the property, the land is still WSFR funded (FWS and KDWPT) and has a federal nexus. There can be no disposal or condemning of this property without our (FWS) approval. An EA/EIS would still be required in any case.

Before my time, I understand there may have been a KDWPT WSFR funded property that didn't have an EA, and this may be the waiver you are talking about. I am copying WSFR staff on this email to weigh in if I am incorrect. However, since I have been here, we have always followed the NEPA regulations that there is no CatEX for land disposal and an EA is required. I

confirmed this with WSFR staff before the first email I sent to you. An EA is required for all WSFR funded land disposal.

Please do continue to work with our FWS Ecological Services (ES) field office in Manhattan concerning Mead's milkweed on the Anderson County property. We will not be able to go forward with approving any land disposal for this property, including we will we not be able to conduct our NEPA requirements until you complete consultation with the ES office. I am assuming you are completing a BA so that the ES office then can decide if they need to do a Biological Opinion.

Again, we appreciate your coordination. It is my job to work with partners to uphold regulation and creatively conserve the resource. Feel free to contact me any time with more questions and concerns. I still offer/recommend a phone call between all parties concerning the NEPA (EA writing) process.

Thank you,
Anna

Anna N. Schmidt | Fish and Wildlife Biologist | U.S. Fish and Wildlife Service | Wildlife and Sport Fish Restoration Program | PO Box 25486, DFC, Denver, CO 80225 | 303-236-4375 | anna_schmidt@fws.gov

The mission of the U.S. Fish and Wildlife Service is to work with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people.

U.S. Fish and Wildlife Service | U.S. Department of the Interior | 1011 North Lincoln Street, Suite 1000, Chicago, IL 60610 | www.fws.gov

On Fri, Apr 25, 2014 at 8:46 AM, Michael Fletcher <Fletcher@ksdot.org> wrote:

Anna,

I have some additional questions that came up following a meeting with our Road Design project managers. The project managers are looking for any way to avoid completing a full Environmental Assessment. KDOT does not write EA's or EIS's in-house, they are all contracted out which is very expensive. Thus their desire to find an alternative to the EA.

I did speak with Carl Magnuson and he indicated there is really no way to avoid doing the EA, however I have been asked to confirm with both KDWP and USFWS.

- If KDWP agrees to receive only money, gives it back to the program, and no land is exchanged is an EA still required?
- If the entire grant was paid back would an EA still be required?
- Are there any other options besides a full EA, such as a de-minimis determination (similar to FHWA's 4(f), additional mitigation or enhancement funds, etc.
- The Kansas FHWA indicated that with Anderson County tract being in private party ownership (The Nature Conservancy) KDOT could condemn the property and not have to complete the EA to acquire the land they need. Not that KDOT would consider this but do you have any comments on this option.

The KDOT project managers are moving forward with the EA for the Cherokee County tracts but would prefer any option to avoid doing so. Carl indicated that in the past a waiver to the EA requirement could be given but by the time of the Byron Walker project this waiver was not available.

- Can you tell me what triggered the exclusion of the waiver option.

For your information the Anderson County tract does contain Meads milkweed, a federally threatened species. It is not known at this time whether any plants exist within the proposed right-of-way of the project. KDOT has been working with the Kansas Biological Survey and the US Fish and Wildlife Service in Manhattan and a plan has been approved. We are writing the Biological Assessment and hope to have it completed soon.

I know this sounds like KDOT is making it difficult but the project managers are just trying to evaluate options since they have not done this before. I'm sure the process will go smoothly once started.

You can contact me at (785) 296-3726 or by email if it is easier for you.

Thanks for all your help.

Mike

Michael Fletcher

From: Michael Fletcher
Sent: Friday, April 25, 2014 11:06 AM
To: Robert Stork
Subject: WSFR funds Cherokee and Anderson counties

Rob,

Here is a summary of my discussion with KDWPT and USFWS.

- Would KDWPT be willing to receive only money and no land in exchange for the Cherokee County tracts (approx. 3 acres) bought with Wildlife Restoration Funds
 - o Carl (KDWPT) would have to discuss with the KDWPT Secretary
 - o The monetary value would have to at least equal the current appraised value of the land (1:1 ratio based on current values)
- If only money is exchanged will an EA still be required
 - o Yes
- If the entire grant was paid back would an EA still be required
 - o Yes
- Does a state conservation easement exist on either the Cherokee County or Anderson County property
 - o Probably not since it would be redundant, the land was purchased for conservation
- Would KDWPT be willing to receive only money and no land in exchange for the Anderson County tracts bought with State Wildlife Grant Funds
 - o That will require negotiation with The Nature Conservancy, doubtful since their goal was to preserve land
- If only money is exchanged will an EA still be required
 - o Yes
- If the entire grant was paid back would an EA still be required
 - o Yes
- What was the value of the State Wildlife Grant fund for Anderson County
 - o \$572,500, federal funds were half of the grant, any exchange would be based on current values
- Are there any other options for avoiding a full EA such as de minimis, mitigation or enhancement funds, etc.
 - o No
- What if KDOT would condemn the private property (The Nature Conservancy) and not complete an EA
 - o Carl had never heard of this being done, this is the first time KDWPT has given federal money to a 3rd party to purchase land
 - o Carl assumes there would be issues with the Meads milkweed
 - o The Nature Conservancy property is not owned by the Kansas Nature Conservancy, it is held by the National Nature Conservancy
 - o Anna (USFWS) indicated that although The Nature Conservancy holds fee title of the property, the land is still WSFR funded and has a federal nexus. There can be no disposal or condemning of this property without USFWS approval. An EA/EIS would still be required in any case.

Michael Fletcher

From: Cliff Ehrlich
Sent: Monday, June 02, 2014 11:19 AM
To: Sharp, William C.
Cc: Holladay, Jennifer; Delisle, Jennifer; Michael Fletcher; James Dietzel; Samba Secka
Subject: RE: Cost proposal and scope of work, University of Kansas Center for Research - "Mead's milkweed transplaining project, Hwy 169"

Mr. Sharp,

We have reviewed the Mead's Milkweed transplanting plan and agree with the cost proposed for the scope of work to be completed. Please consider this email as authorization to go ahead with this as planned.

Please contact me with any questions.

Thank you,

Cliff Ehrlich
Environmental Services Section
Natural Environment/Permits Unit
Kansas Department of Transportation
(785) 296 - 8415

From: Sharp, William C. [mailto:wsharp@ku.edu]
Sent: Tuesday, April 15, 2014 4:48 PM
To: Cliff Ehrlich
Cc: Holladay, Jennifer; Delisle, Jennifer
Subject: Cost proposal and scope of work, University of Kansas Center for Research - "Mead's milkweed transplaining project, Hwy 169"

April 15, 2014

Cliff Ehrlich
Environmental Services Section
Natural Environment/Permits Unit
Kansas Department of Transportation

RE: Cost proposal and scope of work, University of Kansas Center for Research

Dear Mr. Ehrlich,

Attached please find a signed cover letter, a cost estimate, and a scope of work for the proposed project entitled "Mead's milkweed transplanting project, Hwy 169 in Anderson County" under the direction of Jennifer M. Delisle of the Kansas Biological Survey. This proposed work is submitted according to the terms outlined in a cooperative agreement for field survey of threatened and endangered species between the Kansas Department of Transportation and the University of Kansas Center for Research, Inc. (KUCR) effective May 10, 2000 (also attached).

If the attached materials are agreeable to you as submitted, please feel free to send a letter of authorization for the work directly to me (email is fine).

If I can be of any assistance regarding this agreement or if there are any questions, please feel free to contact me directly at (785) 864-7430 or wsharp@ku.edu.

Best regards,

Bill

William Sharp, Ph.D.

Assistant Director, Research Administration
Office of Research | The University of Kansas
2385 Irving Hill Road
Lawrence, KS 66045
(785) 864-7430 | wsharp@ku.edu

Cliff Ehrlich

From: Kettle, Dean <kettle@ku.edu>
Sent: Thursday, June 12, 2014 11:23 AM
To: Delisle, Jennifer; Cliff Ehrlich
Cc: Jim F. Hays
Subject: RE: AN Co. Bridge replacement

I also looked at this area in late May and did not find any Mead's milkweed. I agree that the habitat in this immediate area is not favorable for the species.

Dean

*W. Dean Kettle, Ph.D.
Associate Director, University of Kansas Field Station
Kansas Biological Survey
2101 Constant Avenue
Lawrence, KS 66047-3759
voice: 785-864-1540
fax: 785-864-1534
kettle@ku.edu
www.kufs.ku.edu*

From: Delisle, Jennifer
Sent: Thursday, June 12, 2014 11:18 AM
To: Cliff Ehrlich
Cc: Jim F. Hays; Kettle, Dean
Subject: RE: AN Co. Bridge replacement

Hello all;

Yesterday I did a survey for Mead's milkweed in the area of the county bridge replacement project. I did not find any. Most of the area is highly unsuitable for the species.

Jennifer

Jennifer M. Delisle, Information Manager
Kansas Natural Heritage Inventory
Kansas Biological Survey
Takeru Higuchi Bldg.
2101 Constant Ave.
Lawrence, KS 66047
785-864-1538
idelisle@ku.edu

From: Jim F. Hays [mailto:jim_hays@TNC.ORG]
Sent: Monday, April 14, 2014 9:55 AM
To: Kettle, Dean
Cc: Busby, William H.; Delisle, Jennifer; Salisbury, Vaughn B; Johanning, Bruce A.
Subject: RE: AN Co. Bridge replacement

KBS colleagues,



Operations Office
512 SE 25th Ave.
Pratt, KS 67124-8174

Phone: 620-672-5911
Fax: 620-672-6020
www.kdwp.state.ks.us

Robin Lemison, Secretary

Sam Brownback, Governor

13 June 2014

Michael Fletcher
KDOT – ESS
Dwight D. Eisenhower State Office Bldg
700 S.W. Harrison Street
Topeka, KS 66603-3745

Ref: D2.0202
Anderson
KDOT: 169-2 KA-2380-01
Track: 20140236
T22S-R19E-Sec.02 to T21S-R20E-Sec.06

Dear Mr. Fletcher:

RE: KDWP T&E Review concerning road reconstruction of additional shoulders in Anderson County.

We have reviewed a proposed road reconstruction of additional shoulders in Anderson County. The project was reviewed for potential impacts on crucial wildlife habitats, current state-listed threatened and endangered species and species in need of conservation, and Kansas Department of Wildlife, Parks and Tourism managed areas for which this agency has administrative authority.

Project plans indicate that there will be construction activity within Designated Critical Habitat for the State-Threatened Eastern Spotted Skunk (*Spilogale putorius*). As such, an Action Permit will be required from our department.

To date an application for an Action Permit has not been applied for. Project activity should not commence until the permit application process has been completed. A copy of the permit application can be obtained at: http://www.kdwp.state.ks.us/news/other_services/threatened_and_endangered_species/action_permit We ask that all other necessary permits be held in abeyance until conditions necessary to protect threatened and endangered species have been established.

Thank you for the opportunity to provide these comments and recommendations. Please let me know if you have any questions or concerns about the preceding information.

Cc: Cliff Ehrlich, KDOT
Carl Magnuson, KDWP
Jim Hays, Nature Conservancy

Sincerely,

Brian Bartels, Ecologist
Ecological Services Section

June 25, 2014

Michael Fletcher, Chief
Environmental Services Section
Kansas Department of Transportation
Eisenhower State Office Building
Topeka KS 66612

Re: 169-2 KA-2380-01
US 169 Improvements
Anderson County, Kansas

Subject: Phase II completed: project clearance recommended

Dear Mr. Fletcher:

In accordance with the goals and procedures of the Memorandum of Agreement between the Kansas Historical Society (KSHS) and the Kansas Department of Transportation effective July 1, 2011, the KSHS Contract Archeology Program (CAP) has completed a Phase II field survey investigation of the above referenced road project. Highway Archeologist Tricia Waggoner, Contract Archeologist Gina S. Powell, and field technicians Melanie Naden and Roger Ward carried out most of the recommended fieldwork May 12-15, 2014. Tricia Waggoner finished the fieldwork on June 17, 2014. A report of that investigation is enclosed.

In brief, ten archeological sites (14AD335-344) were discovered and recorded in the project area: three are prehistoric sites and seven are historic sites. None are considered to represent significant cultural resources and therefore we recommend that the project proceed as planned with no further archeological investigations. A copy of the enclosed report, containing this recommendation, has been sent to the State Historic Preservation Officer for review.

It is always possible that buried cultural deposits could be encountered during the course of the project. If that occurs the remains should be left in place and the State Archeologist contacted immediately so that the appropriate measures can be carried out as soon as possible.

Thank you for your cooperation in helping to preserve the State's archeological resources.

Sincerely,



Tricia Waggoner
Highway Archeologist, Kansas Historical Society

6425 SW 6th Avenue
Topeka, KS 66616



phone: 785-272-8681
fax: 785-272-8682
jchinn@kshs.org

Kansas Historical Society

Sam Brownback, Governor
Jennie Chinn, Executive Director

June 25, 2014

Michael Fletcher, Chief
Environmental Services Section
Kansas Department of Transportation
Eisenhower State Office Building
Topeka KS 66612

Re: 169-2 KA-2380-01
US 169 Improvements
Anderson County, Kansas

Dear Sir:

Staff review of the above referenced project has been completed at the Phase II level. Pursuant to 36 CFR 800.4, we concur with the finding of no historic properties affected for the above referenced undertaking. We therefore have no objection to implementation of the project.

Sincerely yours,

Jennie Chinn
State Historic Preservation Officer

Patrick Zollner
Deputy State Historic Preservation Officer

gsp

Kansas Department of Transportation

MEMO

Meeting Date: July 8, 2014

Project Number: 169-2 KA-2380-01,
Roadway Reconstruction with Shoulder Addition

Attendees: Rob Stork, Cliff Ehrlich, Mike Fletcher, Ryan Barrett, Samba Secka, Jim Hays,
Steve Adams, Carl Magnuson, Anna Schmidt, Laura Norian, Jacque Troutt

US-169 Project State Wildlife Grant purchased land – Conference Call

Discussion:

- Land transfer/monetary transfer option for State Wildlife Grant Fund Properties
- KDOT would prefer a monetary transfer.
- Land transfer must be equivalent value (current appraised value) and equivalent habitat value.
- Land transfer would go 100% to The Nature Conservancy.
- Monetary transfers would be split 50/50 with KDWP&T getting 50% to pay the grant back.
- KDOT would be willing to pay a premium, for example a double payment and give TNC the option to find land at any site. KDOT should coordinate with Carl and Jim.
- Any enhancement over appraised value would have to be confirmed by TNC to be a legal exchange under non-profit rules. TNC will confirm whether monetary transfer would be an option and whether payment over the appraised value would be accepted.
- If monetary transfer was not an option does TNC have property identified in this area they want to acquire? If so would TNC make the initial contact with the landowner?
- TNC did know of 2-e landowners with property they would like to acquire. One has a 40 acre tract TNC is very interested in. TNC can provide the background and contact information to KDOT. TNC will check with former employee who worked in the area to see how receptive the landowners will be to selling. TNC will check with their legal department as to whether they will make first contact. TNC has concerns if payment to landowner is higher than current appraised value for a partial tract purchase it will drive up the price for the remaining tract TNC wants to acquire. TNC would not be in favor of this.
- TNC requested the total number of acres required for this project and a project summary. They already have the county bridge project totals (KA-2380-02). KDOT will provide this information.

Kansas Department of Transportation

- The county bridge project cannot start until the State Wildlife Grant is amended. It is possible that the bridge project can be amended before the KDOT project. KDOT Road Design indicated that the county is purchasing the ground for the bridge.
- Has it been determined if this project falls under 4(f) as this property may be considered a refuge. KDOT Road Design will check.

Tim Flagler

From: Michael Fletcher <Fletcher@ksdot.org>
Sent: Wednesday, July 09, 2014 12:10 PM
To: Robert Stork; Ryan Barrett; Samba Secka
Cc: Cliff Ehrlich
Subject: FW: 169-2 KA-2380-01

FYI

From: Jim F. Hays [mailto:jim_hays@TNC.ORG]
Sent: Wednesday, July 09, 2014 12:06 PM
To: Michael Fletcher
Cc: Magnuson, Carl (carl.magnuson@ksoutdoors.com); Laura Norian; Schmidt, Anna (anna_schmidt@fws.gov)
(anna_schmidt@fws.gov); Alan Pollom
Subject: 169-2 KA-2380-01

Good Morning Mike,

After follow-up discussions with colleagues at TNC and Carl Magnuson (KDWPT); I want to advise that we prefer the land exchange option to offset the loss of Welda Prairie acres from the US-169 highway project. Purchase and conservation of disappearing native prairie habitat in Eastern Kansas was the original reason for the SWG fund purchase in Anderson County and that mission is just as important today; as native grasslands continue to dwindle due to conversion and development.

We do have a couple of possibilities to investigate for adjacent or nearby properties. The owner of the in-holding on our west side (80 acres) also has property adjacent to the highway ... so he could already be on your list to contact, in regards to the ROW issue. TNC is willing to assist with background and contact information for these two landowners. However, we will not be approaching them in regards to the highway project.

Thanks, Mike, for organizing the meeting, yesterday. It was good to learn more from all stakeholders, discuss the various options, and identify questions. Let me know if you have other questions of me. I look forward to continued progress on the project.

Jim

Jim Hays
*Conservation Projects
Coordinator*

jim_hays@tnc.org

(620) 388 4613 (Mobile)

nature.org

The Nature Conservancy
Hays Home Office
10124 Merton
Wichita, KS 67209



Please consider the environment before printing this email

Cliff Ehrlich

From: John.Knowles@dot.gov
Sent: Tuesday, July 22, 2014 3:28 PM
To: Ryan Barrett
Cc: Scott King; James Brewer
Subject: RE: 169-2 KA-2380-01 Project Description & 4f Question

Ryan,

I just got back in the office and am just getting to your email. I will review the attached and get you comments asap. The Nature Conservancy property does not meet the definition of 4(f) and would not have special protection under the 4(f) regulation.

John

From: Ryan Barrett [<mailto:ryanb@ksdot.org>]
Sent: Tuesday, July 22, 2014 10:18 AM
To: Knowles, John (FHWA)
Cc: Scott King; James Brewer
Subject: 169-2 KA-2380-01 Project Description & 4f Question

John,

Please find the plans we submitted to our Bureau of RW back on May 22nd attached to this e-mail. Please also find e-mails and notes attached from discussions we have had with The Nature Conservancy and KDWP (Kansas Division of Wildlife and Parks).

Please find a project description attached that we have been asked to submit to The Nature Conservancy at their request (see attached e-mail). Would you please review this project description and provide any comments you have when you get a chance? I am anticipating the "project description" could be used in the EA that will be developed at KDWP's request. If you could send me your comments on this by the end of the day, it would be much appreciated. I am going on vacation starting tomorrow and will be gone until August 4th. If not, no big deal – just send me the comments after you have had time to review. I will pass along our project description once I receive comments and update the word document.

Finally, during a discussion with KDWP and The Nature Conservancy on July 8th, KDWP asked us if The Nature Conservancy Property falls under a 4(f) designation for publicly owned wildlife and waterfowl refuge. Based on the discussion at our meeting, it seemed like The Nature Conservancy is a public non-profit. They allow the public to visit, but they conduct research on the land they own and it does not seem like they allow the public to be stomping around on their ground on their own. They mentioned that visitors are required a guide when touring the property. To me, this does not seem to qualify under a Federal 4(f) designation, but I would like to get your expert determination/opinion. Would you mind researching this and providing a determination on this? The meeting minutes and my notes are attached from our July 8th meeting where this question was raised.

If I recall correctly, I believe you were involved in early discussions regarding 4(f) and whether or not an EA would be needed. It was my understanding that there were no other options to do a de minimus or less environmental documentation. Can you confirm this?

Please let me know if you need anything else (additional plans, e-mails documenting discussions, etc.). I will follow up with a phone call later this morning.

Thanks,

Kansas Department of Transportation

MEMO

Meeting Date: July 23, 2014

Project Number: 169-2 KA-2380-01,
Roadway Reconstruction with Shoulder Addition

Attendees: Rob Stork, Cliff Ehrlich, Mike Fletcher, Tom Allen, Carl Magnusom, Alan Pollom, Steve Adams, Steven Lesslie

US-169- Discuss landowner background and contact information

Discussion:

- Meeting commenced at 10:30 a.m. at KDOT Headquarters.
- Land was purchased with State Wildlife Grant Fund (SWG).
- Three parcels of land in Anderson County were purchased by The Nature Conservancy (TNC) from the same landowner. These are the smallest properties in KS owned by TNC.
- The Kansas Biological Survey (KBS) did a National Heritage Inventory of the area. An aerial photo showing the core area of interest and the properties owned by TNC was handed out.
- It was noted that the area KDOT was taking was deemed high quality prairie.
- Land transfer/swap must be equivalent value (current appraised value) and equivalent habitat value.
- Land transfer would go 100% to The Nature Conservancy.
- Land valuation may be determined using a habitat assessment.
- KDOT needs approximately 13 acres because of SWG land impacts. TNC would like to go equal shares (20 acres) each. Rob said KDOT could do that. KDOT Right-of-Way confirmed that 14.84 acres will be impacted as well as 3.95 acres of temporary easement.
- TNC originally had 3 properties identified for possible purchase.
- Only 1 is considered available at this time. It is located on the west side of the largest TNC property and is surrounded on 3 sides by TNC owned land. TNC recommended attempting to purchase the east 40 acres that consists of high quality native prairie that contains Mead's Milkweed. Frank Herman of rural Garnett owns the property. It is designated as Farm # 2086 on a NRCS land use map that was distributed. Mr. Herman has owned this land for 15 years and it is thought he may not have "family" attachments to it.
- TNC gave Right-of-Way the contact information. It was noted that TNC was close to a deal to purchase the property 9 years ago but at the last minute the deal fell thru and Mr. Herman still appears to be upset with the

Kansas Department of Transportation

TNC. TNC has not been able to contact him and it was suggested KDOT might have better luck. It was stated that Mr. Herman has many siblings but no children.

- TNC is not sure of the best way to approach Mr. Herman but he is aware that he has Mead's Milkweed and at one time had agreed to hay around the plants. The first choice might be an environmental need approach.
- TNC commented that Anderson County may require 40 acres to establish a home site so Mr. Herman may want to keep at least 40 acres for future development. It was also stated that Kansas University (KBS) was not wishing to increase the area they manage for the TNC. It was noted that the KBS is under contract to transplant the Mead's Milkweed impacted by the road project.
- TNC has to buy at the appraised value but if paying more is necessary a 3rd party to fund additional costs would be looked into. TNC would also be willing to trade their isolated parcels that don't contain Mead's Milkweed but that has to be dollar for dollar as well. KDOT purchases land at the going acre rate.
- KDOT needs to calculate how much land is available for possible purchase. The acres of Mr. Herman's land that will be impacted by the project will also be calculated. The KDWPT and the USFWS have stated they are happy with the land we are looking to purchase.
- Acquiring this property is necessary before KDOT can do an Environmental Assessment.
- Lance Hedges works for TNC and lives in Garnett. He may be able to assist Tom Allen with contacting Mr. Herman to see if he is willing to negotiate.
- Meeting over at 11:30 a.m.

6425 SW 6th Avenue
Topeka, KS 66615



phone: 785-272-8681
fax: 785-272-8682
cultural_resources@kshs.org

Kansas Historical Society

Sam Brownback, Governor
Jennie Chinn, Executive Director

KSR&C # 14-10-031
October 3 2014

Michael Fletcher
KDOT
Via Email

Re: 169-2 KA-2380-02 – Anderson County

We have reviewed the materials received October 2, 2014 regarding the above-referenced project in accordance with 36 CFR Part 800. In reviews of this nature, the SHPO determines whether a federally funded, licensed, or permitted project will adversely affect properties that are listed or determined eligible for listing in the National Register of Historic Places. The SHPO has determined that the proposed project will not adversely affect any property listed or eligible for listing in the National Register. As far as this office is concerned the project may proceed.

Thank you for giving us the opportunity to comment on this proposal. Please refer to the Kansas State Review & Compliance number (KSR&C#) listed above on any future correspondence. Please submit any comments or questions regarding this review to Kim Gant at 785-272-8681, ext. 225 or kgant@kshs.org.

Sincerely,

Jennie Chinn
State Historic Preservation Officer

Patrick Zollner
Director, Cultural Resources Division
Deputy State Historic Preservation Officer

Phase I Review

Kansas State Historical Society
Contract Archeology Program

KSHS Database Number KA-2380-BRID-02	KDOT Project Number 169-2 KA-2380-02	Phase I request date 11/6/2014	Received 10/6/2014
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District 4	County Anderson	Legal Discription Sec. 6, T22S, R20E ; Sec. 31, T21S, R20E
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Review Resources

Project Plans Provided	County Map Anderson	County Atlases Northwest Publishing Company 1901
USGS topo Welda, Bush City	Map of Historic Trails GLO	

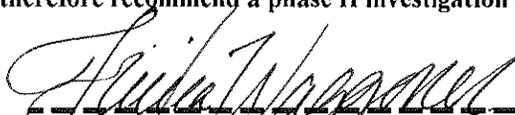
Any recommendation made here is with the understanding that due to the nature of archeological manifestations, it is always possible that cultural deposits could be encountered during the course of the project. If that occurs, the remains should be left in place and the State Archeologist contacted immediately so that the appropriate mitigative measures can be carried out as soon as possible. Thank you for your cooperation in helping to preserve the State's archeological resources.

Phase I Clearance

Background Research has been conducted by consulting resources listed above. The results indicate that there are no recorded prehistoric or historic archeological sites in the project area and that there is a low potential for the occurrence of sites eligible for listing on the National Register of Historic Places. We therefore see no need for further archeological investigations.

Phase II Recommended

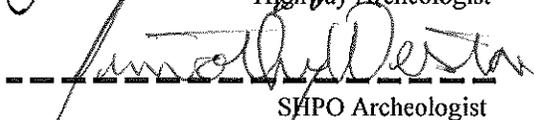
Background research has been conducted by consulting resources listed above. Results indicate either the presence of recorded sites or a high potential for the occurrence of sites eligible for listing on the National Register of Historic Places. We therefore recommend a phase II investigation of all or parts of the project area.



Highway Archeologist

10/7/14

Date



SHPO Archeologist

10/7/14

Date



U.S. Department
of Transportation
**Federal Highway
Administration**

Kansas Division

January 22, 2015

6111 SW 29th, Suite 100
Topeka, Kansas 66614
(785)273-2600
(785)273-2620 (fax)
www.fhwa.dot.gov/ksdiv/index.htm

In Reply Refer To:
HDA-KS

Ms. Heather Whitlaw
U.S. Department of the Interior
Fish and Wildlife Service
Kansas State Office
2609 Anderson Avenue
Manhattan, Kansas 66502

Subject: 169-2 KA-2380-01
Biological Assessment
Anderson County, Kansas

Dear Ms. Whitlaw:

Enclosed is a biological assessment prepared by the Kansas Department of Transportation (KDOT) for your review. We are requesting formal consultation for the potential impacts by this project to Mead's Milkweed (*Asclepias meadii*). KDOT has already entered into informal consultation and has an approved transplant plan. We believe the recommendations of the assessment will satisfy our Section 7 requirements.

You may contact John Knowles at 785-273-2628 if you have any comments, concerns, or require additional information.

Sincerely yours,

For J. Michael Bowen, P.E.
Division Administrator

Enclosure

Cc: Mike Fletcher, Environmental Scientist III, KDOT



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Kansas Ecological Services Office
2609 Anderson Avenue
Manhattan, Kansas 66503-6172

January 30, 2015

J. Michael Bowen, P.E.
Division Administrator
Federal Highway Administration
6111 SW 29th, Suite 100
Topeka, KS 66614

RE: U.S. Highway 169 widening; Anderson County, KS 06E2100000-2015-CPA-0314

Dear Mr. Bowen:

This is in response to your January 22, 2015 letter, which we received January 28, requesting formal Endangered Species Act consultation on potential impacts to the federally-listed threatened Mead's milkweed from a proposed highway project in rural Anderson County, Kansas. The Kansas Department of Transportation is proposing to widen a portion of existing U.S. Highway 169 north of Welda. Your letter also included a Biological Assessment addressing the impacts of this project on the Mead's milkweed, along with describing a transplanting plan in cooperation with the Kansas Biological Survey. This letter acknowledges the Service's receipt of that request, and hereby initiates the requested section 7 consultation under the ESA.

My staff will utilize the information you provided in the Biological Assessment to prepare our biological opinion on the proposed actions. Section 7 allows the Service 90 calendar days to conclude formal consultation and an additional 45 calendar days to prepare and deliver our biological opinion. Therefore, by law we must provide you with our biological opinion no later than June 12, 2015.

The Endangered Species Act requires that after initiation of consultation, the federal action agency may not make any irreversible or irretrievable commitment of resources that limits future options. This practice ensures agency actions do not preclude the formulation or implementation of reasonable and prudent alternatives that avoid jeopardizing endangered or threatened species.

If you have any questions or concerns about this consultation or the consultation process in general, please contact me or Dan Mulhern of this office. Thank you for your cooperation in the completion of this consultation.

Sincerely,

Heather Whitlaw
Field Supervisor

cc: KDWPT, Pratt, KS (Ecological Services)

Phase I Review

Kansas State Historical Society
Contract Archeology Program

KSHS Database Number KA-2380-ROW-01	KDOT Project Number 169-2 KA-2380-01	Phase I request date 4/8/2015	Received 3/25/2015
District 4	County Anderson	Legal Discription Sec. 30, T21S, R20E	
Review Resources			
Project Plans Provided	County Map Anderson	County Atlases Northwest Publishing Company 1901	
USGS topo Welda	Map of Historic Trails GLO		

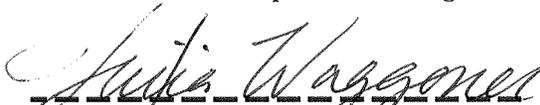
Any recommendation made here is with the understanding that due to the nature of archeological manifestations, it is always possible that cultural deposits could be encountered during the course of the project. If that occurs, the remains should be left in place and the State Archeologist contacted immediately so that the appropriate mitigative measures can be carried out as soon as possible. Thank you for your cooperation in helping to preserve the State's archeological resources.

Phase I Clearance

Background Research has been conducted by consulting resources listed above. The results indicate that there are no recorded prehistoric or historic archeological sites in the project area and that there is a low potential for the occurrence of sites eligible for listing on the National Register of Historic Places. We therefore see no need for further archeological investigations.

Phase II Recommended

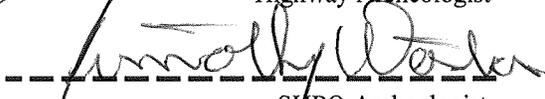
Background research has been conducted by consulting resources listed above. Results indicate either the presence of recorded sites or a high potential for the occurrence of sites eligible for listing on the National Register of Historic Places. We therefore recommend a phase II investigation of all or parts of the project area.



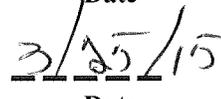
Highway Archeologist



Date



SHPO Archeologist



Date

Tim Flagler

From: Michael Fletcher <Fletcher@ksdot.org>
Sent: Wednesday, April 01, 2015 11:22 AM
To: Jim F. Hays (jim_hays@TNC.ORG); Carl Magnuson (carl.magnuson@ksoutdoors.com)
Cc: Robert Stork; Stephen Bass; Ryan Barrett; Lucy K. Munz; Cliff Ehrlich; Steven Lesslie; James Brewer; Scott King
Subject: 169-2 KA-2380-01 Sericea Lespedeza

Jim and Carl,

Cliff Ehrlich and I inspected the Doering tract for the presence of Sericea Lespedeza. There were no plant remnants found on either the west or east sides of US 169.

Mike

Tim Flagler

From: Bartels, Brian <brian.bartels@ksoutdoors.com>
Sent: Monday, April 06, 2015 2:07 PM
To: Cliff Ehrlich
Cc: Environmental Services
Subject: Re: Potential land transfer for TNC; 169-2 KA-2380-01

Cliff:

Re: Potential land transfer for TNC; 169-2 KA-2380-01 (Track 20140236)

The referenced property transfer (and minimal improvements to entrances and fencing) was reviewed for potential impacts on crucial wildlife habitats, current state and federally-listed threatened or endangered species, species in need of conservation (SINC), and public recreation areas for which KDWPT has administrative authority.

Results of our review determine that adverse impacts to crucial wildlife habitats, current state or federally-listed threatened species, endangered species, SINC, or public recreation areas will not occur; therefore, specific mitigation measures via an Action Permit are not required by KDWPT. Although state and federal lists of imperiled species and KDWPT's land obligations change periodically, unless the project boundary is extended beyond what is presently proposed, future clearances from KDWPT are not required.

Thank you for the opportunity to provide these comments and recommendations.



Brian Bartels, Ecologist
Ecological Services
Kansas Dept. of Wildlife, Parks and Tourism
512 SE 25th Ave., Pratt, KS 67124
office: 620-672-0746
cell: 620-770-6628
fax: 620-672-2972

On Wed, Mar 25, 2015 at 1:20 PM, Cliff Ehrlich <cliffe@ksdot.org> wrote:

Brian,

Attached is the area we are hoping to be able to purchase from the Doerings' that is on US-169 and 1100 Road. This is the spot we drove by that is just west of the rock quarry and Bradshaw Creek. Could you please review this parcel and send a reply email evaluating the potential to impact any critical habitat inside the outlined area. The land to be transferred to The Nature Conservancy will not be impacted other than entrances to their new property and some fencing.

Please give me a call with any questions.

Thanks,

Cliff Ehrlich

Environmental Services Section

Natural Environment/Permits Unit

Kansas Department of Transportation

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Sam Brownback, Governor
Jennie Chinn, Executive Director

KSR&C # 14-03-054
April 8, 2015

Michael Fletcher
KDOT
Via Email

Re: 169-2 KA-2380-01
NHPP-A238(001)
Anderson County

We have reviewed the materials received March 25, 2015 regarding project 169-2 KA-2380-01 in accordance with 36 CFR Part 800. This project was previously submitted on March 11, 2014 and was cleared by our office. This phase of the project will transfer property to The Nature Conservancy as mitigation for the highway project on US-169. After reviewing the current documentation, the SHPO has determined that the proposed project will continue to not adversely affect any property listed or determined eligible for listing in the National Register. As far as this office is concerned, the project may proceed.

Thank you for giving us the opportunity to comment on this proposal. Please refer to the Kansas State Review & Compliance number (KSR&C#) listed above on any future correspondence. Please submit any comments or questions regarding this review to Sarah Hunter at 785-272-8681 ext. 225 or shunter@kshs.org.

Sincerely,

Jennie Chinn
State Historic Preservation Officer

Patrick Zollner
Director, Cultural Resources Division
Deputy State Historic Preservation Officer



U.S. Department
of Transportation
**Federal Highway
Administration**

Kansas Division

May 08, 2015

6111 SW 29th, Suite 100
Topeka, Kansas 66614
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In Reply Refer To:
HDA-KS

Ms. Heather Whitlaw
U.S. Department of the Interior
Fish and Wildlife Service
Kansas State Office
2609 Anderson Avenue
Manhattan, Kansas 66502

Subject: 169-2 KA-2380-01
Biological Assessment
Anderson County, Kansas

Dear Ms. Whitlaw:

We are writing to clarify the request included in the letter sent to you on May 6, 2015. In that letter we requested you include the Northern Long-Eared Bat (NLEB) (*Myotis septentrionalis*) in the current Biological Opinion for the proposed widening of U.S. Highway 169 in Anderson County, Kansas. It is our conclusion, based on tree clearing limitations proposed by KDOT, that the impacts of the project should be covered under the interim Section 4(d) rule for the NLEB and would not likely adversely affect the NLEB. We are seeking your concurrence with this determination, which would result in no need to include NLEB in the ongoing formal consultation.

You may contact John Knowles at 785-273-2628 if you have any comments, concerns, or require additional information.

Sincerely yours,

For J. Michael Bowen, P.E.
Division Administrator

Cc: Mike Fletcher, Environmental Scientist III, KDOT



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Kansas Ecological Services Office
2609 Anderson Avenue
Manhattan, Kansas 66503-6172

May 11, 2015

J. Michael Bowen, P.E.
Division Administrator
Federal Highway Administration
6111 SW 29th, Suite 100
Topeka, KS 66614

06E2100000-2015-CPA-0314

RE: U.S. Highway 169 widening (169-2 KA-2380-01); Anderson County, KS

Dear Mr. Bowen:

This responds to your May 8, 2015 letter providing a determination that the proposed widening of U.S. Highway 169 in Anderson County, Kansas, is not likely to adversely affect the federally-listed threatened northern long-eared bat (NLEB). This follows up on data we received from Kansas Department of Transportation that the total acreage of trees to be removed within the 100' extension of right-of-way (ROW) will be 19.11 acres, with the largest contiguous zone being 2.85 acres. Trees proposed to be removed outside the 100' extension total 1.03 acres, with the largest contiguous zone being 0.42 acre.

Given the project location, limited ROW expansion, and minimal acreage of additional tree removal (< 1.0 acre), I concur with the determination that this project may affect, but is not likely to adversely affect, the NLEB. Therefore, there is no further need of ESA section 7 consultation on this project relative to this species.

Please contact Dan Mulhern or Michele McNulty of this office if you have additional comments or questions regarding this finding. Thank you for your continued coordination and cooperation in the review of this project.

Sincerely,

Heather Whitlaw
Field Supervisor

cc: KDWPT, Pratt, KS (Ecological Services)



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Kansas Ecological Services Office
2609 Anderson Avenue
Manhattan, Kansas 66503-6172

May 26, 2015

J. Michael Bowen, P.E.
Division Administrator
Federal Highway Administration
6111 SW 29th, Suite 100
Topeka, KS 66614

06E21000-2015-CPA-0314
06E21000-2015-F-0311

RE: U.S. Highway 169 widening (169-2 KA-2380-01); Anderson County, KS

Dear Mr. Bowen:

This document transmits the U. S. Fish and Wildlife Service's biological opinion regarding potential impacts of the proposed widening of U.S. Highway 169 to the federally-listed threatened Mead's milkweed (*Asclepias meadii*) near Welda in Anderson County, Kansas. This consultation document has been prepared pursuant to section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) and 50 CFR 402 of our interagency regulations governing section 7 of the Act. Your January 22, 2015 request for formal consultation was received on January 28.

This biological opinion is based on the best available scientific and commercial data including electronic mail and telephone correspondence between our staffs, Service files, pertinent scientific literature, discussions with recognized species authorities, and other scientific sources. A complete administrative record of this consultation is on file at our Manhattan, Kansas Field Office.

Consultation History

The Federal Highway Administration (Administration) contacted the Fish and Wildlife Service (Service) by letter dated July 11, 2013, requesting formal consultation for the proposed widening of U.S. Highway 169 in Anderson County. However, it was very early in the planning process, and very few details of the actual work to be done were known at that time. The Kansas Department of Transportation (KDOT) and Kansas Biological Survey (KBS) were consulted for additional information, and discussions ensued regarding the potential for impacting the Mead's milkweed.

On August 28, 2013, Jennifer Delisle of KBS proposed the concept of transplanting wild-growing Mead's milkweed out of the projected impact zone onto a protected site owned and

operated by The Nature Conservancy (TNC). This plan was to include marking of plant locations in spring 2014, digging plants and rhizomes during their dormant season in 2014-2015, and continuing to monitor transplants into spring 2015. The Service and Administration agreed by phone on September 23, 2013 to temporarily suspend the request for formal consultation, pending further information to be provided by KDOT and KBS.

A meeting was held between the Service and KDOT on September 26, 2013, to discuss the development of a transplanting plan by KBS, which included relocating plants to TNC property. Maps and a plan and profile of the proposed highway project were provided to the Service at that time. The Service gave verbal approval for KDOT to contract with KBS to develop and initiate a relocation plan, determining that additional time ahead of the actual construction impact would be needed to determine success or failure. KDOT indicated the project would have a let date of March 2017.

Another meeting between the Service and KDOT occurred February 21, 2014 to bring all parties up to date with the progress of the planned work. Because of the safety-necessitated widening, there was no way to avoid impacting plants known to occur in the existing highway right-of-way. Since these plants were going to be destroyed regardless of any avoidance or mitigating measures, the transplanting plan was determined the best means of minimizing the overall impacts of the project.

Upon request by KDOT, the Administration sent a letter dated July 9, 2014 to the Service requesting initiation of formal consultation. However, that letter was never received by the Service, and a question concerning the issue came up in a January 22, 2015 phone conversation between KDOT and the Service. The Service contacted the Administration that same day, requesting that a new letter be sent. The Administration responded with a January 22 letter requesting initiation of formal consultation on this project, and provided a Biological Assessment, to which the Service replied affirmatively on January 30. This Biological Opinion is the result of that consultation.

BIOLOGICAL OPINION

It is the opinion of the Service that the proposed action is not likely to jeopardize the continued existence of the Mead's milkweed. The potential for adverse impacts, and measures to avoid or minimize those impacts, are addressed in this opinion. There is no federally-designated critical habitat at the project location; therefore, none will be directly impacted.

Description of the Proposed Action

The federal action considered in this opinion is the Administration's funding and authorization to KDOT for the widening of U.S. Highway 169 in Anderson County. The federal action also includes the implementation of a transplanting plan to salvage as many individual Mead's milkweed plants as possible from the proposed impact area. The project

includes 2-lane reconstruction and placement of drainage structures and ditch improvements. A 10-foot composite shoulder will be provided the length of the project. It is estimated that approximately 8-10 acres of suitable Mead's milkweed habitat will be removed by the project. The project is scheduled to be let for bids in March 2017, with construction to begin within approximately two months. Final completion date is estimated at December 2018, with work occurring continuously during that time frame as long as weather allows.

Because of the anticipated impact on Mead's milkweed growing in the areas proposed to be impacted, KDOT worked with KBS to develop a transplanting plan in 2014 (Appendix 1). KBS estimated after a survey in 2013 that at least 50 individual Mead's milkweed ramets could be taken as a result of project activities (Delisle and Kettle 2014). Since the loss of these plants was unavoidable, transplantation was initiated in 2014 as an effort to minimize the overall population loss. Mead's ramets were flagged in the spring and summer of 2014, and these locations were dug up with a backhoe and by hand in the fall 2014 dormant season. Thirty-two recovered rhizomes were planted on TNC's Anderson County Prairie Preserve (ACPP), with GPS readings taken at each planting site (J. Delisle, pers comm.).

Additional ramets will be dug up and transplanted in fall 2015 as well. All transplants are to be monitored for five years. Seeds were also collected in fall 2014, with the intent of germinating and growing them in a greenhouse to produce additional plants for translocation to ACCP. These greenhouse plants are intended to be planted in May 2015, and the first monitoring to determine survival of 2014-planted plants will occur then as well.

Action Area

The action area considered in this opinion is a seven-mile-long corridor along U.S. Highway 169 from 1.5 miles south of the town of Welda, extending north to the junction of U.S. 169 and U.S. 59, in Anderson County, Kansas. This action area represents a small percentage of the occupied range of the Mead's milkweed. This opinion assesses the impacts resulting from the removal of wild-growing Mead's milkweed plants from the construction zone and transplanting them to ACPP, as described above.

STATUS OF THE SPECIES

Mead's milkweed is a long-lived tallgrass prairie perennial herb belonging to the family *Asclepiadaceae*. The genus *Asclepias* includes approximately 150 species (Cronquist 1981), most of which occur in North America. Mead's milkweed was first discovered in 1843 in Hancock County, Illinois by Dr. Samuel Barnum Mead, a pioneer medical doctor (Jones 1952; Betz 1967; Mohlenbrock 1983; Betz 1989) and was eventually found in five other states by 1900 (Mohlenbrock 1983). Mead (1846) originally identified the plant as *Asclepias cordata*, but it was later described as a separate species by Torrey as *Asclepias meadii* Torrey (Gray 1856).

Mead's milkweed can be distinguished from similar species by a combination of smooth "stalkless" opposite leaves with a herringbone venation and a single nodding umbel (a type of

flower cluster) consisting of large fragrant greenish-cream flowers. Immature plants may resemble those of other milkweeds or species in the related dogbane (*Apocynaceae*) family. Juvenile or seedling plants are often difficult to locate and identify due to their small stature and slender linear leaves.

Mead's milkweed usually begins its seasonal growth in mid to late April. It has a single slender unbranched stalk, 8-16 inches (20-40 centimeters) high without hairs but with a whitish waxy covering. The hairless leaves are opposite, broadly ovate, 2-3 inches (5-7.5 centimeters) long, 3/8-2 inches (1-5 centimeters) wide, with a whitish waxy covering. A solitary umbel at the top of the stalk has 6-15 greenish ivory/cream colored flowers, which appear in late May and early June. Young green fruit pods appear by late June and reach their maximum length of 1.5-4 inches (4-8 centimeters) by late August or early September. As these pods mature, they darken, and the hairy seeds borne within are mature by mid-October (Morgan 1980; Kurz and Bowles 1981; USFWS 1988; Missouri Department of Conservation 2000).

Mead's milkweed is a long-lived perennial rhizomatous herb that may persist indefinitely or until destroyed by chance impacts from animals or pathogens. Mead's milkweed persists in stable habitat of late-successional prairie (Bowles et al. 1988; Bowles and Bell 1998). Plants marked along railroads in Missouri in 1966 persisted until the 1990's when the sites were destroyed. Plants established in restored prairie at the Morton Arboretum have persisted since 1966 (Betz 1989).

Mead's milkweed formerly occurred throughout the eastern tallgrass prairie region of the central U.S. extending from Kansas (Carruth 1877; Gates 1940; McGregor 1948) through Missouri (Tracy 1888; Woodson 1954; Steyermark 1977), and Illinois (Mead 1846; Lapham 1857; Patterson 1876; Brendel 1887; Huett 1897; McDonald 1899; Jones 1952) to southern Iowa (Fitzpatrick and Fitzpatrick 1899; Greene 1907), southwest Wisconsin (Greene 1880, 1898), and northwest Indiana (Deam 1940). Historically, Mead's milkweed is known from a total of 46 counties in Illinois (Kurz and Bowles 1981), Indiana (Betz 1988; LeBlanc 1988), Iowa (Watson 1983), Kansas (Freeman 1988), Missouri (Morgan 1980), and Wisconsin (Alverson 1981). Based on historical collections Mead's milkweed has been extirpated from Wisconsin and Indiana.

Mead's milkweed populations are generally restricted to full sun in late-successional or virgin grassland; however, plants may also persist vegetatively in partial shade, such as in edges of glades or barrens that are being encroached upon by woody vegetation (Betz and Hohn 1978; Schwegman 1987; Bowles et al. 1998; Phillippe et al. 2000). Populations typically occur on mesic to dry-mesic, upland tallgrass prairies (Ellsworth 1922; Van Bruggen 1959; Freeman 1988). Mead's has also been found on glades or barrens (Steyermark 1940; 1977; White 1978). Populations in Kansas, Iowa, and Illinois have been classified as dry-mesic to mesic prairie. Populations in Missouri, however, have been classified as sandstone, chert, limestone/dolomite, or shale prairie with the exception of igneous glades in Iron and Reynolds

counties (Steyermark 1940, 1977). Southern Illinois sites are classified as sandstone barrens (White 1978).

This species has low reproductive rates. In a 7-year study Betz (1989) found only 6.4 % of flowering stems produced seed pods, while Kettle, et al. (2000) found 15% pod formation, but no seedlings. Growth projections on seedling cohorts suggest that Mead's milkweed will require 15 years or more to mature from a germinating seed to a flowering plant (Bowles et al. 2001a). The species may have demographic processes that are as slow as in some woody plants. Because plants are slow to reach reproductive maturity, their longevity is an important life-history strategy and has apparently sustained populations in hay meadows where mowing results in the removal of fruits before they mature and release seeds (Freeman 1988; Bowles et al. 1998; Tecic et al. 1998). While seedling establishment may be infrequent, it is probably required for long-term population maintenance and is necessary for population establishment. In addition, Mead's milkweed can also spread vegetatively through an underground rootstock that produce multiple ramets from which rhizomes grow.

This species begins flowering from late May in the south and mid-June in the north (Betz 1967). Severe drought can cause loss of flowers or wilting and dying back of an entire plant. Stressed plants may be reduced to sterile or juvenile conditions or dormancy the following year. Most milkweeds are either self-incompatible or highly sensitive to inbreeding depression and require outcrossing by insects between sexually compatible plants for production of viable seeds (Kephart 1981; Shannon and Wyatt 1986; Kahn and Morse 1991; Broyles and Wyatt 1993b). Milkweed pollen is dispersed in pollen sacs, or pollinia, by insects (Betz 1967; Betz and Hohn 1978; Kephart 1981; Shannon and Wyatt 1986; Betz et al. 1994). Mead's milkweed is pollinated by small bumblebees (*Bombus* sp.) and miner bees (*Anthophora* sp.), and its seeds are wind dispersed from follicles (Betz 1989; Betz and Lamp 1992; and Betz et al. 1994). Morse (1982) found that pollinia on bumblebees were retained for six hours. This slow pollinium turnover coupled with the strong flying characteristics of bees may contribute to high levels of long distance pollen transfer between populations of milkweeds (Wyatt and Broyles 1994).

Mead's milkweed is genetically diverse, with about 74% of its genetic variation maintained within populations and only 26 % genetic differentiation among populations (Tecic et al. 1998). This population structure is characteristic of plants with outcrossing breeding systems and wind dispersed seeds (Hamrick and Godt 1990; Hamrick et al. 1991). As a result, large natural populations have high reproductive and evolutionary potential. Tecic et al. (1998) and Hayworth et al. (2001) also found that genetically different individuals (genotypes) were also characteristic of sexually reproducing Mead's milkweed populations and that these genotypes tended to be distributed among populations. Therefore, while diversity of alleles may be high within populations, there may be a low number of different genotypes to insure successful crossing within populations, particularly in small populations (Tecic et al. 1998; Hayworth et al. 2001).

Genetic analyses suggest that most small populations in the eastern portion of the range are composed of single genets that may be incapable of sexual reproduction, leaving them vulnerable to extinction (Tecic et al. 1998). Mead's milkweed populations exhibit minor annual fluctuations in ramet numbers (Betz and Hohn 1978; Freeman 1988; Betz 1989). The status of individual ramets and genets may shift between flowering, non-flowering, or not appearing above ground. Environmental fluctuations, such as rainfall, or biological factors, such as seed production or pathogens, may be factors in this variation; however, differences in land management and use may also affect population structure. Bowles et al. (1998) found that ramet densities are higher in mowed sites, but a greater proportion of flowering ramets, as well as greater numbers of genotypes, occur in sites that are burned rather than mowed.

Actions in the Kansas portion of the species' range have eliminated or degraded habitat in recent years. Since 2006, our office has reviewed 149 individual projects for their potential to impact the Mead's milkweed in Kansas. Of these, three were determined to have beneficial effects, and 23 were initially determined not likely to adversely affect the species. Of the remaining 123, none of the effects were determined individually to rise to the level of effect necessary to complete a formal consultation, although habitat suitability may have been impacted at least temporarily. These projects include housing and commercial developments, buried pipelines, communications towers, roads and bridges, airport expansion, rail line expansion, and quarries and mining operations. For some of these projects, as with the current U.S. Highway 169 project under consideration, a permanent loss of suitable habitat may have occurred. As more development continues within native tallgrass prairie, the overall effect may be a gradual loss of habitat suitable for use by the species.

As a result of fragmentation and destruction of the tallgrass prairie, Mead's milkweed populations have declined in Kansas, Missouri, Iowa, and Illinois. The species has been extirpated from Wisconsin and Indiana. The Service listed the Mead's milkweed as a threatened species on September 1, 1988 under the ESA (USFWS 1988).

Environmental Baseline

The environmental baseline is an analysis of the collective effects of past and ongoing human and natural factors leading to the current status of the species or its habitat and ecosystem, the effects of the proposed action and the collective effects in the action area. This analysis describes the status of the species and factors affecting the environment of the species in the proposed action area during the consultation. The baseline includes state, local, and private actions already affecting the species. Unrelated federal actions that have completed formal or informal consultations also are part of the environmental baseline, as are federal and other actions within the action area that may benefit listed species.

Within or very near the action area for this project, our office has reviewed six oil and gas pipeline maintenance projects, and one communication tower construction. The pipeline projects each resulted in a temporary disruption of potentially suitable habitat, but no

permanent impacts. Construction of the tower resulted in long-term, essentially permanent, loss of a very small parcel of potentially suitable habitat.

The Mead's milkweed is broadly distributed across the eastern two tiers of Kansas counties, with many occurrences reported in Anderson County and surrounding areas (Figure 1). The number of known occurrences in the vicinity of the proposed action (Figure 2) demonstrates the significance of the region for this species, as well as the potential for conservation and continued recovery outside the immediate impact area.

Effects of the Action

The most significant impacts of the proposed project are relatively permanent in nature, owing to the fact that up to 10 acres of currently-existing prairie will be converted to paved roadway. Prairie habitat lost to the project will be permanently unavailable to the species for recolonization or population expansion.

Project activities that result in the loss of Mead's milkweed include intentional removal for transplanting to a location managed for native plant conservation, which is being done as an alternative to losing them all to the conversion of prairie to highway and shoulder.

Cumulative Effects

Cumulative effects include the effects of future state, local or private actions that are reasonably certain to occur in the area considered in this biological opinion. Future federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Endangered Species Act.

Because the ACCP to which Mead's milkweed plants are being moved is protected for conservation, it is unlikely that any additional actions will be undertaken in the immediate vicinity of this project location to further threaten these individuals. Use of herbicides by highway crews to control roadside vegetation could have an effect on these individuals as well as any that remain in the highway right-of-way, and this will be addressed in the Conservation Recommendations section below.

Summary

Under the ESA, jeopardy occurs when an action is reasonably expected, directly or indirectly, to diminish a species' numbers, reproduction, or distribution so that the likelihood of survival and recovery in the wild is appreciably reduced. After reviewing the current status of the species, the environmental baseline for the action area, the effects of the proposed project, and the cumulative effects; it is the Service's biological opinion that the proposed project, as described, is not likely to jeopardize the survival and recovery of the Mead's milkweed. This is based primarily on the availability of suitable habitat and known populations that occur

outside the action area. No critical habitat has been federally-designated for this species in Kansas; therefore, none will be affected.

INCIDENTAL TAKE

Section 9 and federal regulations pursuant to section 4(d) of the Endangered Species Act prohibit the take of endangered and threatened fish and wildlife species without special exemption. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under ESA provided that such taking is in compliance with the terms and conditions of an incidental take statement provided with a biological opinion from the Service.

Section 7(b)(4) and 7(o)(2) of the Act do not apply to listed plant species. However, limited protection of listed plants is provided to the extent that the Act prohibits the removal and reduction of possession of federally listed plants or the malicious damage of endangered plants on areas under Federal jurisdiction, or the destruction of endangered plants on non-Federal areas in violation of State law or regulation. The project under consultation includes a conservation measure to transplant individual Mead's milkweed from the impact area to a protected area. Through this statement, we are authorizing project-related translocation of the federally listed Mead's milkweed and any subsequent loss of individuals.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purpose of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information needed to conserve the species. It is the recommendation of the Service that the Administration work with KDOT to implement the following:

1. Ensure that completion of the Mead's milkweed transplanting is carried out, including monitoring of translocated plants for up to 5 years.
2. Restrict or prohibit use of herbicides in roadside maintenance in any area of native prairie along this 7-mile highway corridor.
3. If roadside mowing is necessary in native prairie, conduct it as late in the season as possible, preferably after September 20, to allow Mead's milkweed to complete its seed dispersal.

CONCLUSION

This biological opinion is based on the best scientific and commercial data available as described herein. The Service has determined that the impacts of the proposed action are not likely to jeopardize the continued existence of Mead's milkweed.

REINITIATION

This concludes formal consultation on the actions outlined in your January 22, 2015 request to initiate consultation. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary federal agency involvement or control over the action has been retained (or is authorized by law) and if: 1) the amount or extent of incidental take is exceeded; 2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; 3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or 4) a new species is listed or critical habitat designated that may be affected by the action.

Thank you for your cooperation in the formulation of this biological opinion and your interest in conserving listed species.

Sincerely,



Daniel W. Mulhern
Acting Field Supervisor

cc: FWS/LE, Topeka, KS (Kenny Kessler)
FWS/ES, Denver, CO (Doug Laye)
FWS/FA, Denver, CO (Anna Schmidt)

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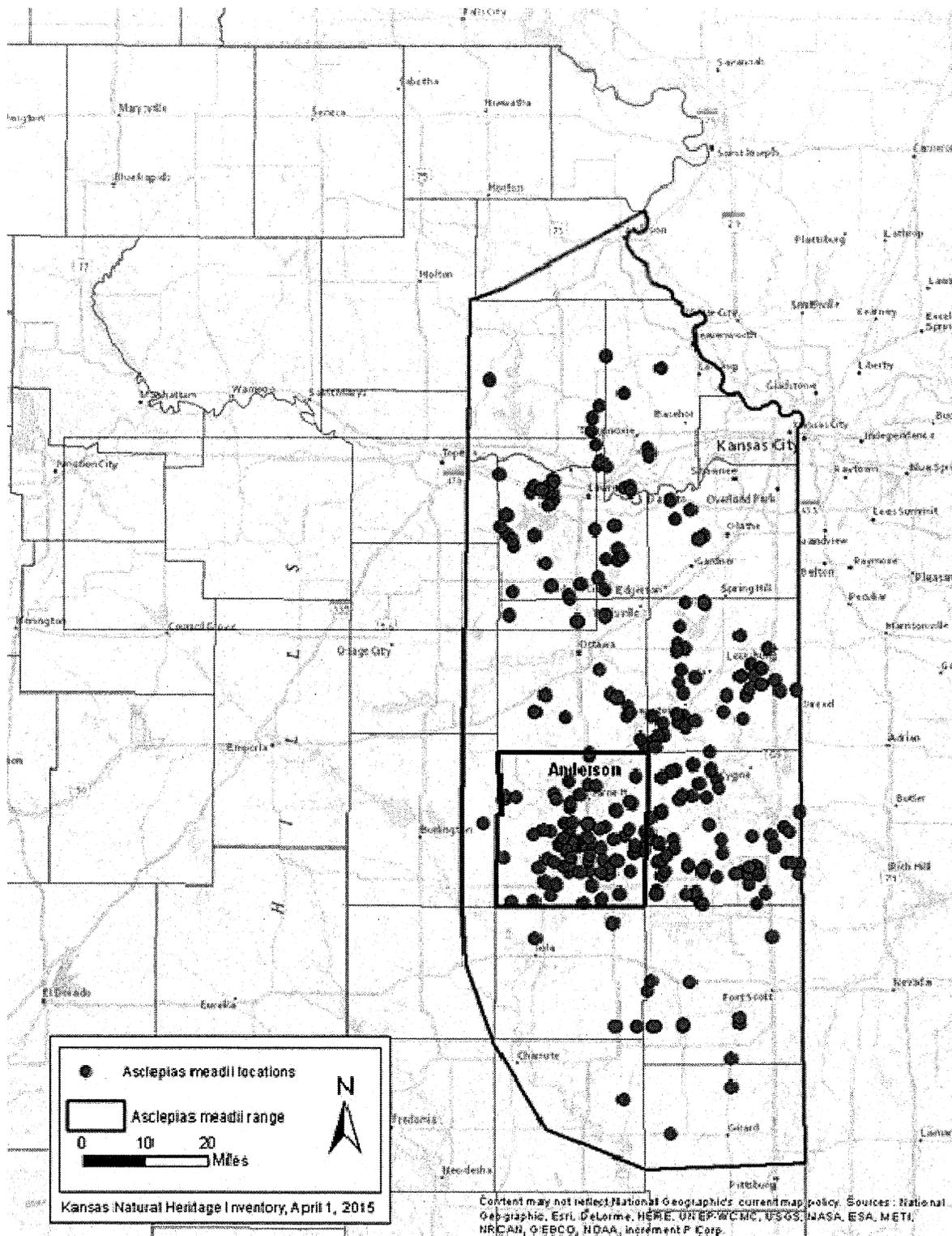


Figure 1. Mead's milkweed locations in Kansas, with Anderson County highlighted.

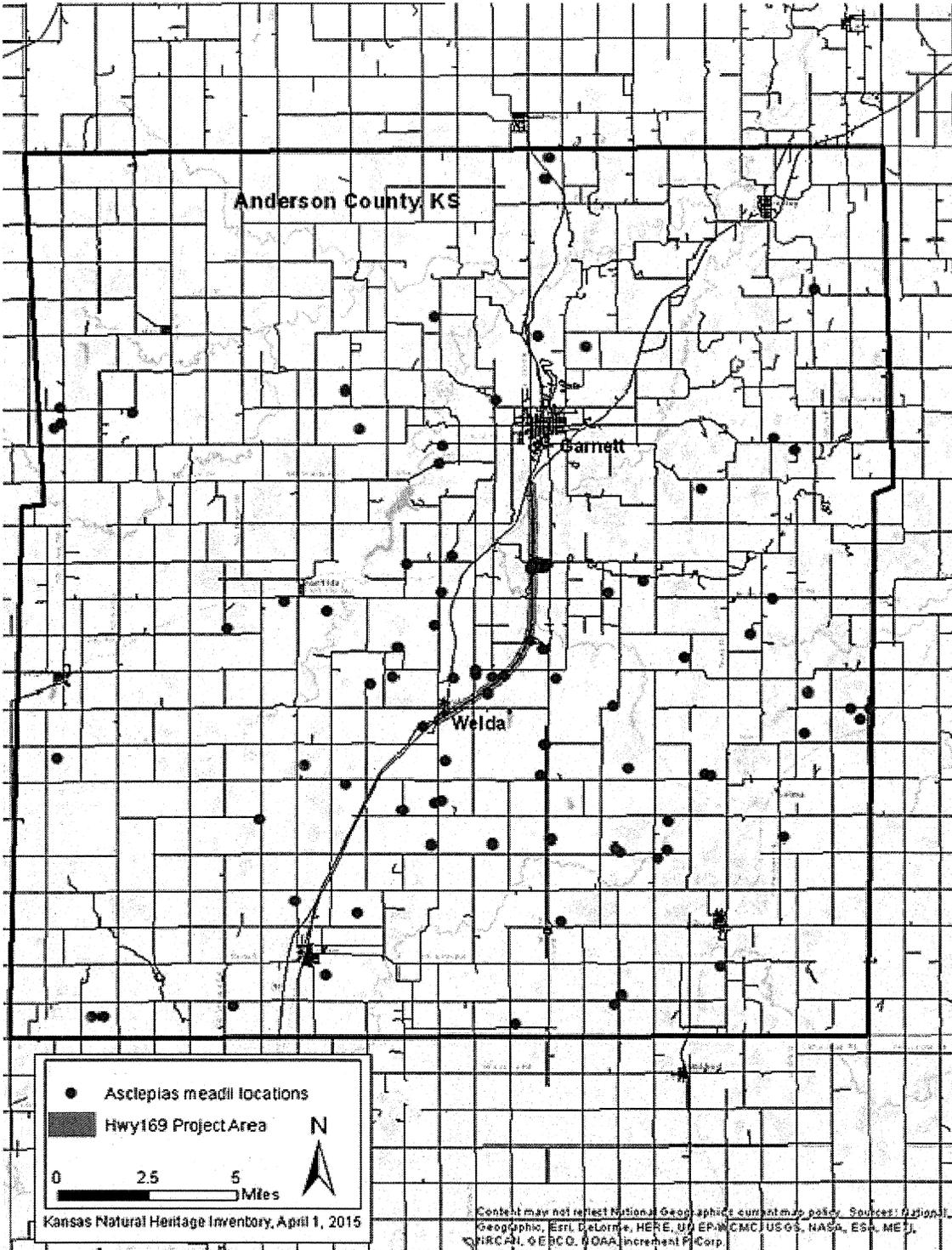


Figure 2. Mead's milkweed locations in Anderson County, with US 169 project highlighted.

Tim Flagler

From: Stephen Bass <SBass@ksdot.org>
Sent: Wednesday, July 08, 2015 8:34 AM
To: Tim Flagler
Cc: Ryan Robinson; Jacob Deiter
Subject: FW: Doering site review

FYI

Steve Bass
Kansas Dept of Transportation
Bureau of Road Design
(785) 296-3840
sbass@ksdot.org

From: Michael Fletcher
Sent: Wednesday, July 08, 2015 7:57 AM
To: Robert Stork; Thomas Allen; Stephen Bass; Jacob Deiter; Jason Pollock
Cc: Cliff Ehrlich
Subject: FW: Doering site review

Below is the results of The Nature Conservancy field review of the Doering property. Looks like we are good to go as long as no spraying occurs at either site.

Mike

From: Jim F. Hays [mailto:jim_hays@TNC.ORG]
Sent: Tuesday, July 07, 2015 6:35 PM
To: Michael Fletcher
Subject: Doering site review

Hey Mike,

Dean Kettle, from KBS, and I reviewed the two Doering tracts proposed for purchase for the K-2380 project. We agreed that you should go forward with plans to purchase both tracts. However, if spraying occurs at either site – before the transaction is completed – the properties may not be deemed acceptable, as mitigation.

Looks like they are grazing the east tract – Dean saw cattle on the site – this morning, before our meeting.

Let me know if you have questions. Please keep me posted.

**Thanks,
Jim**

Jim Hays
Conservation Projects
Coordinator

jim_hays@tnc.org

(620) 388 4613 (Mobile)

The Nature Conservancy
Hays Home Office
943 SE 120th St.
Leon, KS 67074



Tim Flagler

From: Michael Fletcher <Fletcher@ksdot.org>
Sent: Friday, July 31, 2015 6:48 AM
To: Tim Flagler
Cc: Stephen Bass; Jacob Deiter; Cliff Ehrlich; Ryan Robinson
Subject: RE: Doering site review - TNC - EA

Tim,

Neither The Nature Conservancy or KBS staff have any knowledge if there are any fish in the ponds.

Mike

From: Tim Flagler [<mailto:TFLAGLER@HNTB.com>]
Sent: Wednesday, July 29, 2015 12:44 PM
To: Michael Fletcher
Cc: Stephen Bass; Jacob Deiter; Cliff Ehrlich; Ryan Robinson
Subject: FW: Doering site review - TNC - EA

Mike,

As I'm working through the EA for the TNC land exchange, I'm putting together text describing the environment/natural resources on the TNC property being acquired. There are two ponds on the property adjacent to the highway (they'll be mucked and filled). I'm wanting to find out if there are any fish in those ponds. Would I be able to send an email directly to Jim Hays (TNC) and Dean Kettle (KBS) to find out if they, or someone on their staff would know; or should that correspondence come from your department? Or does anyone on your staff know?

Tim Flagler, PLA

Sr. Environmental Planner / Landscape Architect
Tel (816) 527-2415 Cell (913) 645-7760 Fax (816) 472-4086
HNTB CORPORATION
715 Kirk Drive, Kansas City, Missouri 64105 | www.hntb.com

From: Stephen Bass [<mailto:SBass@ksdot.org>]
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To: Tim Flagler
Cc: Ryan Robinson; Jacob Deiter
Subject: FW: Doering site review

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Subject: FW: Doering site review

Appendix D

LEGAL DESCRIPTIONS AND LOCATION OF PROPERTIES

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LEGAL DESCRIPTIONS AND LOCATION OF PROPERTIES

(Refer to Exhibit 2 in Appendix A)

Anderson County Prairie Preserve (TNC-owned Property) = 14.93 Acres

Northwest Side of US-169 (from West to East)

NW 1/4, SW 1/4; Section 36, T21S, R19E

NE 1/4, SW 1/4; “

SW 1/4, NE 1/4; “

NW 1/4, NE 1/4; “

NE 1/4, NE 1/4; “

Southeast Side of US-169 (from West to East)

SW 1/4, SW 1/4; Section 36, T21S, R19E

NW 1/4, SW 1/4; “

NE 1/4, SW 1/4; “

SW 1/4, NE 1/4; “

NW 1/4, NE 1/4; “

NE 1/4, NE 1/4; “

NW 1/4, NW 1/4; Section 31, T21S, R20E

North Side of 1000 Road (detour route)

SW 1/4, SW 1/4; Section 31, T21S, R20E

Doering Property (KDOT-owned Property) = 23.1 Acres

SW 1/4, SW 1/4; Section 30, T21S, R20E