US Army Corps of Engineers ®
Kansas City District

SALINA, KANSAS FLOOD PROTECTION PROJECT

Draft Environmental Assessment
&
Finding of No Significant Impact

Flood Rehabilitation, Salina, Kansas
Flood Risk Reduction Unit

April 2015

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DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
600 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

Finding of No Significant Impact

SALINA, KANSAS FLOOD PROTECTION PROJECT
April 2015

Summary

The U.S. Army Corps of Engineers - Kansas City District (Corps), in cooperation with the project sponsor, the City of Salina, Kansas, proposes to rehabilitate portions of the Salina Levee system that was damaged during an August 2013 flood event. The levee is located in Saline County near the left descending bank of the Smokey Hill River. The levee system protects a total of 10,840 acres of land and partially encircles the City of Salina. Damages to the levee system include the loss of the right shoulder of a concrete sill that stretches across the Smoky Hill River. The sill ponds water and helps protect levees downstream by reducing flood water velocities. The sill's integrity is compromised and water is flanking the structure due to channel erosion. Repairs to the sill would be needed to provide the previous level of flood risk management prior to the August 2013 flood event. This structure also provides the necessary water elevation that supplies the city with roughly half of its water needs. Furthermore, the flood resulted in severe river bank erosion in the vicinity of the intersection at Gypsum and Iowa Avenues. This river bank erosion is placing this intersection at risk of sloughing into the river. The purpose and need for this project is to restore the levee system to the previous level of flood risk while maintaining city water supply and protecting public infrastructure.

Alternatives

A total of three alternatives were evaluated in terms of individual and cumulative effects for the proposed rehabilitation project. Bank stabilization and water control structures were both considered in selection of reasonable alternatives to protect public infrastructure and achieve the level of flood risk protection prior to the 2013 flood event.

Alternative 1 - "No-Action": Under the "No-Action" Alternative, there would be no concrete sill repair assistance through the Corps's PL 84-99 Program. However, it is likely that the sill and eroded bank would still be repaired at some point in the future using some other source of funds by the sponsor. By not repairing the levee at this time, infrastructure, agricultural croplands, and residential properties protected by this system prior to the flooding would be at an increased risk during any future flooding.

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Alternative 2 – Bank Stabilization and Sill Wall Replacement (Recommended Plan): This alternative consists of replacing the existing sill with a new reinforced concrete sill, reinforcing the existing sill, and stabilizing the bank in the vicinity of Gypsum and Iowa Avenues with a rock blanket. The rock blanket would be constructed by placing approximately 5,000 tons of rip-rap along a 200 foot length of bank. The new sill would be located 70 feet upstream of the existing sill. It would be approximately 220 feet long, 20 inches thick, and would extend two feet above the channel bottom. It would extend approximately 10 feet down into the river bed. Where the sill ties into the river banks, it would widen to approximately 36 inches and extend down 22 feet into the bedrock to reduce the likelihood of the river ever going around the structure. A total of 700 tons of 24-inch of rip-rap would be placed where the sill ties into the river banks. Additionally, a total of roughly 100 tons of quarry-run rock would be placed at the existing sill ties into the river bank. During construction, a cofferdam would be installed upstream to divert water through pipes as needed for project construction.

Construction material and equipment would be staged in Indian Rock Park. Construction rubble, loose soil, and debris would be removed and either temporarily placed in a designated stockpile area within the park, or hauled directly offsite to city property at the waste water treatment plant. Material in contact with river water would be contained and allowed to thoroughly dry to prevent the potential spread of zebra mussels, an invasive species found in the river. Approximately 2,300 cubic yards of borrow material may be necessary to construct temporary haul and channel access points. Borrow would be obtained from designated areas of Indian Rock Park and would be returned to its original location upon completion of construction. All disturbed areas in the park would be seeded with native grass mix to prevent erosion and the establishment of invasive species. All other disturbed areas would be seeded with native herbaceous plants. All city roads, sidewalks, and walking trails would be restored to their pre-construction conditions. Alternative 2 was identified as the Recommended Plan because it addresses the purpose and need of the project while providing the greatest net economic benefits.

Alternative 3 – Bank Stabilization and Pile Wall: Alternative 3 consists of installing a pile wall next to the existing sill and stabilizing approximately 200 feet of river bank at the intersection of Gypsum and Iowa Avenues. Bank stabilization would include a rock blanket using approximately 5,000 tons of quarry-run-rock. The pile wall would be installed directly upstream of the existing sill. It would be constructed by drilling multiple 16-inch diameter cast holes side by side to a depth of 19 feet directly in the river bed. The holes would then be filled with concrete and reinforced with rebar to form pilings. The pile wall would stretch approximately 200 feet perpendicular the river channel and tie into the banks on each side approximately ten feet. Approximately 350 tons of rock would be placed at each of the tie-in locations to prevent additional erosion. A 24-inch wide by 4-inch thick reinforced concrete cap would be installed on top of the pile wall for protection. The cap would also provide the required elevation for the city water treatment intake. During construction, a cofferdam would be installed upstream to divert water through pipes as needed for project construction.

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Construction material and equipment would be staged in Indian Rock Park. Construction rubble, loose soil, and debris would be removed and either temporarily placed in a designated stockpile area within the park or hauled directly offsite to city property at the waste water treatment plant. Material in contact with river water would be contained and allowed to thoroughly dry to prevent the potential spread of zebra mussels, an invasive species found in the river. Approximately 2,300 cubic yards of borrow material may be necessary to construct temporary haul and channel access points. Borrow would be obtained from designated locations in Indian Rock Park. This material would be returned to its original location upon completion of construction. All disturbed areas in the park would be seeded with a native grass mix to prevent erosion and the establishment of invasive species. All other disturbed areas would be seeded with native herbaceous plants. All city roads, sidewalks, and walking trails would be restored to their pre-construction conditions. While this alternative would meet the purpose and need of the project, the overall net benefits would be less than Alternative 2 because of higher construction costs.

Summary of Environmental Impacts

The level of flood risk management achieved by the Recommended Plan would be the same as the original pre-flood condition. The Recommended Plan would not likely adversely affect any Federally-listed threatened or endangered species or any designated critical habitat. Areas adjacent to existing sill would be temporarily disturbed by the proposed construction activity. The proposed action would have no impact to sites listed on or eligible for inclusion on the National Register of Historic Places. There would not be any permanent or long term impacts to Indian Rock Park. Temporary, short-term construction impacts to fish and wildlife resources would be related to noise, as well as visual and land disturbances associated with project construction. Other temporary, short-term construction impacts include minor impacts to water quality. These minor adverse effects would be greatly offset by restoring the levee flood risk management capability and its protection of social and economic benefits. The proposed action provides the city with necessary water intake elevations that would be insufficient without the Recommended Plan. Of the three alternatives considered, the Recommended Plan is economically justified, has the highest cost/benefit ratio, and is consistent with the protection of the human environment.

Public Availability

On April 7, 2015, a Notice of Availability was distributed by USACE announcing the availability of this draft environmental assessment for a 30-day public comment period. Information concerning the availability of the Notice of Availability and draft environmental assessment is being e-mailed to entities on the Kansas City District Regulatory Branch distribution list. Hardcopies are available upon request. During the public comment period, the draft environmental assessment is available on the Kansas City District Public Notice website at:
http://www.nwk.usace.army.mil/regulatory/CurrentPN/currentnotices.htm.

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Conclusion

After evaluating the anticipated environmental, economic, and social effects of the proposed activity, it is my determination that construction of the proposed rehabilitation project to repair damage to structures of the Salina Levee Unit that occurred during a August 2013 flood event, does not constitute a major Federal action that would significantly affect the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

Date: _____ _____

Andrew D. Sexton
Colonel, Corps of Engineers
District Commander

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Section 1- Introduction

The U.S. Army Corps of Engineers - Kansas City District (Corps), in cooperation with the project sponsor, the City of Salina, Kansas, propose to conduct a levee rehabilitation project under the authority of Public Law 84-99 (PL 84-99) (FCA, 1941). This law allows the Corps to provide a cost shared program for private landowners to obtain assistance in repairing their levee systems after flood events. To be included in the PL 84-99 program, levees must be routinely inspected and meet construction and maintenance standards by the Corps. This Environmental Assessment (EA) provides the necessary information to fully address the potential environmental impacts of the proposed project as required under the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code [USC] 4321 et seq.); the President's Council of Environmental Quality (CEQ, 1992) Regulations (40 Code of Federal Regulations [CFR] 1500 - 1508); and the US Army Corps of Engineers ER 200-2-2 (33 CFR 230) (Corps, 2008).

The alternatives included in this EA are considered the most cost effective and practicable alternatives for repair of this Federal levee system under the Corps PL 84-99 Program. The project sponsor was informed of their option to pursue a non-structural repair alternative, but chose to pursue a structural repair. The levee system was designed to provide a one-percent annual exceedance probability of flood risk management. This means that for any given year there is a one-percent chance of a flood that could breach the levee system. The non-structural alternative would not provide this level of protection. A signed letter from the sponsor declining a non-structural repair can be found in Appendix A. The Salina Levee Unit consists of four sections totaling 18.2 miles and partially encircles the City of Salina. The levee protects approximately 10,840 acres of mostly urban areas with some agricultural land and roughly 13,799 structures. Population at risk is approximately 47,846.

1.1 Project History

The existing sill was constructed by the Corps as part of a channel cutoff when the levee system was constructed in 1957. The river cutoff was designed to provide low-flow diversion of 100 cubic feet per second through the old Smoky Hill River channel to satisfy water supply requirements for the water treatment plant. The sill was designed provide the necessary water elevation for the city and protect the downstream levee from erosional flood forces. The concrete sill was embedded five feet into shale bedrock and stretched across the entire channel. The Corps repaired the sill in 1957 shortly after initial construction due to a construction deficiency that was observed at a horizontal break in the wall. A 20-foot displaced section of the sill was replaced and heavy grouted stones were placed both above and below the sill. The sill was also raised one foot to better meet the city's water intake needs. The city relocated its water intake from inside the old river channel to the existing channel upstream of the sill in 1988. The City of Salina installed a second sill 125 feet to the north in 1971 to protect a city waterline. This sill was also damaged by the August 2013 flood.

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1.2 Purpose and Need for Action

The purpose of this project is to return the Salina Levee Unit to the one-percent annual flood exceedance probability that existed prior to the August 2013 damage. Immediate actions are needed to repair or replace flood damaged structures to the Salina Levee Unit. Any upcoming flood events could cause complete failure of the existing sill resulting in an increased risk of flood damages to the downstream levee. The sill protects the levee system by reducing the destructive erosional forces of flood water.

Failure of the existing sill would lower the required water elevation that supplies nearly half of Salina's water intake. The lowered water elevation would require the city to replace or relocate its water intake. In addition, bank stabilization is needed to prevent further bank slides in the vicinity of the intersection at Gypsum and Iowa Avenues. This intersection is at risk of sloughing into the river if the bank is not stabilized. See Appendix B, for pictures of flood damaged areas.

1.3 Project Location

The Salina Levee Unit encircles most of Salina, Kansas, in Saline County and is located along the left descending bank of the Smoky Hill River. See Appendix C, Figure 1 for flood damaged location.

Section 2 - Recommended Plan and Alternatives

A total of three alternatives were evaluated in terms of individual and cumulative effects for the proposed rehabilitation project.

2.1 Alternative 1 - "No-Action"

Under the "No-Action" Alternative, there would be no concrete sill repair assistance through the Corps's PL 84-99 Program. However, it is likely that the sill and 200 feet of eroded bank would still be repaired at some point in the future using some other source of funds by the sponsor. By not repairing the levee at this time, infrastructure, agricultural croplands, and residential properties protected by this system prior to the flooding would be at an increased risk during any future flooding.

2.2 Alternative 2 - Bank Stabilization and Sill Wall Replacement (Recommended Plan)

This alternative consists of replacing the existing sill with a new reinforced concrete sill, reinforcing the existing sill, and stabilizing the bank in the vicinity of Gypsum and Iowa Avenues with a rock blanket. The rock blanket would be constructed by placing approximately 5,000 tons of rip-rap along a 200 foot length of bank. The new sill would be located 70 feet upstream of the existing sill. It would be approximately 220 foot long, 20 inches thick, and would extend two feet above the channel bottom. It would extend

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approximately 10 feet down into the river bed. Where the sill ties into the river banks, it would widen to approximately 36 inches and extend down 22 feet into the bedrock to reduce the likelihood of the river ever going around the structure. A total of 700 tons of 24-inch of rip-rap would be placed where the sill ties into the river banks. Additionally, a total of roughly 100 tons of quarry-run rock would be placed at the existing sill ties into the river bank. During construction, a cofferdam would be installed upstream to divert water through pipes as needed for project construction.

Construction material and equipment would be staged in Indian Rock Park (see Appendix C, Figure 2). Construction rubble, loose soil, and debris would be removed and either temporarily placed in a designated stockpile area within the park, or hauled directly offsite to city property at the waste water treatment plant. Material in contact with river water would be contained and allowed to thoroughly dry to prevent the potential spread of zebra mussels, an invasive species found in the river. Approximately 2,300 cubic yards of borrow material may be necessary to construct temporary haul and channel access points. Borrow would be obtained from Indian Rock Park from the location indicated in Appendix C, Figure 2. This material would be returned to its original location upon completion of construction. All disturbed areas in the park would be seeded with native grass mix to prevent erosion and the establishment of invasive species. All other disturbed areas would be seeded with native herbaceous plants. All city roads, sidewalks, and walking trails would be restored to their pre-construction conditions. Alternative 2 was identified as the Recommended Plan because it addresses the purpose and need of the project while providing the greatest net economic benefits.

2.3 Alternative 3 - Bank Stabilization and Pile Wall

Alternative 3 consists of installing a pile wall next to the existing sill and stabilizing approximately 200 feet of river bank at the intersection of Gypsum and Iowa Avenues. Bank stabilization would include a rock blanket using approximately 5,000 tons of quarry-run-rock. The pile wall would be installed directly upstream of the existing sill. It would be constructed by drilling multiple 16-inch diameter cast holes side by side to a depth of 19 feet directly in the river bed. The holes would then be filled with concrete and reinforced with rebar to form pilings. The pile wall would stretch approximately 200 feet perpendicular the river channel (see Appendix C, Figure 2) and tie into the banks on each side approximately ten feet. Approximately 350 tons of rock would be placed at each of the tie-in locations to prevent additional erosion. A 24-inch wide by 4-inch thick reinforced concrete cap would be installed on top of the pile wall for protection. The cap would also provide the required elevation for the city water treatment intake. During construction, a cofferdam would be installed upstream to divert water through pipes as needed for project construction.

Construction material and equipment would be staged in Indian Rock Park (see Appendix C, Figure 2). Construction rubble, loose soil, and debris would be removed and either temporarily placed in a designated stockpile area within the park or hauled directly offsite to city property at the waste water treatment plant. Material in contact

with river water would be contained and allowed to thoroughly dry to prevent the potential spread of zebra mussels, an invasive species found in the river. Approximately 2,300 cubic yards of borrow material may be necessary to construct temporary haul and channel access points. Borrow would be obtained from Indian Rock Park as shown in Appendix C, Figure 2. This material would be returned to its original location upon completion of construction. All disturbed areas in the park would be seeded with a native grass mix to prevent erosion and the establishment of invasive species. All other disturbed areas would be seeded with native herbaceous plants. All city roads, sidewalks, and walking trails would be restored to their pre-construction conditions. While this alternative would meet the purpose and need of the project, the overall net benefits would be less than Alternative 2 because of higher construction costs.

Section 3 - Affected Environment

3.1 Terrestrial Habitat

The terrestrial habitat within the project area primarily consists of a manicured city park. The riparian corridor consists of cottonwood, willow, maple, cedar, and elm along the Smoky Hill River. Most of the trees within the work area are clustered within 50 feet of the river's edge and with an approximated average height of 30 feet. Trees along the bank near the intersection of Gypsum and Iowa Avenues are considerably younger with little canopy. The river bank at this intersection is very steep and erosion is evident. Open grassy areas within the projects boundaries are an equal mix of well kept mowed areas and areas where vegetation has been allowed to naturally grow. City streets and recreational running and walking paths are also present.

3.2 Wetlands and Aquatic Resources

There are no wetlands within or adjacent to the project footprint. Aquatic resources within the project area include the Smoky Hill River and a section of an old channel. The Ordinary High Water Mark (OHWM) within the project area is approximately 5.5 feet above base flows. The Smoky Hill River is classified as a water of the U.S. as defined by the Clean Water Act, 33 CFR Part 328. Because of this, a Clean Water Act Section 404 authorization would be needed for project construction. Nationwide Permit (NWP) 3 Maintenance and 13 Bank Stabilization would be applicable.

3.3 Fish and Wildlife

Fish species that can be observed in Smoky Hill River include channel catfish, bluegill, and largemouth bass among others. It is expected that urban wildlife species occupy the area including squirrels, coyotes, raccoons, opossums, and rabbits. Various amphibians and reptiles that are common to the region are expected to be within the area. Migratory birds such as the mourning dove, bald eagle, and blue-winged teal are expected to be found around in the area. All migratory birds are protected under the Migratory Bird Treaty Act. Movement of fish and other aquatic organisms are impeded by the concrete sill wall which creates a drop off of approximately three feet.

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3.4 Invasive Species

Invasive species have the potential to displace native plants and animals. According to Executive Order 13122, Federal agencies may not authorize, fund, or carry out actions that are likely to cause or promote the introduction or spread of invasive species. Invasive aquatic species that are a concern in Kansas which have the potential to be introduced into new water bodies as a result of contaminated construction equipment include zebra mussels, purple loosestrife, and Eurasian water-milfoil, among others. It's important to note that zebra mussels are found in Kanopolis Lake upstream of the project and larval zebra mussels are likely to be found in the Smoky Hill River at the projects location. The Smokey Hill River is a tributary to the Kansas River, which in turn is a tributary to the Missouri River that contains many invasive fish to include Asian carp, among others. Currently, Asian carp species are confined to the Kansas River and tributaries downstream of the water control structure in Lawrence, KS. Therefore, Asian carp would not be a concern in the Smokey Hill River (KDWPT 2014). Invasive terrestrial species often flourish on land that has recently been disturbed. They may also be transported to new locations on construction equipment. Examples of invasive terrestrial species of concern in Kansas include johnsongrass, reed canary grass, sericea lespedeza, and Japanese honeysuckle, among others. Invasive plant species are common on disturbed lands in the general project area.

3.5 Threatened or Endangered Species

U.S. Fish and Wildlife Service (USFWS) and Kansas Department of Wildlife Parks and Tourism (KDWPT) were contacted to request information regarding Federal and State listed threatened, endangered, candidate species, or species of special concern that have potential to occur in the project area (Appendix D). Species that may potentially occur in the area are identified in Table 1. No State listed species or critical habitat concerns were identified.

Table 1: Threatened and endangered species.

Common Name	Scientific Name	Status
Northern Long-Eared Bat	*Myotis septentrionalis*	Federal Candidate
Whooping Crane	*Grus americana*	Endangered

The northern long-eared bat is currently proposed for listing under the Endangered Species Act. The final listing decision for this bat is expected April of 2015. Northern long-eared bats have been experiencing rapidly declining populations due to white nose syndrome, a fungal pathogen. During winter this species of bat is known to hibernate in caves and abandoned mines. Summer habitat is not well defined, but it is believed that roosting habitat includes peeling or exfoliating bark, crevices, split tree trunk and/or branches, dead or live trees and snags with cavities typically greater than three inch diameter at breast height. This bat seems to be opportunistic and occasionally they may roost in structures like barns and sheds. Foraging habitat includes upland and lowland

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woodlots and tree lined corridors. However, it has been noted that trees found in highly-developed urban areas are unlikely to provide suitable habitat for this species (USFWS, 2014).

The whooping crane is known to migrate through central and western Kansas counties during March/April and October/November. The whooping crane breeds, migrates, winters, and forages in a variety of wetland and other habitats, including coastal marshes and estuaries, inland marshes, lakes, ponds, wet meadows and rivers, and agricultural fields (USFWS, 2014). Whooping cranes use a variety of these habitat types along their migration path between central Canada and the Texas coasts.

3.6 Water Quality

Water quality within Smoky Hill River is impacted by both point and non-point sources of pollution. Possible point sources include three wastewater treatment plants upstream of Salina. Kanopolis Lake is located upstream of the project on the Smoky Hill River and impacts water flows and water quality of the river. Non-point sources of pollution include urban run-off such as lawn and garden chemicals, petroleum products, industrial pollutants, and agricultural run-off. The current nutrients, sediments, other unknown impairments to aquatic macroinvertebrates on the Smoky Hill River have resulted in the rivers status as an impaired water body under Section 303 (d) of the Clean Water Act. (EPA, 2014)

3.7 Air and Noise Quality

Air quality in a given location is described by the concentrations of various pollutants in the atmosphere. The quality of the air is measured against National Ambient Air Quality Standards (NAAQS) set by the Environmental Protection Agency (EPA). The City of Salina is located in an attainment area, which is an area wherein the concentrations of all criteria pollutants meet the NAAQS (EPA, 2008). Other larger cities such as Junction City and Hutchison, Kansas are located over 50 miles away and are not likely influence local air quality. Sounds that disrupt normal activities or otherwise diminish the quality of the environment are designated as noise. Noise can be stationary or transient and intermittent or continuous. Existing noise levels in the proposed project area are highly variable. Noise quality adjacent to the projects location would likely be attributed to residential and urban sounds, traffic, aircraft, wildlife, and natural sounds associated to Smoky Hill River. Recreational noise would likely come from adjacent Gleniffer Hill Elementary School, Indian Rock Park, and the baseball and soccer fields of Bill Burke Sports Complex.

3.8 Cultural Resources

Section 106 of the National Historic Preservation Act of 1966, as amended, requires Federal agencies to take into account the effects of their undertakings on historic properties. By definition, historic properties are properties eligible for or listed on the National Register of Historic Places. Federal undertakings refer to any Federal

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involvement including funding, permitting, licensing, or approval. Federal agencies are required to define and document the Area of Potential Effect (APE) for undertakings. The APE is defined as the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist.

A background review of the project area was conducted using the Kansas Historical Society Archeological Map viewer on-line. No sites were identified within the project area. The results of the background review were coordinated by letter with State Historic Preservation Officer (SHPO) on August 8, 2014 (Appendix E). In that letter, the Corps requested concurrence that any proposed work in the project area would have no effect on historical properties and that any work could proceed with any further coordination, unless in the unlikely event that archeological materials were discovered during construction. SHPO concurred with this recommendation in a letter dated August 14, 2014. Additional evaluation and coordination with the SHPO office regarding borrow locations in Indian Rock Park was conducted by the Corps Archeologist in November 2014. Concurrence from SHPO regarding borrow locations can be found in Appendix E.

3.9 Socioenomics

The project area is located near northeast edge of the City of Salina in Saline County, Kansas. The Salina Levee Unit protects approximately 10,840 acres and 13,799 structures. Of which approximately 7,500 acres are urban areas. The levee also protects a majority of the residents within the City of Salina and associated infrastructure. The major industries in Salina include retail trade, accommodation/food services, merchant wholesales, and manufacturing (USCB, 2014). See Table 2 for a breakdown of population and census information of the city and county.

Table 2: Salina and Saline County Census Information.

Description	Number/Percentage	City/County
Population, 2013 estimate	47,846	City
Population, 2013 estimate	55,740	County
Persons per square mile, 2010	1,900	City
Persons per square mile, 2010	73	County
White, percent, 2013	80%	City
White, percent, 2013	90%	County
Persons below poverty level, percent, 2008-2012	17%	City
Persons below poverty level, percent, 2008-2012	16%	County
Median household income, 2008-2012	$44,556	City
Median household income, 2008-2012	$47,339	County

*Information above provided by State & County QuickFacts, U.S. Census Bureau online review 2014.

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3.10 Flood Risk Management

The Salina Levee Unit is located in the Smoky Hill River floodplain. The levee system consists of four sections totaling 18.2 miles of earthen levee, 15.0 miles of new diversion channel, 1.4 miles of improved channel, two pumping plants, three relief wells, and 23 drainage structures. The levee partially encircles the City of Salina and protects approximately 10,840 acres of urban and agricultural area and 13,799 structures. The average levee height is generally 12 to 16 feet above landside natural ground surface and has an average crown width of ten feet. The level of flood risk protection prior to August 2013 flooding was designed to a one-percent annual flood exceedance probability. Flooding along the Smoky Hill River has been attenuated due to the Kanopolis Lake reservoir. There is no development within the project construction footprint.

Section 4 - Environmental Consequences (Impacts)

4.1 Terrestrial Habitat

Alternative 1 - “No-Action”: Possible impacts from the “No-Action” Alternative to the terrestrial habitat would be related to flood risk management. Terrestrial habitat landward of the levee would be at a greater risk of being inundated during flood events. This could have negative impacts to some species not tolerant of flood conditions and possibly benefit species that are tolerant of these conditions. However, it is expected that the frequency of inundation would remain infrequent, therefore this alternatives is not expected to result in any long-term impacts to the terrestrial habitat. Selection of the “No-Action” alternative would likely result in levee system damages being repaired without the PL 84-99 assistance.

Alternative 2 - Bank Stabilization and Sill Wall Replacement (Recommended Plan): This alternative would have minor short-term impacts to terrestrial habitat resulting from land disturbance necessary for the obtaining borrow material for constructing haul roads and access points. This alternative could disturb approximately five acres of city property, primarily within the Indian Rock Park, along Smoky Hill River. The disturbed temporary borrow areas, access points, and haul roads would be returned to similar surface contours and pre-construction conditions. The park area would be seeded with a fescue grass mix to return the area to its existing vegetative condition. Other disturbed areas would be seeded with native grass species. Less than 0.1 acres of trees may be removed for construction access points and to stabilize the bank along Smoky Hill River (see Appendix C, Figure 3). These trees mostly consist of saplings, shrub sized to intermediate sized willows, cottonwoods, elm, and cedars that have become established along the steep embankment. Because of the limited number of trees to be removed, and the fact that there are similar trees in other near-by locations, removal of the trees would not result in any significant impacts.

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Alternative 3 - Bank Stabilization and Pile Wall: All terrestrial impacts associated to Alternative 3 would be the same as the Recommended Plan. There would not be any significant impacts to the terrestrial habitat.

4.2 Wetlands and Aquatic Resources

Alternative 1 - “No-Action”: The “No-Action” Alternative would not impact any wetlands or aquatic resources. There are no wetlands within or adjacent the project work area.

Alternative 2 - Bank Stabilization and Sill Wall Replacement (Recommended Plan): This alternative would not impact any wetlands. No wetlands are located in or adjacent to the project area. Borrow material for haul roads and access points would be removed from Indian Rock Park. NWP 3 Maintenance and NWP 13 Bank Stabilization would be used to comply with Clean Water Act Section 404 and both NWPs are accompanied by Section 401 water quality certification (Appendix F). NWP 3 is applicable because the existing, previously authorized, structure is failing due to flood damages and would be replaced by the proposed sill. NWP 3 authorizes replacement structures. Configuration and fill area can deviate from the existing structures design, construction techniques, and safety standards. The existing sill would eventually fail. It would be left in place because it causes less environmental damage to the river bed by continuing to protect it from further degrading and extends the lifespan of the replacement sill. NWP 13 is applicable because bank stabilization activities are necessary for erosion prevention. Project activities are within required criteria for both nationwide permits. The project sponsor or contractor would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit from KDHE and/or other state and local permits if applicable.

The Recommended Plan would have minor impacts to aquatic resources from placing fill material into the river in the form of quarry-run rock and constructing the wall below the rivers OHWM. Approximately 50 tons of quarry-run rock would be placed below the OHWM for bank stabilization at the corner of Gypsum and Iowa Avenue; permanently occupy a space of roughly 2,000 square feet of river channel along approximately 200 feet of the left bank. The new sill would restrict flow perpendicular to the river and result in approximately 163 cubic yards of permanent fill below the OHWM, of which roughly 136 cubic yards would be below the channel bed and into the adjacent river banks. The 136 cubic yards of fill material would be a negligible impact because it is simply replacing the existing volume of soil or bedrock/shale with the volume of the wall. Furthermore, a total of approximately 630 tons of quarry-run rock would be placed below the OHWM at the bank tie-in locations and permanently occupy a space of roughly 2,400 square feet of channel to protect the structure and prevent flanking. Additionally, roughly 100 tons of quarry-run rock would be placed below the OHWM at the existing sill at bank tie-in locations to slow its deterioration and occupying approximately 500 square feet of river channel.

Alternative 3 - Bank Stabilization and Pile Wall: As with the Recommended Plan, this alternative would not impact any existing wetlands. Borrow material for haul roads and

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access points would be removed from Indian Rock Park and authorized as work necessary to conduct the activity under NWP 3 Maintenance and NWP 13 Bank Stabilization (Appendix F). Both NWP's would be applicable for the same reasons discussed in Alternative 2. The project sponsor or contractor would be required to obtain a NPDES permit from KDHE and/or other state and local permits if applicable.

Alternative 3 would have minor impacts to aquatic resources from placing quarry-run rock and constructing the wall below the rivers OHWM. The pile wall and cap would result in approximately 188 cubic yards of fill below the OHWM, of which roughly 168 cubic yards would be below the channel bed and into the adjacent river banks. The 168 cubic yards of fill material would be a negligible impact because it is simply replacing the existing volume of soil or bedrock/shale with the volume of the wall. Furthermore, a total of approximately 630 tons of quarry-run rock would be placed below the OHWM at the bank tie-in locations and permanently occupy a space of roughly 2,400 square feet of channel to protect the structure and prevent flanking.

4.3 Fish and Wildlife

Alternative 1 - "No-Action": The "No Action" Alternative could have minor positive impacts to fish and other aquatic wildlife as the sill continues to degrade and is eventually destroyed allowing easier passage upstream. However, selection of the "No-Action" alternative would likely result in levee system damages being repaired without the PL 84-99 assistance. The "No-Action" Alternative is not likely to have any permanent impacts to fish and wildlife.

Alternative 2 - Bank Stabilization and Sill Wall Replacement (Recommended Plan): This alternative would result in minimal short-term construction related impacts to fish and wildlife resources. Currently, the EPA has designated this section of the Smoky Hill River as fish, shellfish, and wildlife protection and propagation impaired water body. Temporary construction related impacts from the Recommended Plan would neither improve nor further degrade the impaired conditions of the river. The use of quarry-run rock to stabilize the bank would have minor positive long-term impacts to aquatic organisms. The stabilization would reduce the amount of sediments and nutrients that are continuing to impair the river. The cofferdam would minimize negative construction impacts to aquatic organisms by diverting them away from construction activities. Additionally, potential impacts to fishery resources are primarily related to fish passage. As discussed in Section 3.1, the history of the project area has been impacting fish passage for over 50 years. The Recommended Plan would not further impact fish passage. Furthermore, it is unlikely that site runoff from construction, which would be avoided or otherwise minimized through the use of erosion control measures, would temporarily impact aquatic organisms in the Smoky Hill River. Discussion related to water quality is addressed in Section 4.6.

This project is located in an urban setting and most wildlife here would have sparse populations and would be accustomed to human activities, such as noise. Impacts to wildlife resources would be mostly related land disturbance from construction activities.

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The removal of about 0.1 acres of trees from along Smoky Hill River for bank stabilization, haul roads, and access points would have minimal long-term impacts to fish and wildlife. These trees mostly consist of saplings and shrub sized to intermediate sized willows, cottonwoods, elm, and cedars that have become established along the steep embankment. Nearly all of the removed trees from this project would be within the bank stabilization area and subject to erosional forces of future flood events. Furthermore, if project work appears likely to impact any birds protected by the Migratory Bird Treaty Act, a field survey would take place to determine impacts and/or identify active nests. If avoidance or spatial distance from the protected birds cannot be accomplished the USFWS would be immediately contacted and construction work would take place under their guidance.

Alternative 3 - Bank Stabilization and Pile Wall: All fish and wildlife impacts associated to Alternative 3 would be the same as the Recommended Plan. The top elevation of pile wall is the same as the replacement sill wall and any differences in wall installation would have negligible impacts on fish and wildlife. If project work appears likely to impact any birds protected by the Migratory Bird Treaty Act, Alternative 3 would follow steps as described in the Recommended Plan.

4.4 Invasive Species

Alternative 1 - “No-Action”: The “No-Action” Alternative could result in the further spread of invasive aquatic species. Without the existing structure there would be nothing to prevent the movement of any invasive aquatic species downstream from moving upriver. Furthermore, it is possible a flood of one-percent annual flood exceedance probability could overtop a levee as a result of not implementing either Alternative 2 or 3, in which destructive forces of the flood could promote and distribute invasives currently found within the Smoky Hill River. However, selection of the “No-Action” alternative would likely result in levee system damages being repaired without the PL 84-99 assistance.

Alternative 2 - Bank Stabilization and Sill Wall Replacement (Recommended Plan): The Recommended Plan is not expected to introduce any new invasive species to project site. All previously used construction equipment would be cleaned prior to bring it onto the project site. The construction contractor would be required to ensure that all equipment is free from soil residuals, eggs deposits from plant pests, noxious weeds, plant seeds, and aquatic nuisance species prior to its use on the project and before leaving the worksite. Disturbed land areas would be seeded with fescue grass mixtures to minimize the likelihood that invasive plants would become established on disturbed soil. It is unlikely any invasive fish would migrate upstream as a result of this project due to the existing sill downstream that continues to block fish passage. Furthermore, all construction rubble, loose soil, and debris in contact with Smoky Hill River water would be considered contaminated with zebra mussels. This material would be removed and temporarily placed in the designated stockpile area or directly hauled offsite to be staged on city property at the waste water treatment plant. Any zebra mussel

contaminated material would be required to be thoroughly dried and placed in a location that would prevent the spread of zebra mussels.

Alternative 3 - Bank Stabilization and Pile Wall: As with the Recommended Plan, this alternative is not expected to introduce any new invasive species to the project site. The contractor would be required to clean all equipment entering and leaving the site and seed disturbed areas as described under the Recommended Plan. All construction rubble, loose soil, and debris in contact with Smoky Hill River water would be handled as described in the Recommended Plan. Impacts from Alternative 3 would reflect that of the Recommended Plan.

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4.5 Threatened or Endangered Species

Alternative 1 - “No-Action”: The “No-Action” Alternative is not likely to adversely affect any Federally-listed threatened or endangered species or any designated critical habitat. However, selection of the “No-Action” alternative would likely result in levee system damages being repaired without the PL 84-99 assistance.

Alternative 2 - Bank Stabilization and Sill Wall Replacement (Recommended Plan): The Recommended Plan would not likely adversely affect any Federally-listed threatened or endangered species or any designated critical habitat. One endangered species, the whooping crane, and one proposed for listing species, the northern long-eared bat, are known to occur in the region. However, it is not likely that whooping cranes would be found in an urban environment. This location lacks habitat partial to the birds for nesting and/or its use during annual migration. If whooping cranes are identified during construction, USFWS would be contacted and project work would temporarily stop until the cranes move out of the project area. The northern long-eared bat could be found in the riparian trees within the project area. Clearing of trees greater than 3-inch diameter at breast height would be avoided where practical. Unavoidable tree losses would take place outside the months of March through October when bats would not be utilizing trees. If seasonal tree cutting is not possible, summer bat surveys would be conducted to determine the presence or likely absence of the bats. If northern long-eared bats are detected from surveys, USFWS would be contacted and tree cutting would be temporarily delayed until the bats have left the area.

Alternative 3 - Bank Stabilization and Pile Wall: This alternative would not impact any proposed for listing, and/or Federally-listed threatened or endangered species for reasons described under the Recommended Plan. If whooping cranes or northern long-eared bats are discovered, steps would be taken as described in Alternative 2. Furthermore, tree cutting and clearing would take place as described under the Recommended Plan.

4.6 Water Quality

Alternative 1 - “No-Action”: The “No-Action” plan would not likely result in any permanent impacts to water quality. In the event a one-percent annual flood exceedance probability was to occur and breach the levee as a result of implementing this alternative, short-term temporary impacts to water quality would result from inundation. Inundated areas would transport urban non-point source pollutants into the river system. However, selection of the “No-Action” alternative would likely result in levee system damages being repaired without the PL 84-99 assistance. A NPDES permit, and a Clean Water Act (CWA) Sections 404 and 401 permits would still be needed by the sponsor if they were to repair the levee structures.

Alternative 2 - Bank Stabilization and Sill Wall Replacement (Recommended Plan): Alternative 2 would not likely further contribute to the rivers status as an impaired water body under Section 303 (d) of the Clean Water Act. The Recommended plan may result

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in potentially minor, temporary, construction-related adverse impacts to water quality resulting from site runoff and increased turbidity. However, these impacts would be avoided and/or minimized to the greatest extent possible by the implementation of Best Management Practices (MDNR, 1998) and measures required under the NPDES permit. Best Management Practices would minimize potential adverse sedimentation into aquatic resources during construction and would minimize the introduction of fuel, petroleum products, or other deleterious material from entering the waterway. Such measures may consist of erosion control fences; storing equipment, solid waste, and petroleum products above the OHWM and away from areas prone to runoff; and requiring that all equipment be clean and free of leaks. To prevent fill from reaching water sources by wind or runoff, fill would be covered, stabilized or mulched, and silt fences would be used as required. The on-site contractor would be responsible for obtaining a NPDES permit. All appropriate measures will be taken to minimize erosion and storm water discharges during and after construction. The Clean Water Act Section 404 authorization for this project is obtained under Corps NWP 3 Maintenance and NWP 13 Bank Stabilization and each are accompanied by a Section 401 water quality certification.

Alternative 3 - Bank Stabilization and Pile Wall: Alternative 3 would result in the same impacts to water quality as Alternative 2. As with the Recommended Plan, impacts to water quality would be avoided and/or minimized to the greatest extent possible by the implementation of Best Management Practices as required under the NPDES permit. Clean Water Act Section 404 authorization for this project is obtained under Corps NWP 3 Maintenance and NWP 13 Bank Stabilization and each are accompanied by a Section 401 water quality certification.

4.7 Air and Noise Quality

Alternative 1 - “No-Action”: This alternative would not result in any impacts to air and noise quality. Indirectly, if the existing sill was to fail the repair/replacement of city utility and infrastructures could attribute to minor additional air and noise impacts. However, selection of the “No-Action” alternative would likely result in levee system damages being repaired without the PL 84-99 assistance.

Alternative 2 - Bank Stabilization and Sill Wall Replacement (Recommended Plan): The Recommended Plan would result in minimal impacts to air and noise quality. The project is located in an urban area where traffic and noise levels are part of normal environment. Emissions and noise from construction equipment would likely be near non-detectable levels when compared to current conditions at this location. Construction would take place during normal business hours and impacts would be similar to that of city or road construction work that takes place throughout the city. Furthermore, any noise impacts on recreational users of the baseball fields, running and walking paths, and open areas of the park would be minimal because a majority of the use would be after normal working hours.

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Alternative 3 - Bank Stabilization and Pile Wall: Alternative 3 would have similar to impacts to those described in the Recommended Plan. The only foreseeable difference would be the method of installing the wall. The pile wall would involve drilling piling cast holes. This installation would result minor negative noise impacts to the adjacent area due to the increased noise levels. No significant impacts to noise or air quality would result from Alternative 3.

4.8 Cultural Resources

Alternative 1 - “No-Action”: Selection of the “No-Action” alternative would likely result in levee system damages being repaired without the PL 84-99 assistance. The sponsor would still be required to obtain necessary construction permits including a CWA Section 404 permit and Section 401 water quality certification. One of the general conditions of Section 404 permits is that the requirements of Section 106 of the National Historic Preservation Act have been satisfied. Furthermore, in the unlikelihood that a one-percent annual flood exceedance probability flood was to occur and breach the Salina Unit levee as a result of implementing this alternative, many historic sites and other cultural resources could be impacted. No other foreseeable significant impacts to cultural resources are anticipated.

Alternative 2 - Bank Stabilization and Sill Wall Replacement (Recommended Plan): The Recommended Plan would have no impact to sites listed on or eligible for inclusion on the National Register of Historic Places. A review of the Kansas State Historical Society’s Archeological Inventory (on-line) and historical information on the City of Salina’s web site, among others, indicated one location in the vicinity of the project area. The archeological site boundaries are located outside of the project work areas.

In a letter to the Kansas State Historic Preservation Officer (SHPO) dated August 8, 2014, the Corps determined that the project would have no effect on historic properties and that the project should be allowed to proceed (Appendix E). The SHPO concurred with this recommendation in a letter dated August 14, 2014 (Appendix E). Borrow area locations were later cleared by a Corps archeologist and coordinated with the SHPO (Appendix E). The Federally recognized Native American tribes (Tribes), with ties to the area, are notified of the proposed project through the draft EA notification process. In the unlikely event that archeological material is discovered during project construction, work in the area of the discovery would cease until the discovery is investigated by a qualified archeologist and the find is coordinated with SHPO and the Tribes.

Alternative 3 - Bank Stabilization and Pile Wall: This alternative is not expected to impact any cultural resources, similar to the Recommended Plan. If archeological material is discovered, the same procedures as described in the Recommended Plan would take place.

4.9 Socioeconomics

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Alternative 1 - “No-Action”: Selection of the “No-Action” alternative would likely result in levee system damages being repaired without the PL 84-99 assistance. As described for the Recommended Plan, economic conditions are unlikely to change from those of the pre-damage levee conditions with repair of this levee system.

Alternative 2 - Bank Stabilization and Sill Wall Replacement (Recommended Plan): Under this alternative, the levee would be restored to the same level of flood risk management, having a one-percent chance of flooding on an annual basis, as existed prior to the August 2013 flood. Public and private infrastructure protected by the levee prior to the flood damage would continue to be protected up to a one-percent chance flood event. Economic conditions are unlikely to change from those prior to the levee being damaged.

Alternative 3 - Bank Stabilization and Pile Wall: As with the Recommended Plan, economic conditions are unlikely to change from those prior to the levee being damaged.

4.10 Flood Risk Management

Alternative 1 - “No-Action”: This alternative would likely result in levee system damages being repaired without the PL 84-99 assistance and restoring the one-percent annual flood exceedance probability to the levee system through non-Federal means.

Alternative 2 - Bank Stabilization and Sill Wall Replacement (Recommended Plan): This alternative would provide a one-percent annual flood exceedance probability of flood risk management, which existed prior to the August 2013 flood. The proposed action would not directly or indirectly support more development in the floodplain or encourage additional occupancy and/or modification of the base floodplain. The Corps has determined that the Recommended Plan complies with the intent of Executive Order 11988.

Alternative 3 - Bank Stabilization and Pile Wall: This alternative would also maintain the same level of flood risk management as described in the Recommended Plan. This alternative would also comply with Executive Order 11988.

Section 5 - Cumulative Impacts

The Council on Environmental Quality Regulations defines cumulative impacts 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” (CEQ, 1997).

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The cumulative impacts addressed in this document consist of impacts of multiple actions affecting the human environment. These include impacts that have contributed to clearing/conversion of riparian habitat into agricultural lands and/or residential development as well as the importance and conservation of water along the Smoke Hill River. The geographical areas of consideration are actions located within/along the Smoky Hill River floodplain.

The Smoky Hill River and its floodplain has been altered by past actions such as bank stabilizations, dams on the river and its tributaries, roads/bridges, agricultural and urban levees, channelization and altered alignments, farming, water withdrawal for human and agricultural use, urbanization and other human uses. These activities have substantially altered the terrestrial and aquatic ecosystem within the Smoky Hill River watershed. Some examples of the alterations that have occurred include: altering the channel alignment, urban and industrial development of the floodplain, conversion of riparian habitat to agriculture, and the cut-off of the floodplain from the river by building levees.

Conventional agriculture has expanded production at the expense of water in the Midwest. With the growth of population pressure and concern about water quality and quantity, demands are growing to alter the relationship of agriculture to water in both these locations (Gasteyer, 2008). Ground water uses for irrigation and water supply wells do play vital roles in this region of Kansas, but they do not always provide the needed demand. The City of Salina is not able to meet its water demand solely from its ground water well sources and relies on the Smoky Hill River for nearly half of its intake. Much of the rivers flow volume is controlled by Cedar Bluff and Kanopolis Reservoirs located upstream. The reservoirs, along with many known and unknown sources of water pollution have resulted in poor water quality in reach of the river at Salina, Kansas. No new reservoirs are likely to be constructed on the river in the foreseeable future. Water uses and pressures are likely to continue within the Smoky Hill River basin.

The Corps, under the authority of the PL 84-99 has and will continue to provide rehabilitation assistance to Federal and non-Federal levee sponsors within the Missouri River basin which participate in the PL 84-99 Program. The PL 84-99 Program will not involve new or increased obstructions to the floodway through new structures or heightened levels of protection to existing levees. The rehabilitation of these levees usually consists of repairs through minor levee setbacks, and repairing existing structures to their previous condition. These projects typically result in minor short-term construction related impacts to agricultural lands, wetlands, fish and wildlife and the habitats upon which they depend. However, cumulatively, these minor adverse affects are out-weighed by the long-term beneficial effects of restoring the levee flood risk management capability. It is likely, even without assistance from Corp's PL 84-99 Program, that these levees and structures would be repaired either using some other source of public funding or with private funds from the sponsor. .

The Corps, which administers Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act, has issued and will continue to evaluate permits

authorizing the placement of fill material in the Waters of the United States and/or work on, in, over or under a navigable water of the United States. Of the reasonably foreseeable projects and associated impacts that would be expected to occur, future development of the floodplain would probably have the greatest impact on these resources. Because this project will merely restore the levee system to its pre-existing state, it should not induce development that would not occur otherwise. The possibility of clearing riparian habitat is ever present, and these activities also tend to impact riparian forest. It is likely over time some impacted areas would naturally recover or be restored through restoration projects. However, if these areas are developed or permanently stabilized with a rock blanket, riparian re-growth is unlikely. Specifically, the vegetative habitat cleared for bank stabilization for this project is relatively poor quality and due to the steep bank and frequent erosion mature trees have not been able to establish.

The cumulative impacts of the proposed action when added to past actions on the Smoky Hill River as well as present and future actions do not result in a net increase because the proposed action does not result in an addition to flood heights, reduced floodplain area, or degradation in water supply or quality. Instead, the project is merely a form of maintenance of the existing flood risk management capability. No significant cumulative impacts associated with the proposed project and existing levee system have been identified.

Section 6 - Conclusion

The flood risk management level achieved by the Recommended Plan would be the same as the original pre-flood condition. The Recommended Plan would not likely to adversely affect any Federally-listed threatened or endangered species or any designated critical habitat. The proposed action would have no impact to sites listed on or eligible for inclusion on the National Register of Historic Places. The adverse effects associated with the proposed project are minor and are associated with project construction. Areas of the existing levee system damaged by flooding would be temporarily disturbed by the proposed construction activity. This project would result in minor adverse environmental effects. However, greater social and economic benefits would result by restoring the level of flood risk management prior to the 2013 flood. The Recommended Plan would achieve the purpose and need of this project. Of the three alternatives considered, the Recommended Plan is economically justified, and is consistent with the protection of the human environment.

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Section 7 - Coordination and Comments

As part of the preparation of this document, various State and Federal agencies were contacted. The USFWS was contacted for threatened and endangered species; SHPO was contacted for cultural considerations; KDWPT was contacted for various concerns from State listed species to parks protected under the Land Water Conservation Fund. Correspondence was established with the State Parks Division of KDWPT regarding areas of Indian Rock Park protected under the Land Water Conservation Fund. The State Parks Division agreed that project actions would not likely impact protected areas of the park. For further details see Appendix G.

This draft EA and FONSI is being e-mailed to individuals, agencies, and businesses contained on the USACE Regulatory public notice list. They are also available on the USACE Regulatory webpage at: http://www.nwk.usace.army.mil/regulatory/public_notices.htm. Hard copies are available upon request.

Section 8 - Agency Compliance with Other Environmental Laws

Compliance with other environmental laws is listed below.

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Federal Policy	Compliance
Archeological Resources Protection Act, 16 U.S.C. 470, et seq.	Full Compliance
Clean Air Act, as amended, 42 U.S. C. 7401-7671g, et seq.	Full Compliance
Clean Water Act (Federal Water Pollution Control Act), 33 U.S.C. 1251, et seq.	Full Compliance
Coastal Zone Management Act, 16 U.S.C. 1451, et seq.	Not Applicable
Endangered Species Act, 16 U.S.C. 1531, et seq.	Full Compliance
Environmental Justice (Executive Order 12898)	Full Compliance
Estuary Protection Act, 16 U.S.C. 1221, et seq.	Not Applicable
Farmland Protection Policy Act, 7 U.S.C. 4201, et. seq.	Full Compliance
Federal Water Project Recreation Act, 16 U.S.C. 4601-12, et seq.	Full Compliance
Fish and Wildlife Coordination Act, 16 U.S.C. 661, et seq.	Full Compliance
Floodplain Management (Executive Order 11988)	Full Compliance
Invasive Species (Executive Order 13122)	Full Compliance
Land and Water Conservation Fund Act, 16 U.S.C. 4601-4, et seq.	Not Applicable
Marine Protection Research and Sanctuary Act, 33 U.S.C. 1401, et seq.	Not Applicable
Migratory Bird Treaty Act, as amended, 16 U.S.C. 703-712	Full Compliance
National Environmental Policy Act, 42 U.S.C. 4321, et seq.	Full Compliance
National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470a, et seq.	Full Compliance
Protection & Enhancement of the Cultural Environment (Executive Order 11593)	Full Compliance
Protection of Wetlands (Executive Order 11990)	Full Compliance
Rivers and Harbors Act, 33 U.S.C. 403, et seq.	Full Compliance
Watershed Protection and Flood Prevention Act, 16 U.S.C. 1001, et seq.	Full Compliance
Wild and Scenic River Act, 16 U.S.C. 1271, et seq.	Not Applicable

NOTES: a. Full compliance. Having met all requirements of the statute for the current stage of planning (either preauthorization or post authorization).
b. Partial compliance. Not having met some of the requirements that normally are met in the current stage of planning.
c. Noncompliance. Violation of a requirement of the statute.
d. Not applicable. No requirements for the statute required; compliance for the current stage of planning.

Section 9 - List of Preparers

This draft EA and draft FONSI were prepared by Mr. Chris Name, Environmental Resources Specialist, with cultural resource assistance provided by Mr. Timothy Meade, District Archeologist. The address of the preparers is: U.S. Army Corps of Engineers, Kansas City, District; PM-PR, Room 529, 601 E. 12th Street, Kansas City, Missouri 64106.

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Section 10 - References

CEQ. 1992. Regulations for Implementing the Procedural Provisions of NEPA, Counsel of Environmental Quality. 40 CFR Parts 1500-1508, in accordance with 40 CFR 1507.3.

CEQ. 1997. January, 1997. Considering Cumulative Effects Under the National Environmental Policy Act, Counsel of Environmental Quality. Executive Office of the President, Washington, D.C. pp ix-x, 28-29 and 49-57.

Corps. 2008. Procedures for Implementing the National Environmental Policy Act. Engineer Regulations, Army Corps of Engineers. (ER) 200-2-2. 33 CFR 230.

EPA. 2008. Green Book, Environmental Protection Agency. http://www.epa.gov/airquality/greenbook/hindex.html. Accessed October 23, 2014.

EPA. 2014. Watershed Assessment, Tracking & Environmental Results: Kansas 303(b) Listed Waters for Reporting Year 2014, Environmental Protection Agency. http://iaspub.epa.gov/tmdl/attains_impaired_waters.impaired_waters_list?p_state=KS&p_cycle=2014. Accessed October 23, 2014.

FCA. 1941. Flood Control Act of 1941, 33 U.S.C. 701n, as amended (commonly referred to as Public Law 84-99, Flood Control and Coastal Emergencies Act). IFMRC (Interagency Floodplain Management Review Committee). 1994. Sharing the Challenge: Floodplain Management Into the 21st Century.

Gasteyer, S.P. 2008. Agricultural transitions in the context of growing environmental pressure over water. Agriculture and Human Values. Dec 2008. Volume 25, Issue 4, pp 469-486.

MDNR. 1998. Protecting Water Quality: A field guide to erosion, sediment and stormwater best management practices for development sites in Missouri and Kansas, Missouri Department of Natural Resources. http://www.dnr.mo.gov/env/wpp/wpcp-guide.htm

KDWPT. 2014. Kansas Waters with Aquatic Nuisance Species. November 17, 2014. http://kdwpt.state.ks.us/Fishing/Aquatic-Nuisance-Species Accessed February 13, 2015.

USCB. 2014. State and County QuickFacts, United States Census Bureau. http://quickfacts.census.gov/qfd/states/20/20169.html. Accessed October 23, 2014.

USFWS. 2014. IPaC – Information, Planning, and Conservation System, United States Fish & Wildlife Service. http://ecos.fws.gov/ipac/. Accessed October 23, 2014.

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Section 11 - Appendices

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APPENDIX A

Declining of Non-Structural Repair

NONSTRUCTURAL ALTERNATIVES TO
REHABILITATION OF FLOOD CONTROL WORKS

Authority. Under Public Law 84-99, the Chief of Engineers is authorized, when requested by the non-Federal sponsor, to implement nonstructural alternatives (NSA's) to the rehabilitation, repair, or restoration of flood control works damaged by floods or coastal storms.

I, Wayne Nelson (name), Civil Engineer II (title)

representing the City of Salina, Kansas (local sponsor) have been provided with information indicating that the option of pursuing a Non-Structural Alternative Project has been made available to the public entity that I represent.

The City of Salina (local sponsor) **does** / **does not** wish to pursue the option of a Non-Structural Alternative Project.

Joshua A. Marx
Corps of Engineers Representative
Providing Information on NSA

21 January 2014
Date Information Provided

City of Salina, Kansas
Name of Local Sponsor

Wayne Nelson
Signature

Wayne Nelson
Name (Printed)

Civil Engineer II
Title

21 January 2014
Date

APPENDIX B

Photographs of Flood Damaged Areas

Photographs:

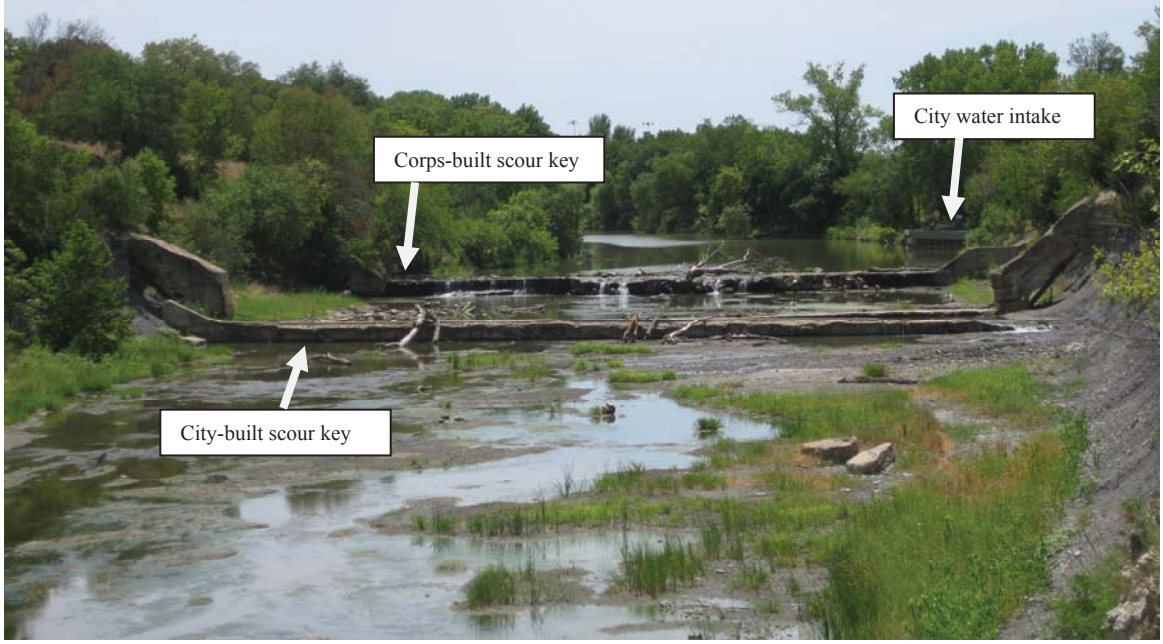

Photo 1: Facing south (upstream) in the Iron Avenue Cutoff Channel – August 2012

Photo 2: Corps-built scour key in July 2012

Photo 3: Corps-built scour key in October 2013

Photo 4: Corps-built scour key in October 2013

Photo 5: Corps-built scour key in October 2013

Photo 6: Corps-built scour key in October 2013

Photo 7: Looking South at Erosion Along Left River Bank

Photo 8: Looking West at Bank Slide / Erosion

APPENDIX C

Project Flood Damage Location
And Project Work Boundaries

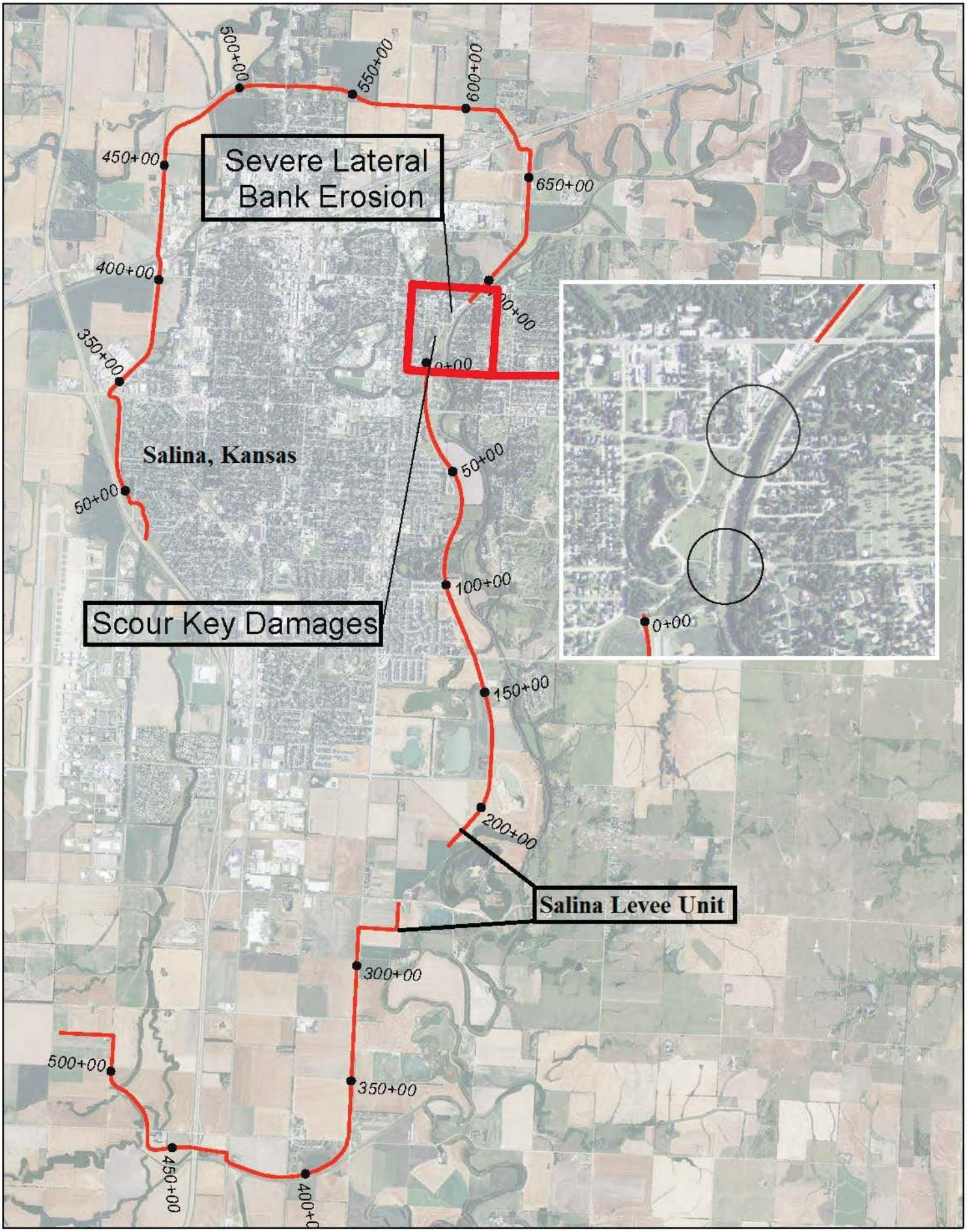

Figure 1. Salina, Kansas Flood Damage Location

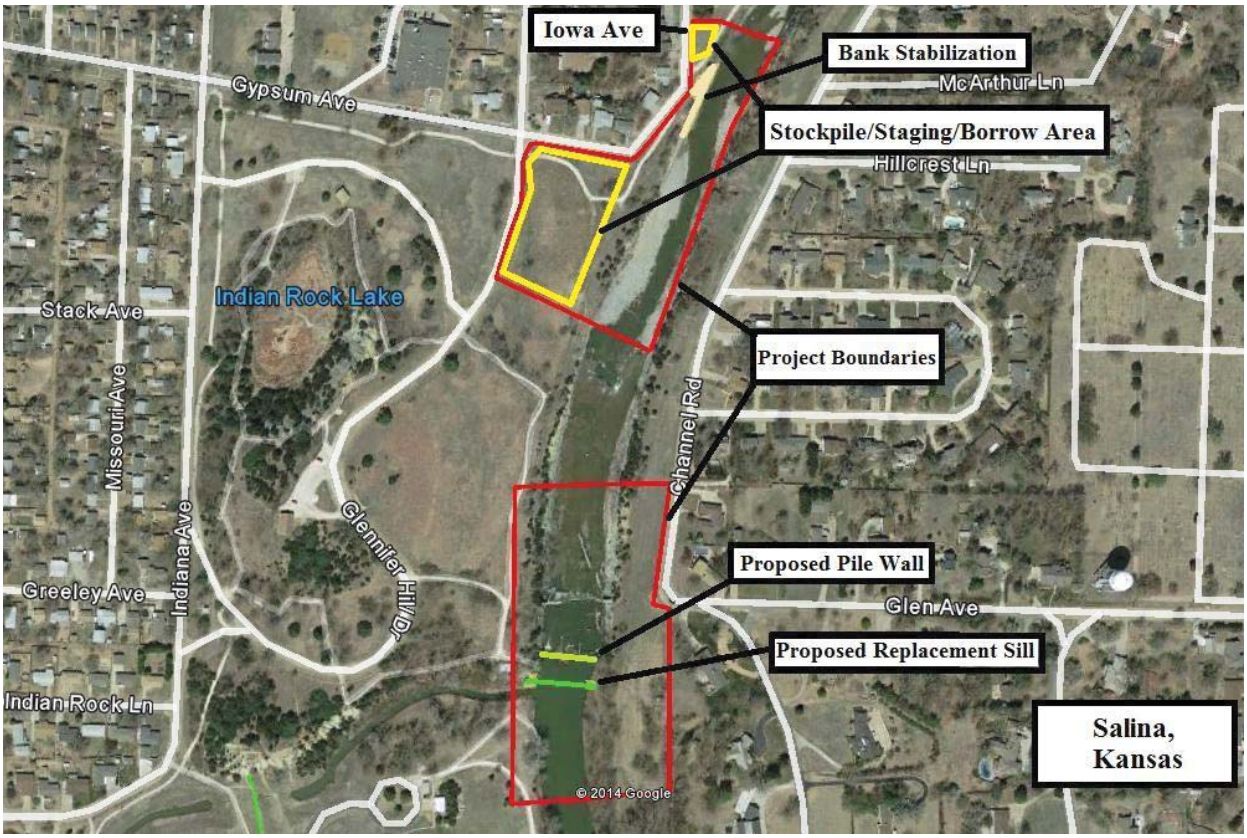

Figure 2. Project Boundaries

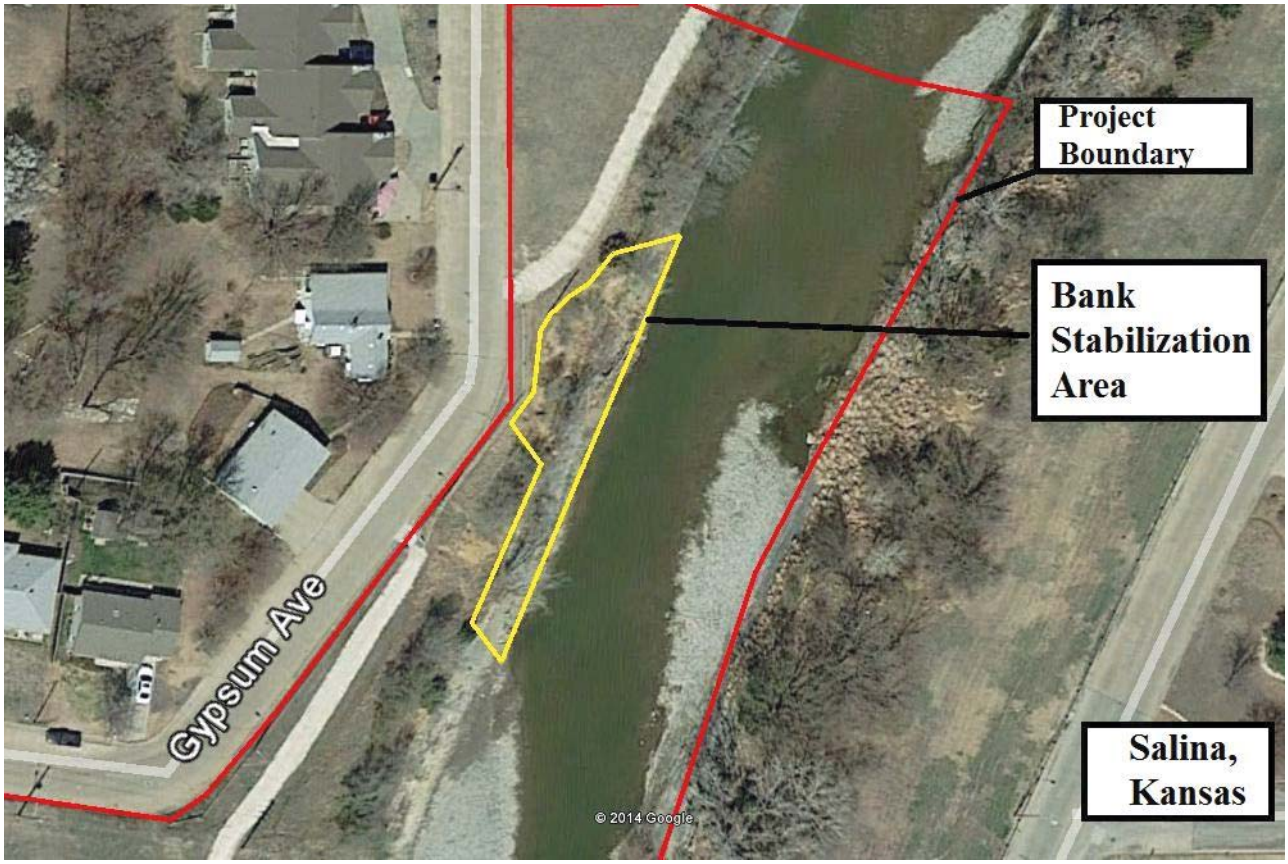

Figure 3. Bank Stabilization Area

APPENDIX D

Resource Agency Coordination

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Kansas Ecological Services Field Office
2609 Anderson Avenue
Manhattan, Kansas 66502-6172

November 19, 2014

Chris Name, Biologist
PM-PR
U.S. Army Corps of Engineers – Kansas City District
601 E 12th Street
Kansas City, MO 64106

RE: Request for Informal Consultation for Salina, Kansas Water Control Structure

FWS Tracking # 2015-CPA-0118

Dear Mr. Name:

This is in response to your October 21, 2014 letter requesting an informal consultation for federally listed species. You also provided additional information in an email dated November 18, 2014. Under PL84-99 (Emergency Levee Rehabilitation Program) a new concrete scour key structure would be constructed approximately 70-feet upstream from an existing scour key that was damaged during a 2013 flood event. A coffer dam would be constructed to divert water while constructing the new scour key. In addition, quarry run rock would be used at the corner of Iowa Ave. and Gypsum Ave. to stabilize the left bank. Some trees would be removed for the project. Temporary stock piling of material would be staged in designated areas of Indian Rock Park. You stated during a phone conversation on November 19, 2014 that part of the park was constructed using a Federal Land and Water Conservation Fund grant administered by agency now known as the Kansas Department of Wildlife, Parks and Tourism. The project is located at 38° 50'2.24"N, 97° 35'09.35"W in the Smokey Hill River in the City of Salina, Saline County, Kansas.

Federal Threatened and Endangered Species and Trust Resources

You included a species list generated from the FWS Information, Planning, and Conservation System (IPAC) which indicated that the federally listed as endangered whooping crane (*Grus americana*) and the northern long-eared bat (NLEB), (*Myotis septentrionalis*), currently proposed for listing under the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), may be found in Saline County, Kansas. We agree with that list.

Whooping Crane

The whooping crane is a regular migrant through central and western Kansas counties, generally

occurring during March-April and October-November. Its preferred habitat sites include wetlands, open fields, and grasslands in areas of low relief with short vegetation which affords the birds an open view of the surrounding terrain. It is unlikely that whooping cranes would stop at the project site, particularly while construction is occurring. We recommend that in the unlikely event that any are found in the project area that construction activities cease until the whooping cranes leave. The project should not effect the whooping crane.

Northern Long-Eared Bat (NLEB)

Your letter stated that trees greater than 9" dbh would be removed during the winter months to protect the NLEB. Please be advised that the NLEB are known to use trees ≥ 3 inches dbh (see below for NLEB habitat description) and your plans should be adjusted accordingly.

The northern long-eared bat (NLEB) (*Myotis septentrionalis*) is currently proposed for listing under the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). The final listing decision for the NLEB is expected in April 2015. At this time, no critical habitat has been proposed for the NLEB. The state of Kansas is within the known range of the NLEB. **During the summer, NLEBs typically roost singly or in colonies in cavities, underneath bark, crevices, or hollows of both live and dead trees and/or snags (typically ≥3 inches dbh)**. Males and non-reproductive females may also roost in cooler places, like caves and mines. This bat seems opportunistic in selecting roosts, using tree species based on presence of cavities or crevices or presence of peeling bark. It has also been occasionally found roosting in structures like barns and sheds (particularly when suitable tree roosts are unavailable). They forage for insects in upland and lowland woodlots and tree lined corridors. During the winter, NLEBs predominately hibernate in caves and abandoned mine portals. Additional habitat types may be identified as new information is obtained.

Tree clearing/cutting should be avoided during the NLEB's active season which runs from March 1 through Oct. 31. If implementation of the seasonal tree cutting restriction is not possible, summer surveys should be conducted to document the presence or likely absence of the northern long-eared bat within the project area during the summer. Please be advised that if surveys are conducted and the NLEB is detected, the tree cutting activities will have to be delayed until after the active season (March 1 – Oct. 31). The survey must be conducted by an approved surveyor and be designed and conducted in coordination with the Endangered Species Coordinator for the U.S. Fish and Wildlife Service, Ecological Services, Kansas Field Office. Survey guidance protocols can be found in Appendix B of the NLEB interim guidance document:
http://www.fws.gov/midwest/endangered/mammals/nlba/pdf/NLEBinterimGuidance6Jan2014.pdf.

The Corps of Engineers should make a determination if the activity will affect the species and if conferencing with the FWS is necessary. Additional information regarding NLEB and conference procedures can be found at
(http://www.fws.gov/midwest/endangered/mammals/nlba/index.html).

Migratory Bird Treaty Act

The MBTA prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. Takings could result from projects in prairies, wetlands, stream and woodland habitats, and those that occur on bridges and other structures if swallow or phoebe nests are present. While the provisions of MBTA are applicable year-round, most migratory bird nesting activity in Kansas occurs during the period of January (owls and hawks) through August (goldfinches). If the proposed project appears likely to result in the take of migratory birds (e.g. constructed during the period of January through August), I recommend a field survey during the nesting season of the affected habitats and structures to determine the presence of active nests. Our office should be contacted immediately for further guidance if a field survey identifies the existence of one or more active bird nests that you believe cannot be avoided temporally or spatially by the planned activities.

Other Considerations

We encourage you to include measures to address the following concerns in planning for your project:

Erosion Control

Erosion controls should be an integral component of the project to ensure that sediment originating from the project does not enter the stream or migrate downstream. Erosion controls should include on-land best management practices, such as mulching bare areas, properly maintaining silt fences, hay bales, or coir mats, and reseeding disturbed areas as-soon-as-possible. Maintaining an undisturbed buffer of a minimum 50 feet from the top of the streambank should significantly reduce sediment reaching the stream and help to protect the stream's functions and values. Good information on BMPs for erosion control can be found at http://www.dot.ca.gov/hq/construc/stormwater/BMP_Field_Master_FullSize_Final-Jan03.pdf, and http://www.fws.gov/midwest/fisheries/streamcrossings/ErosionControl.htm. In addition, in-stream sediment controls should also be considered in sensitive areas or where upland erosion controls may not be adequate. These practices should be properly maintained for the life of the project. Before removing any in-stream structures, the accumulated silt should be carefully removed, so as not to disturb the natural substrate or vegetation of the stream and to prevent the downstream migration of sediments that have accumulated behind the structure.

Invasive Species

Invasive species have been identified as a major factor in the decline of native flora and fauna and impact aquatic resources. Tools to perform Hazard Analysis and Critical Control Points (HACCP) planning for invasive species control are available at http://haccp-nrm.org/. HACCP planning focuses attention on critical control points where non-target species can be removed. Documenting risks and methods used to remove non target species gives managers a strategic method to make consistent decisions based on identified risks. Planning builds a logical framework of information to weigh risks for species spread against management benefits. Invasive species of particular concern in Kansas include the zebra mussel (*Dreissena*

polymorpha), Eurasian watermilfoil (*Myriophyllum spicatum*), purple loosestrife (*Lythrum salicaria*), Johnson grass (*Sorghum halepense*), sericea lespedeza (*Lespedeza cuneata*), salt cedar (*Tamarix spp.*), and reed canary grass (*Phalaris arundinacea*). Additional information on aquatic invasive species in Kansas can be found on KDWP's website http://www.kdwp.state.ks.us/news/fishing/aquatic_nuisance_species. Human actions are the primary means of invasive species introductions. Prevention of introductions is the first and most cost-effective option for dealing with invasive species. We strongly encourage the inclusion of best management practices for the prevention of invasive species transfer in all project planning. At the minimum the following should be included as a Best Management Practice:

> All equipment brought on site will be thoroughly washed to remove dirt, seeds, and plant parts. Any equipment that has been in any body of water within the past 30 days will be thoroughly cleaned with hot water greater 140° F (typically the temperature found at commercial truck washes) and dried for a minimum of five days before being used at this project site. In addition, before transporting equipment from the project site all visible mud, plants and fish/animals will be removed, all water will be eliminated, and the equipment will be thoroughly cleaned. Anything that came in contact with water will be cleaned and dried following the above procedure.

Thank you for this opportunity to comment on the project. If we can be of any assistance, please call Ms. Susan Blackford, of my staff, at 785-539-3474 ext. 102.

Sincerely,

Heather Whitlaw
Field Supervisor

cc: KDWPT, Pratt, KS (Environmental Services)

U.S. Fish and Wildlife Service

Trust Resources List

This resource list is to be used for planning purposes only — it is not an official species list.

Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

Kansas Ecological Services Field Office
2609 ANDERSON AVENUE
MANHATTAN, KS 66502
(785) 539-3474

Project Location Map:

U.S. Fish and Wildlife Service

Trust Resources List

Project Counties:

Saline, KS

Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83):

MULTIPOLYGON (((-97.5846041 38.8397271, -97.5831471 38.8394246, -97.5849925 38.8367503, -97.5854645 38.8346109, -97.585207 38.8326385, -97.5870524 38.8326385, -97.5873099 38.8339757, -97.5864945 38.8366501, -97.5846041 38.8397271)))

Project Type:

Water Supply / Delivery

Endangered Species Act Species List (USFWS Endangered Species Program).

There are a total of **2** threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fishes may appear on the species list because a project could cause downstream effects on the species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section below for critical habitat that lies within your project area. Please contact the designated FWS office if you have questions.

Species that should be considered in an effects analysis for your project:

Birds	Status		Has Critical Habitat	Contact
Whooping crane (*Grus americana*) Population: except where EXPN	Endangered	species info	Final designated critical habitat	Kansas Ecological Services Field Office
Mammals				
northern long-eared Bat (*Myotis septentrionalis*) Population:	Proposed Endangered	species info		Kansas Ecological Services Field Office

Critical habitats within your project area:

There are no critical habitats within your project area.

U.S. Fish and Wildlife Service

Trust Resources List

FWS National Wildlife Refuges (USFWS National Wildlife Refuges Program).

There are no refuges found within the vicinity of your project.

FWS Migratory Birds (USFWS Migratory Bird Program).

The protection of birds is regulated by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. For more information regarding these Acts see: http://www.fws.gov/migratorybirds/RegulationsandPolicies.html.

All project proponents are responsible for complying with the appropriate regulations protecting birds when planning and developing a project. To meet these conservation obligations, proponents should identify potential or existing project-related impacts to migratory birds and their habitat and develop and implement conservation measures that avoid, minimize, or compensate for these impacts. The Service's Birds of Conservation Concern (2008) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

For information about Birds of Conservation Concern, go to:
http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html.

To search and view summaries of year-round bird occurrence data within your project area, go to the Avian Knowledge Network Histogram Tool links in the Bird Conservation Tools section at: http://www.fws.gov/migratorybirds/CCMB2.htm.

For information about conservation measures that help avoid or minimize impacts to birds, please visit:
http://www.fws.gov/migratorybirds/CCMB2.htm.

Migratory birds of concern that may be affected by your project:
There are **25** birds on your Migratory birds of concern list. The underlying data layers used to generate the migratory bird list of concern will continue to be updated regularly as new and better information is obtained. User feedback is one method of identifying any needed improvements. Therefore, users are encouraged to submit comments about any questions regarding species ranges (e.g., a bird on the USFWS BCC list you know does not occur in the specified location appears on the list, or a BCC species that you know does occur there is not appearing on the list). Comments should be sent to the ECOS Help Desk.

U.S. Fish and Wildlife Service

Trust Resources List

Species Name	Bird of Conservation Concern (BCC)	Species Profile	Seasonal Occurrence in Project Area
American bittern (*Botaurus lentiginosus*)	Yes	species info	Breeding
Bald eagle (*Haliaeetus leucocephalus*)	Yes	species info	Year-round
Bell's Vireo (*Vireo bellii*)	Yes	species info	Breeding
Black-billed Cuckoo (*Coccyzus erythropthalmus*)	Yes	species info	Breeding
Burrowing Owl (*Athene cunicularia*)	Yes	species info	Breeding
Chestnut-collared Longspur (*Calcarius ornatus*)	Yes	species info	Wintering
Dickcissel (*Spiza americana*)	Yes	species info	Breeding
Ferruginous hawk (*Buteo regalis*)	Yes	species info	Wintering
Golden eagle (*Aquila chrysaetos*)	Yes	species info	Wintering
Grasshopper Sparrow (*Ammodramus savannarum*)	Yes	species info	Breeding
Harris's Sparrow (*Zonotrichia querula*)	Yes	species info	Wintering
Henslow's sparrow (*Ammodramus henslowii*)	Yes	species info	Breeding
Hudsonian Godwit (*Limosa haemastica*)	Yes	species info	Migrating
Kentucky Warbler (*Oporornis formosus*)	Yes	species info	Breeding
Lark Bunting (*Calamospiza melanocorys*)	Yes	species info	Breeding
Loggerhead Shrike (*Lanius ludovicianus*)	Yes	species info	Year-round
Mississippi Kite (*Ictinia mississippiensis*)	Yes	species info	Breeding
Painted Bunting (*Passerina ciris*)	Yes	species info	Breeding

Red-headed Woodpecker (*Melanerpes erythrocephalus*)	Yes	species info	Breeding
Rusty Blackbird (*Euphagus carolinus*)	Yes	species info	Wintering
Scissor-tailed Flycatcher (*Tyrannus forficatus*)	Yes	species info	Breeding
Short-eared Owl (*Asio flammeus*)	Yes	species info	Year-round
Snowy Plover (*Charadrius alexandrinus*)	Yes	species info	Migrating
Swainson's hawk (*Buteo swainsoni*)	Yes	species info	Breeding
Upland Sandpiper (*Bartramia longicauda*)	Yes	species info	Breeding

NWI Wetlands (USFWS National Wetlands Inventory).

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

Data Limitations, Exclusions and Precautions
The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work

conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery and/or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Exclusions - Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Precautions - Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

The following wetland types intersect your project area in one or more locations:

Wetland Types	NWI Classification Code	Total Acres
Riverine	R2UBH	19.7161
Riverine	R2UBHx	14.2299

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

Kansas
Department of Wildlife, Parks and Tourism

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

Robin Jennison, Secretary

Sam Brownback, Governor

21 November 2014

Chris Name
U.S. Army Corps of Engineers, KC District
601 E 12th St.
Kansas City, MO 64106

Ref: D1.1101
Saline County
Track: 20140008
Sec. 18; Town 14S; Range 2W

Dear Mr. Name,

RE: KDWPT T&E Review concerning scour key replacement and rip rap installation, Saline County

We have reviewed the information for the proposed scour key replacement and rip rap installation on the Smoky Hill River in Salina. 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.

We provide the following comments and general recommendations:

- **Rip rap installation should be monitored and maintained regularly to minimize the need for additional installations, expansions, or re-construction that would further disturb the stream channel.**
- **Restrict in-stream activities as much as possible, particularly during spawning periods (May 1 – Aug. 31).**
- **Remove scour key materials from the channel that were displaced by the 2013 high flow events.**
- **Implement and maintain standard erosion-control Best-Management-Practices such as silt fencing, hay/straw-bale ditch checks, erosion-control blankets, storm-drain-inlet protection and temporary weed-free seeding/mulching.**
- **Reseed any disturbed areas with native warm-season grasses (e.g. Buffalo Grass, *Bouteloua dactyliodes*).**

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.

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.

Sincerely,

Jordan R Hofmeier

Jordan Hofmeier, Aquatic Ecologist
Ecological Services Section

APPENDIX E

Kansas State Historic Preservation Office Coordination

DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
600 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

August 8, 2014

REPLY TO
ATTENTION OF

Environmental Resources Section
Planning Branch

Ms. Jennie A. Chinn
Executive Director, State Historic Preservation Officer
Kansas State Historical Society
6425 S. W. 6th Avenue
Topeka, Kansas 66615-1099

Dear Ms. Chinn:

The U.S. Army Corps of Engineers, Kansas City District (Corps) is planning emergency repairs to the Salina Flood Risk Management System in Saline County. The repair would be constructed under the authority of Public Law 84-99. The proposed project would stabilize the Saline River bank within the city of Salina that had sustained erosion damage resulting from an August 2013 flooding event. The letter report below details the results of an archeological background review and survey conducted for the project.

The project area is located along the banks of the Saline River within the Saline city limits (Figure 1). The river flows roughly south to north through the city. The river channel is relatively deeply incised within the project area with cut banks extending from 10 to 40 feet above the river bed. The channel has been modified by previous Corps and City installed flood prevention measures, most notably with the installation of concrete scour keys (see attached photographs). The general project area consists of urban residential east of the river and along the northwestern project area west of the river. Indian Rock City Park covers most of project area west of the river and south of Iowa Avenue.

Damages sustained during the flooding event include the loss of the right shoulder of a concrete scour key in the Iron Avenue Cutoff Channel as well as undermining and flanking of the structure. The recommended repair action would consist of constructing a new concrete cutoff wall upstream and to stabilize the bank at the intersection of Gypsum Avenue and Iowa Avenue with a combination of soil nail reinforced slope and riprap. The project would also require access points and staging areas. The proposed project locations are presented in Figure 1.

A cultural resource background review of the proposed project area and surrounding vicinity was undertaken prior to field work. The review consisted of an examination of

the Kansas State Historical Society's Archeological Inventory (on-line) and historical information found from a number of sources on-line including the City of Saline's web site and other web sites pertaining to the history of Salina. Following the background review, I conducted a field survey of the proposed project area.

The review found one archeological site, 14SA471, recorded in the vicinity of the project area. The site, known as the Indian Hill Battle Site, is the reported location of an 1857 battle or skirmish between the Cheyenne and Potawatomie hunters. Indian rock located on a high bluff top west of the Saline River in what is now Indian Rock City Park was reported to be the last stand of the Potawatomie during the battle. The site was formally recorded as the battle site in 2004 by a member of Kansas Archaeological Association. The only reported material identified on the site form is chert flaking debris. No battle related artifacts were noted in the site form or in the on-line references. It is assumed that the observed flaking debris was associated with an unrelated prehistoric archeological site, not surprising given the proximity to the Saline River. The proposed project locations are located both north and south of the recorded site boundaries, but no work is proposed on within the mapped site area (see Figure 1). No professional survey is recorded within or near the proposed project area.

Because of the recorded site and the potential for archeological materials, I conducted a field survey on July 23, 2014. The survey consisted of a walkover of all the proposed project locations and inspections of exposed river cut banks. As ground surface and cut bank exposure visibility was good, shovel testing was determined to be unnecessary.

The survey found no archeological materials in any of the proposed project locations. Ground surface visibility in the area ranged from very good along the various cut banks to good along exposed ground surface in the proposed staging areas. Observed soils consisted of course sand along the northernmost revetment location and silt in the remainder of the areas. Bedrock was observed exposed in the lower half of the cut bank. Disturbances were observed throughout the project area. The river channel has been altered by construction of the existing flood risk management system and likely from other past channelization work and urban related development. The areas away from the cut banks have also been heavily disturbed. Observed disturbances include, roads, buried utilities, residential housing, park related landscaping, and park structures. Photos of the project area are included as attachments.

Because no archeological sites were identified in the proposed project locations and because of the observed disturbances, it is unlikely that the project will impact sites eligible for inclusion on the NRHP. At this time, we ask for your concurrence that the project will have no effect on historic properties. If project plans change and additional project locations are needed, these changes would be coordinated with your office and appropriate federally recognized affiliated Native American tribes (Tribes). In the unlikely event that archeological materials are discovered during project construction, work in the area of discovery will cease and the discovery investigated by a qualified

archeologist. The findings on the discovery would be coordinated with your office and the Tribes.

Thank you for your consideration in this matter. If you have any questions or have need of further information please contact me at timothy.m.meade@usace.army.mil or at (816) 389-3138.

Sincerely,

Timothy Meade

Timothy Meade
District Archeologist

Enclosures

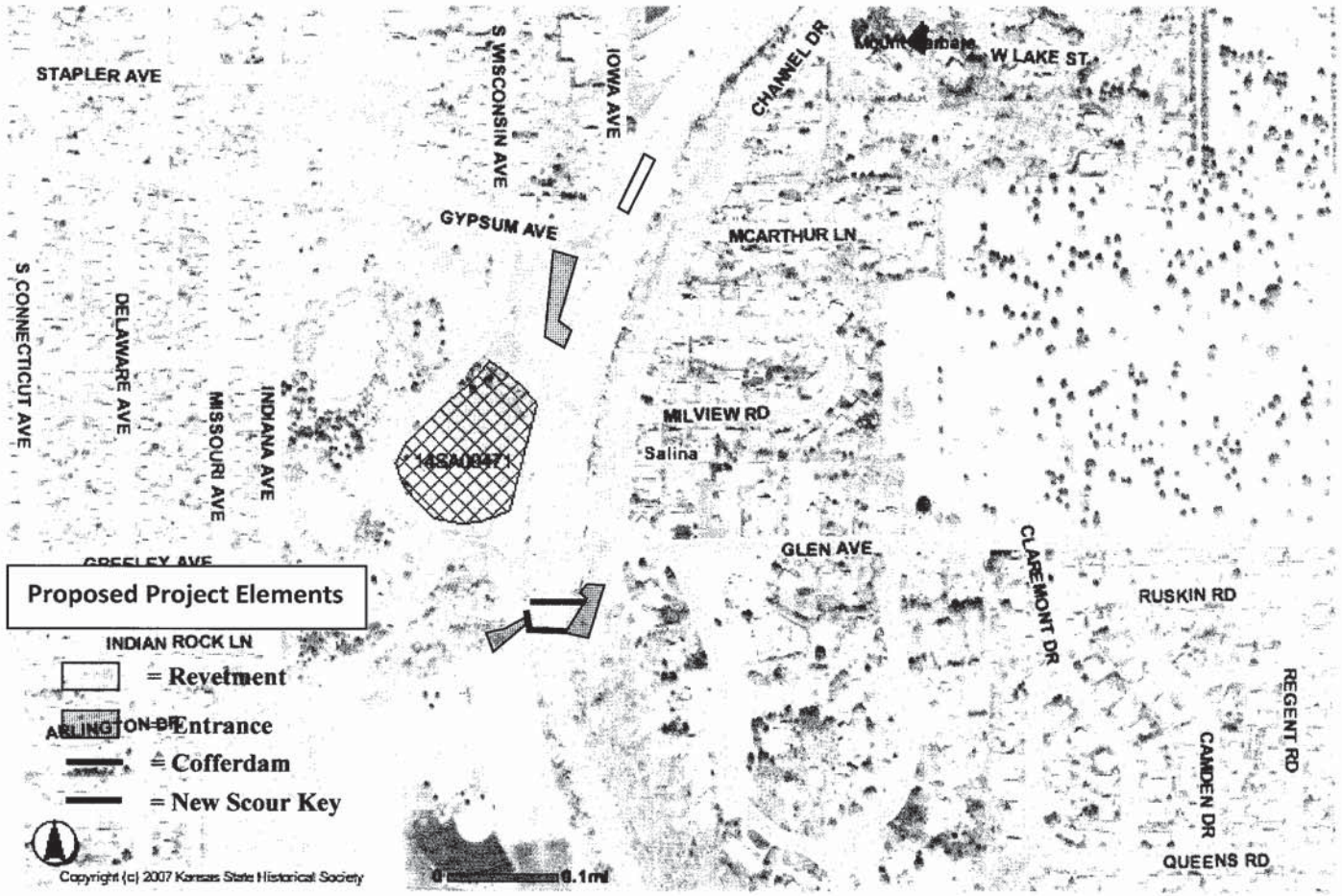

Figure 1. Proposed Salina Flood Risk Management System repair locations and archeological site location map.

Photographs of Salina Flood Risk Management System Project Area

Photo. Project Area looking south from northwestern most project location.

Photo. Looking west at project area cut bank.

Photo. Scour key in Saline River.

Photo. Scour key in Saline River.

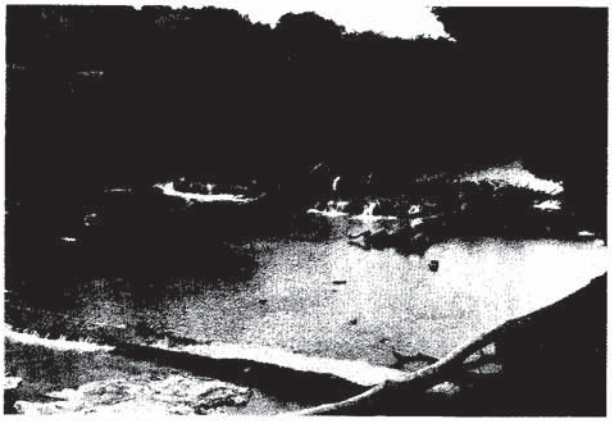

Photo. Scour key in Saline River.

Photo. Scour key in Saline River.

6425 SW 6th Avenue
Topeka, KS 66615

Kansas

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

Kansas Historical Society

Sam Brownback, Governor
Jennie Chinn, Executive Director

KSR&C No. 14-06-068

August 14, 2014

Timothy Meade
District Archeologist/Tribal Liaison
U.S. Army Corps of Engineers
Kansas City District
600 Federal Building
601 E. 12th Street
Kansas City, Missouri 64106-2896

Via E-Mail

RE: Floodwall Replacement Project
City of Salina
Saline County

Dear Mr. Meade:

In accordance with 36 CFR 800, the Kansas State Historic Preservation Office has reviewed your letter report and attached documentation (dated August 8, 2014) describing plans for replacement/repair of selected flood control structures in the City of Salina. We note that no archeological resources were discovered, and that the level of disturbance from previous development projects (including the existing flood control system) is high. Given those factors, we concur with the determination that the proposed project will have no effect on historic properties as defined in 36 CFR 800. This office has no objection to implementation of the project.

Any changes to the project, which include additional ground disturbing activities, will need to be reviewed by this office prior to beginning construction. If construction work uncovers buried archeological materials, work should cease in the area of the discovery and this office should be notified immediately.

This information is provided at your request to assist you in identifying historic properties, as specified in 36 CFR 800 for Section 106 consultation procedures. If you have questions or need additional information regarding these comments, please contact Tim Weston at 785-272-8681 (ext. 214).

Sincerely,

Jennie Chinn, Executive Director and
State Historic Preservation Officer

Timothy Weston for

Patrick Zollner
Deputy SHPO

DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
600 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

December 3, 2014

REPLY TO
ATTENTION OF

Environmental Resources Section
Planning Branch

Ms. Jennie A. Chinn
Executive Director, State Historic Preservation Officer
Kansas State Historical Society
6425 S. W. 6th Avenue
Topeka, Kansas 66615-1099

Dear Ms. Chinn:

The U.S. Army Corps of Engineers, Kansas City District (Corps) is planning emergency repairs to the Salina Flood Risk Management System in Saline County. The repair would be constructed under the authority of Public Law 84-99. The project was initially coordinated with your office by letter report on August 8, 2014. Since that time project plans have changed and borrow material will be required for the project.

The proposed borrow material will be used to create access roads to work on the river channel and embankment. The preferred proposed borrow area is an approximately 1.27 acre area within the northern proposed project area boundaries (see attached aerial map). The borrowing activity would extend to a maximum depth of 3.0 feet below the present ground surface. The proposed borrow area is currently situated within a landscaped area of the park. The July project area survey covered the entire proposed borrow area and found that the area has been heavily disturbed by previous land clearing and earth moving activity. No artifacts were found during the survey. It is also likely that the area was previously used as borrow during construction of the surrounding park roads. The borrow area does not fall within the site boundaries of 14SA471 (see attached site location map).

Because no archeological sites were identified in the proposed project locations and because of the observed disturbances, it is unlikely that the borrowing activity would impact sites eligible for inclusion on the NRHP. At this time, we ask for your concurrence that the borrowing activity will have no effect on historic properties. If project plans change and additional project locations are needed, these changes would be coordinated with your office and appropriate federally recognized affiliated Native American tribes (Tribes). In the unlikely event that archeological materials are discovered during project construction, work in the area of discovery will cease and the discovery investigated by a qualified archeologist. The findings on the discovery would be coordinated with your office and the Tribes.

Thank you for your consideration in this matter. If you have any questions or have need of further information please contact me at timothy.m.meade@usace.army.mil or at (816) 389-3138.

Sincerely,

Timothy Meade

Timothy Meade
District Archeologist

Enclosures

Figure. Proposed borrow location.

Figure 1. Proposed Salina Flood Risk Management System repair locations and archeological site location map showing proposed borrow area.

6425 SW 6th Avenue
Topeka, KS 66615

Kansas

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Kansas Historical Society

Sam Brownback, Governor
Jennie Chinn, Executive Director

KSR&C No. 14-06-068

December 10, 2014

Timothy Meade
District Archeologist/Tribal Liaison
U.S. Army Corps of Engineers
Kansas City District
600 Federal Building
601 E. 12th Street
Kansas City, Missouri 64106-2896

Via E-Mail

RE: Floodwall Replacement Project
City of Salina
Saline County

Dear Mr. Meade:

In accordance with 36 CFR 800, the Kansas State Historic Preservation Office has reviewed your letter report and attached documentation (dated December 3, 2014) describing the location of a proposed borrow area related to replacement/repair of selected flood control structures in the City of Salina. We note that the borrow area was covered during the original project survey in July of 2014. Since no archeological resources were discovered and the level of disturbance from previous development projects (including the existing flood control system) is high, we concur with the determination that the proposed borrow area will have no effect on historic properties as defined in 36 CFR 800. This office continues to have no objection to implementation of the project.

Any changes to the project, which include additional ground disturbing activities, will need to be reviewed by this office prior to beginning construction. If construction work uncovers buried archeological materials, work should cease in the area of the discovery and this office should be notified immediately.

This information is provided at your request to assist you in identifying historic properties, as specified in 36 CFR 800 for Section 106 consultation procedures. If you have questions or need additional information regarding these comments, please contact Tim Weston at 785-272-8681 (ext. 214).

Sincerely,

Jennie Chinn, Executive Director and
State Historic Preservation Officer

Timothy Weston
for

Patrick Zollner
Deputy SHPO

APPENDIX F

Nation Wide Permit 3
And Nation Wide Permit 13

2012 Nationwide Permits, Conditions, District Engineer's Decision, Further Information, and Definitions (with corrections)

A. Index of Nationwide Permits, Conditions, District Engineer's Decision, Further Information, and Definitions

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B. Nationwide Permits

1. Aids to Navigation. The placement of aids to navigation and regulatory markers which are approved by and installed in accordance with the requirements of the U.S. Coast Guard (see 33 CFR, chapter I, subchapter C, part 66). (Section 10)

2. Structures in Artificial Canals. Structures constructed in artificial canals within principally residential developments where the connection of the canal to a navigable water of the United States has been previously authorized (see 33 CFR 322.5(g)). (Section 10)

3. Maintenance. (a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure, or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project or within the boundaries of the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris in the vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.) and/or the placement of new or additional riprap to protect the structure. The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization. The placement of new or additional riprap must be the minimum necessary to protect the structure or to ensure the safety of the structure. Any bank stabilization measures not directly associated with the structure will require a separate authorization from the district engineer.

(c) This NWP also authorizes temporary structures, fills, and work necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills,

or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 31). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Sections 10 and 404)

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

13. Bank Stabilization. Bank stabilization activities necessary for erosion prevention, provided the activity meets all of the following criteria:

(a) No material is placed in excess of the minimum needed for erosion protection;

(b) The activity is no more than 500 feet in length along the bank, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in minimal adverse effects;

(c) The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark or the high tide line, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in minimal adverse effects;

(d) The activity does not involve discharges of dredged or fill material into special aquatic sites, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in minimal adverse effects;

(e) No material is of a type, or is placed in any location, or in any manner, that will impair surface water flow into or out of any waters of the United States;

(f) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas); and,

(g) The activity is not a stream channelization activity.

This NWP also authorizes temporary structures, fills, and work necessary to construct the bank stabilization activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Invasive plant species shall not be used for bioengineering or vegetative bank stabilization.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if the bank stabilization activity: (1) involves discharges into special aquatic sites; or (2) is in excess of 500 feet in length; or (3) will involve the discharge of greater than an average of one cubic yard per running foot along the bank below the plane of the ordinary high water mark or the high tide line. (See general condition 31.) (Sections 10 and 404)

C. Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR §§ 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR § 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not

restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such

species. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have “no effect” on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.noaa.gov/fisheries.html respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any “take” permits required under the U.S. Fish and Wildlife Service’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle

Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to

prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) – (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality

or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with

any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____

(Transferee)

_____

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the work and mitigation.

31. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative

description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments.

The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) that the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.

F. Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary

source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist

of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable

rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line, which is defined at 33 CFR 328.3(d).

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a jurisdictional water of the United States. If a jurisdictional wetland is adjacent – meaning bordering, contiguous, or neighboring – to a waterbody determined to be a water of the United States under 33 CFR 328.3(a)(1)-(6), that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

KANSAS
NATIONWIDE PERMIT REGIONAL CONDITIONS

For All Nationwide Permits:

1. **Stream Crossings.** In addition to requirements of General Condition (2) and General Condition (9) of the Nationwide Permits, the following guidelines for stream crossings apply for regulated activities in waters of the United States. The guidelines are available at: http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwidepermits/2012/KSRC1Streams.pdf

2. **Invasive and Exotic Species**. Plant species listed at http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwidepermits/2012/KSInvasivePlants.pdf shall not be used for revegetation unless this requirement is waived by the District Engineer based on a case specific analysis of the revegetation plan. Best management practices should be used to reduce the risk of transferring invasive plant and animal species to or from the project site. Best management practices can be found at: http://www.invasivespeciesinfo.gov/toolkit/prevention.shtml. Known zebra mussel waters within Kansas can be found at http://nas.er.usgs.gov/queries/zmbyst.asp.

3. **Suitable Material**. In addition to the specific examples in General Condition (6) of the Nationwide Permits, the following materials are not suitable for fill activities in waters of the United States: vehicle bodies, construction or demolition debris, garbage, tires, treated lumber (chromated copper arsenate (CCA), creosote, and pentachlorophenol), liquid concrete not poured into forms, grouted riprap, bagged cement, and sewage or organic waste.

   Broken concrete used as bank stabilization must be reasonably well graded, consisting of pieces varying in size from 20 pounds up to and including at least 150 pound pieces to withstand expected high flows. Applicants must break all large slabs to conform to the well graded requirement. Generally, the maximum weight of any piece should not be more than 500 pounds. Gravel and dirt should not exceed 15% of the total fill volume when using broken concrete as fill. All protruding reinforcement rods, trash, asphalt, and other extraneous materials must be removed from the broken concrete prior to placement in waters of the United States.

4. **Indian Country.** All Nationwide Permits requested by applicants other than the Tribal Authority for use within the reservation boundaries of Indian Country in Kansas require preconstruction notification to the District Engineer and coordination with the Tribal Authority. All other terms and conditions of the NWPs and regional conditions apply in Indian Country regardless of the applicant.

5. **Threatened & Endangered Species Waters.** The applicant must provide preconstruction notification to the District Engineer for any regulated activity in waters listed at: http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwidepermits/2012/TEList.pdf

6. **Designated State Waters.** The applicant must provide preconstruction notification to the District Engineer for any regulated activity in Exceptional State Waters (ESW) or Special Aquatic Life Use Waters (SALUW) as listed in the Kansas Surface Water Register. The list of special status waters requiring notification is available on request from the Corps and a map is located at: http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/nationwidepermits/2012/DesignatedWaters_14Oct2011.pdf

For Specific Nationwide Permits:

7. **NWP 12 – Utility Line Activities.** The applicant must provide preconstruction notification to the District Engineer prior to commencing the activity if the discharge is in a special aquatic site or when new utility line construction activities have multiple crossings of the same stream and/or parallel a stream. The preconstruction notification must include a revegetation plan for impacted wetlands and riparian areas in accordance with Regional Condition 2. Where preconstruction notification is required for utility line activities within streams, the submittal must include site-specific plans for the stabilization of disturbed channel bed and bank areas.

8. **NWP 23 - Approved Categorical Exclusions.** The applicant must provide preconstruction notification to the District Engineer for all regulated Nationwide Permit 23 activities in waters of the United States. In addition to information required by General Condition 31, the applicant must identify the approved categorical exclusion that applies and provide documentation that the project fits the categorical exclusion.

9. **NWP 27 – Stream and Wetland Restoration Activities.** The applicant must provide preconstruction notification to the District Engineer prior to commencing the activity if the discharge is associated with impacts to forested wetlands.

10. **Requirements for Waiver of 300 Linear Foot Limit Associated with NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, 52.** The applicant must request the waiver in writing and provide documentation and environmentally based reasons to support the waiver request in accordance with the requirements of General Condition (31) for making waiver determinations.

    Note: Preconstruction Notification to the District Engineer must be in accordance with General Condition (31) of the Nationwide Permits.

Kansas Water Quality Certification
Section 404 Nationwide Permits
Kansas Department of Health and Environment

I. Authority

This certification is prepared pursuant to Clean Water Act (CWA) Section 401 and Kansas Administrative Regulation 28-16-28f(c)(1) by the Kansas Department of Health and Environment (KDHE).

II. Certification

All activities authorized by the U.S .Department of Army Corps of Engineers (USACE) proposed Nationwide Permits (NWP) published February 16 2011, in the Federal Register, and projected to go into effect on or before March 19, 2012, are not expected to result in violations of Kansas Water Quality Standards found at Kansas Administrative Regulations 28-16-28b through 28g, provided the person conducting the Corps of Engineers authorized activity adheres to the conditions set out by this certification. A full description of the proposed NWPs can be found at: http://www.nwk.usace.army.mil/Missions/RegulatoryBranch/NationwidePermits.aspx. Additionally, Kansas Regional Conditions for NWPs have been proposed by the USACE with concurrence from state and federal agencies. Once issued, these conditions provide a general statewide framework for requirements for permitted activities considered by the USACE to have minimal impacts on the aquatic ecosystem. This water quality certification provides conditions and guidance to address local water quality needs of the permitted activities.

III. Limitations of this Certification: All Section 404 activities within the borders of Indian owned and operated lands are not covered by this certification. Individuals proposing projects which impact those waters are responsible for contacting the appropriate individual at the following numbers:

- Prairie Band Pottawatomie Indians, Planning Department, 785/966-2946
- Kickapoo Tribe in Kansas, Environmental Office, 785/486-2601
- Iowa of Tribe of Kansas and Nebraska, 785/595-3258
- Sac and Fox Tribe of Missouri, 785/742-4707

IV. General Conditions

1. **Certification Retention:** The applicant shall retain this water quality certification on the project site through the duration of the project to accommodate inspection.

2. **Kansas Water Pollution Control General Permit for Stormwater Runoff from Construction Activities**: This certification does not relieve the applicant of the responsibility to determine if the project is subject to the requirements of a **General NPDES Permit** and to secure such permit as necessary. Questions and inquiries may be directed to:

   Kansas Department of Health and Environment
   Bureau of Water – Industrial Program Section
   1000 SW Jackson Street, Suite 420
   Topeka, Kansas 66612-1367
   Phone 785/296-5549; FAX:785/296-0086
   www.kdheks.gov/stormwater

3. **Project Water Quality Protection Plan:** Any person wishing to use a Section 404 Nationwide General Permit shall prepare and follow a written project water quality protection plan (PWQPP.) The PWQPP shall identify components of the permitted activity (i.e. solid waste handling, fuel storage and leaks, sediment from construction etc.) which may or will result in the discharge of pollutants to waters of the state. For each component which may discharge pollutants to waters of the state, the plan shall set out the physical, structural and management measures to be implemented to prevent or minimize the discharge of pollutants to waters of the state. A PWQPP shall be prepared and posted on site through the duration of the project (see Section VIII for additional information on preparing a PWPP). Activities requiring a construction stormwater permit, as described above, also require a stormwater pollution prevention plan which will serve as the PWQPP.

   The permittee is required to submit the PWQPP to KDHE only if the project impacts Outstanding National Resource, Exceptional State or Special Aquatic Life Use Waters per condition No. 4 below.

4. **Outstanding National Resource Waters, Exceptional State and Special Aquatic Life Support Use Waters:** In the event the permitted activity occurs within one half (1/2) mile of an Outstanding National Resource Water as defined pursuant to **K.A.R. 28-16-28b(pp)** and **K.A.R. 28-16-28c(a)B(3)**, an Exceptional State Water pursuant to **K.A.R. 28-16-28b(y)** and **K.A.R. 28-16-28c(a)B(2)**, or a Special Aquatic Life Support Use Water designated pursuant to **K.A.R. 28-16-28d(b)(2)(A),** the person responsible for initiating the activity shall submit a copy of the PWQPP to**:**

   Kansas Department of Health and Environment
   Bureau of Water - Watershed Management Section
   1000 SW Jackson Street, Suite 420
   Topeka, Kansas 66612-1367 or email: nps@kdhe.state.ks.us

The project permittee should also contact the assigned KDHE Watershed Field Coordinator once construction is started for activities disturbing less than one acre. A service area map with contact information for the three KDHE Watershed field coordinators is attached (Attachment 1).

Locations of **Outstanding National Resource Waters, Exceptional State and Special Aquatic Life Support Use Waters** can be found at: http://www.kdheks.gov/befs/water_quality_disclaimer.htm .

The permittee should also be aware of the following Kansas water quality protection regulations associated with critical resource waters:

K.A.R. 28-16-28c(a)B(2) "Wherever state surface waters constitute exceptional state waters, discharges shall be allowed only if existing uses and existing water quality are maintained and protected."

K.A.R. 28-16-28c(a)B(3) "Wherever state surface waters constitute an outstanding national resource water existing uses and existing water quality shall be maintained and protected. New or expanded discharges shall not be allowed into outstanding national resource waters."

K.A.R. 28-16-28c(a)B(4) "No degradation of surface water quality by artificial sources of pollution shall be allowed if the degradation will result in harmful effects on populations of any threatened or endangered species of aquatic or semiaquatic life or terrestrial wildlife or its critical habitat as determined by the secretary of wildlife and parks pursuant to K.S.A. 32-960, and amendments thereto, and K.A.R. 115-15-3 or in the federal endangered species act, 16 U.S.C. 1532 , as amended on October 7, 1988."

5. **Solid Waste Disposal:** All solid waste materials produced during the execution of the project shall be disposed in accordance with the provisions of Kansas Solid Waste Management Statutes and regulations and applicable local regulations. Direct inquiries to:

KDHE, Bureau of Waste Management
1000 SW Jackson Street, Suite 320
Topeka, Kansas 66612-1366
Phone: 785/296-1600; FAX: 785/296-1592
www.kdhe.state.ks.us/waste/index.html

6. **Equipment Staging Areas and Project Closure:** Upon completion of the project, disturbed areas shall be expeditiously stabilized with temporary and permanent vegetation, bio-artificial ground cover or other appropriate non-polluting material. Fertilizer application to establish and maintain vegetation shall be done in a manner that will not contribute to the current nutrient load to any of the surface waters impacted by the project. The person responsible for the permitted activity shall monitor and maintain cover materials until such time as the site is stabilized. Project

closure procedures shall be documented in the PWQPP per condition No. IV. 3.

7. **Riparian Areas:** Minimize removal or disturbance of riparian areas (areas adjacent to water bodies). KDHE encourages the use of vegetation consistent with adjoining vegetation materials to minimize impacts from improper handling of fertilizers and pesticides.

8. **Discharge of Floatable Materials:** Pursuant to K.A.R. 28-16-28b (uu)(1),(2), the person responsible for executing the permitted activity shall assure good house keeping is practiced at the site to minimize the discharge of floatable materials such as personal refuse including food containers, packing, and other materials. Appropriate measures shall be taken to capture and/or recover any floatable materials discharged to waters of the state originating with the permitted project.

9. **Fuel, Chemical and Materials Storage:** Fuel, chemical and other materials stored at the project site shall be stored in a manner that minimizes the discharge of product to waters of the state. Spill minimization and prevention measures and procedures shall be documented in the PWQPP.

10. **Spill Response and Reporting:**

    a. **Spill response and cleanup:** In the event a spill of fuel, chemical or other water quality degrading materials stored or transported on the site occurs, the permittee shall or with the assistance of professional response personnel, expeditiously control or contain the spill and initiate clean up procedures. The applicant shall immediately contact 911. Spill response and cleanup actions shall be documented in the PWQPP. The applicant should also contact the appropriate Kansas Department of Health and Environment district office http://www.kdheks.gov/befs/dist_office.html **or look in your local phone directory** to confirm cleanup activities. Finally, KDHE strongly encourages the permittee to establish and post a sign that includes phone contact numbers for the appropriate local emergency response unit, KDHE district office, and the project manager/owner.

    b. **Reporting:** The Kansas Department of Health and Environment shall be notified of all fuel spills or unauthorized discharge of pollutants immediately. Contact KDHE at 785/296-1679, anytime for spill reporting requirements. The Kansas Adjutant Generals Office should also be contacted (785/296-8013) as well as the National Spill Response Center (1-800-424-8802).

11. **Drinking Water Intakes:** The person responsible for the permitted activity shall avoid adverse impacts on public water supplies. Whenever permitted activities occur within one mile upstream of a public drinking water supply - surface water intake, the applicant shall contact the official in charge of the public drinking water supply to apprize the drinking water supply official of the permitted activity. The person responsible for the permitted activity shall consider the suggestions and recommendations of the public water supply official when preparing the PWQPP.

12. **Treated Wastewater Effluent Mixing Zones:** As a general guideline any Section 404 activity within one-half (1/2) mile upstream or one-half (1/2) mile downstream of a permitted wastewater effluent discharge may impact the effluent mixing zone. The person responsible for the permitted activity shall determine if the project will adversely impact the wastewater effluent mixing zones and take appropriate measures to avoid altering or changing the mixing zone. The permitted activities may include but are not limited to:

    a. The construction or placement of a recreation oriented facility or structure (i.e. boat ramp, walkway) which may require modification of the beneficial use designation to accommodate contact or non-contact recreation, thereby increasing the effluent limitations for the permit.

    b. Any activity which may alter or remove the stream channel geometry or natural oxygenation abilities of the stream such as bridge construction, channelization, stream channel substrate modification etc.

    The person responsible for the permitted Section 404 activity shall advise and describe to the waste water discharge permittee and KDHE any potential mixing zone impacts and the measures the person responsible for the Section 404 activity will take to minimize adverse impacts on the mixing zone. Inquiries should be directed to:

    Kansas Department of Health and Environment
    Bureau of Water - Municipal Programs Section
    1000 SW Jackson Street, Suite 420
    Topeka, Kansas 66612-1367
    Phone: 785/296-5527; FAX: 785/296-0086

13. **Total Maximum Daily Load:** The permittee for any Section 404 NWP project within a watershed with a Total Maximum Daily Load (TMDL) should contact the assigned KDHE Watershed Field Coordinator once construction is started for activities disturbing less than one acre. A service area map with contact information for the three KDHE Watershed Field Coordinators is attached (Attachment 1). Visit http://www.kdheks.gov/tmdl/index.htm for TMDL watershed locations, maps and other information.

V. Special Conditions for Specific Nationwide Permits

1. **Nationwide Permit #7. Outfall Structures and Maintenance (construction):** Controls shall be in place to stabilize all areas of the bed and bank around the pipe or adjacent to the outfall structure and associated intake structures that may be affected by outfall or stream flows, respectively.

2. **Nationwide Permits #3-Maintenance; #12-Utility Line Activities; and #18-Minor Discharges (pipelines included):** Hydrostatic tests for pipeline activities shall be

approved prior to discharge of water used for the test. Please contact:

Kansas Department of Health and Environment
Bureau of Water - Industrial Program Section
1000 SW Jackson Street, Suite 420
Topeka, Kansas 66612-1367
Phone 785/296-5513; FAX: 785/296-0086

3. **Nationwide Permits #27 (Aquatic Habitat, Restoration, Establishment and Enhancement Activities) #29 (Residential Developments), #30 (Moist Soil Management for Wildlife), #39 (Commercial and Institutional Developments), #42 (Recreational Facilities), #43 Stormwater Management Facilities). A (Wind Energy Generative Facilities, B Water Based Renewable Energy):** Measures shall be implemented to assure impounded waters, created by activities within the framework of these permits, avoid becoming public health threats, nuisances, generate complaints, and potentially discharge degraded water. The applicant shall prepare and implement an Operations and Maintenance Plan for facilities and landscapes (O&M), which at the minimum incorporate the following:

a. Identify individual and public property owners and their potential for being the source of nonpoint source pollution. This could include but is not limited to: commercial grounds, streets, right-of-ways, parking areas, conservation easement and **proposed** mitigation areas etc.

b. For each property as described in item A. above, indicate the applicable water quality protection measures for each category of artificial sources of pollution. The identified water quality protection measure for each category of artificial source of pollution shall be designed to ***reduce to the maximum extent practicable, the level of pollution resulting from identified pollutant sources***. Identified water quality protection quality protection measures shall be at least as effective as those set out by the Kansas Nonpoint Source Pollution Management Plan, 2010 Update, available at: http://www.kdheks.gov/nps/ .

c. Strategies to assure implementation of the water quality protection measures identified under item IV. 3-10 which may include but are not limited to prohibition or restriction of activities, utilization of alternative technologies or products, information and education, financial assistance, technical assistance, enforcement and penalties. Additionally, an in-house reporting form used by staff to document degraded property conditions potentially impacting the property and needs to address them should be developed, if applicable.

d. Organizations and individuals responsible for assuring implementation of identified water quality protection measures.

VI. Enforcement and Penalties

This certification does not relieve the applicant of the responsibility for any discharge to

waters of the state or allow for any inappropriate discharge to occur. As provided for by K.S.A. 65-171(f), failure to comply with the conditions of this certification may subject the responsible party to fines of $10,000 per violation with each day the violation occurs constituting a separate violation.

VII. Variance

If the applicant believes the conditions of this certification will result in impairment of important widespread social and economic development, the applicant is advised of the variance provisions of KAR 28-16-28b(lll) and KAR 28-16-28f(e).

VIII. Additional Information

The KDHE website contains the following information to assist the applicant in preparing a Project Water Quality Protection Plan (PWQPP):

1. Construction practices: http://www.dnr.mo.gov/env/wpp/wpcp-guide.htm

2. PWQPP Form and Instructions:
   http://www.kdheks.gov/nps/resources/nwpwqppfrm.doc or
   http://www.kdheks.gov/nps/resources/nwpwqppfrm.pdf

3. Kansas Surface Water Register:
   http://www.kdheks.gov/befs/download/Current_Kansas_Surface_Register.pdf

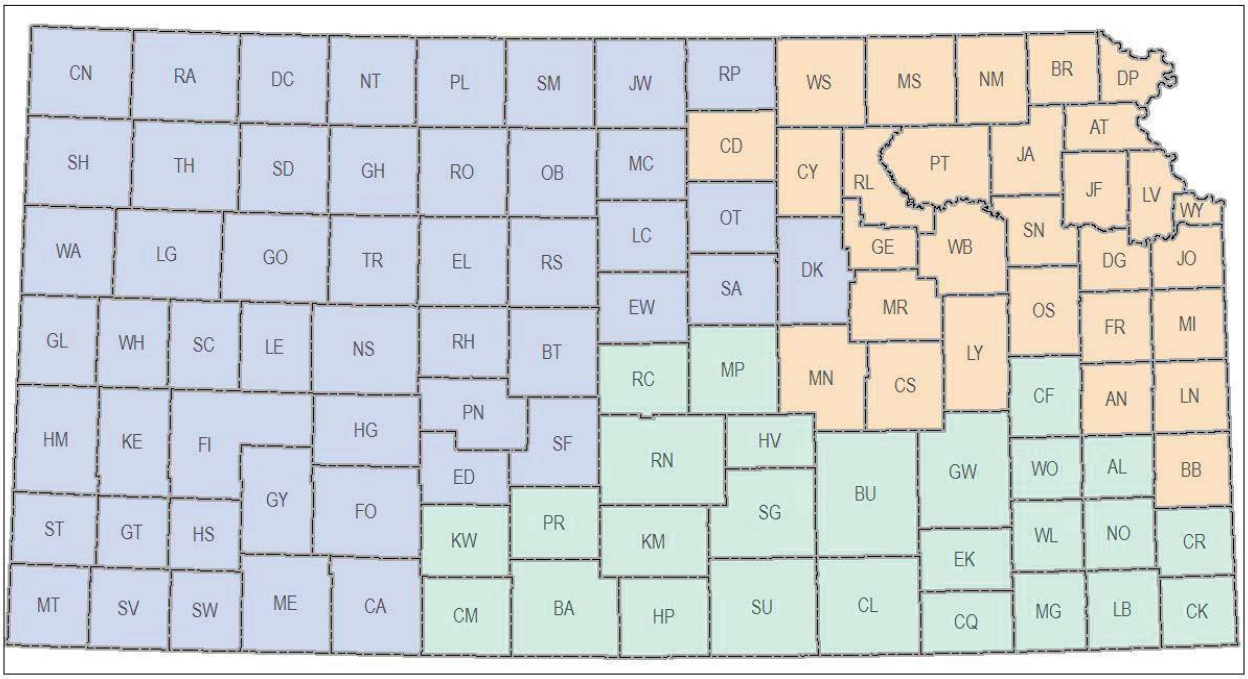
4. Kansas Surface Water Maps:
   http://www.kdheks.gov/befs/download/2006_Surface_Water_Register_Maps.pdf

5. Surface Water Quality Standards- K.A.R. 28-16-28b through g:
   http://www.kdheks.gov/water/download/kwqs_plus_supporting.pdf

6. KDHE District Offices- http://www.kdheks.gov/befs/dist_office.html
   The Kansas Department of Health and Environment, Bureau of Water-Watershed Management Section at: 785/296-4195 or FAX 785/296-5509. This information can also be obtained by written communication directed to:

   Kansas Department of Health and Environment
   Bureau of Water - Watershed Management Section
   1000 SW Jackson Street, Suite 420
   Topeka, Kansas 66612-1367 or email: **nps@kdhe.state.ks.us**

ATTACHMENT 1 – Contact Information for KDHE Watershed Field Coordinators



Beth Rowlands 800 West 24th St., Lawrence, KS 66046 - (785) 842-4600 - browland@kdheks.gov

Doug Schneweis 2301 East 13th St., Hays, KS 67601 - (785) 625-5663 - dschnewe@kdheks.gov

Richard Basore 130 South Market St., Wichita, KS 67202 - (316) 337-6020 - rbasore@kdheks.gov

July 2010

APPENDIX G

Agency Coordination and Public Comments

From: Jackson, Kyle
To: Name, Chris NWK
Subject: [EXTERNAL] Re: LWCF - Salina (UNCLASSIFIED)
Date: Wednesday, January 21, 2015 10:33:17 AM

Hi Chris,

I apologize for the delay in responding to your messages. I have discussed this project with Linda Lanterman, Director of the Kansas State Park Division. We both agree that the circumstances of this project do not yet necessitate a permit for temporary non-conforming use. We agree with you that the city would need to request approval for temporary non-conforming use if the project encroaches further into the LWCF protected boundary. At this time, the project appears to have an insignificant impact on recreation within the LWCF boundary, and potentially will have no impact at all. Please keep us updated on any progress.

Have a good morning,
Kyle Jackson

On Tue, Jan 20, 2015 at 8:47 AM, Name, Chris NWK <Chris.Name@usace.army.mil> wrote:

Classification: UNCLASSIFIED
Caveats: NONE

Kyle,

I was wondering where we are at with the LWCF boundary and our project in Salina? The City of Salina's park's parcel stops at the water's edge of the river and the contractor would only disturb the left bank if additional access was needed. The plan is to perform the sill installation from the right bank. Could we leave this as the contractor would need to get a request approval for "Temporary Non-conforming Use" if they utilize this area. Would the Corps need to get a request approval for the sill bank tie-in location?

This contract will likely be awarded soon so please get back with me as soon as you can. Please feel free to call my number below if need be.

Thanks,

Chris Name
Biologist PM-PR
U.S. Army Corps of Engineers -- Kansas City District
601 E 12th Street
Kansas City, Mo 64106

Office (816)-389-3829 <tel:%28816%29-389-3829>
Cell (660)-528-2197 <tel:%28660%29-528-2197>

-----Original Message-----
From: Name, Chris NWK
Sent: Thursday, December 11, 2014 8:16 AM
To: 'Jackson, Kyle'
Subject: LWCF - Salina (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Hello Kyle,

I'm sending this email to follow up on my previous email. No pressure here. This time of year always seems hectic, at least for me that is. Anyway, let me know when you have the best course of action to move forward.

Thanks for your assistance,

Chris Name
Biologist PM-PR
U.S. Army Corps of Engineers -- Kansas City District
601 E 12th Street
Kansas City, Mo 64106

Office (816)-389-3829
Cell (660)-528-2197

-----Original Message-----
From: Name, Chris NWK
Sent: Wednesday, December 03, 2014 1:40 PM
To: 'Jackson, Kyle'
Subject: RE: [EXTERNAL] Re: salina PL84-99 project construction boundaries (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Kyle,

After speaking with our project manager about the park's parcel boundary, the City of Salina's park's parcel stops at the water's edge of the river according to our records from the city. I guess my question is where we go from here? The area circled in the imaged attached would only be impacted if the contractor would need to access the new sill wall from that side of the bank. The contractor would be responsible for setting up safety boundaries ect. for this area if they need it. This area would likely be untouched with no safety restrictions if the contractor doesn’t need to use it as a access point. It was put in our project boundary simply for that reason; a just in case they need it.

The bank tie-in location of the sill wall and the west bank is within the LWCF map boundary. This would be a permanent structure. The bank tie-in location doesn't have any recreation paths or fishing access points. It’s a very steep/dangerous location to walk down.

Could the Corps get a request for the bank tie-in area and require the contractor to request one if they need to used that area that was circled in the attachment?

Call me if you need to clarify this better. If it's not too much trouble I say the Corps get the "Temporary Non-conforming Use" request for the area. This could temporarily restrict parts of the recreational paths and some fishing access during construction phase. Does this request cover the permanent structure (new sill wall) that's to be build within the LWCF map boundary?

Thanks,

Chris Name
Biologist PM-PR
U.S. Army Corps of Engineers -- Kansas City District
601 E 12th Street
Kansas City, Mo 64106

Office (816)-389-3829
Cell (660)-528-2197

-----Original Message-----
From: Jackson, Kyle [mailto:kyle.jackson@ksoutdoors.com]
Sent: Tuesday, November 25, 2014 4:32 PM
To: Name, Chris NWK
Subject: Re: [EXTERNAL] Re: salina PL84-99 project construction boundaries (UNCLASSIFIED)

Hi Chris,

Thank you for the information. I apologize that I have not touched base with you sooner. I talked to the National Park Service a couple of weeks ago about this project. They said that based on the preliminary project maps, we may want to request approval for "Temporary Non-conforming Use". These requests are typically used for projects that will temporarily (< 6 months) impact or restrict the recreational use in a portion of a LWCF protected park.

To determine whether or not we need to seek approval, I will need a little more information about the project. We will not be concerned with the north project boundary, since it is not within the LWCF 6(f) protected area. Our concern will be whatever happens within the boundary of the Sports Complex area south of the inlet channel. Do you know if any of the trails/sidewalks/fishing access points in that area would be closed due to the safety zones?

Also, do you know if the city park's parcel includes portions of the river? My LWCF maps show half of the river within the park boundary, but the Saline County land parcel website shows this might not be the case. It actually show the parcel abutting the river instead of including it. Let me know if you have any information about this. Feel free to call me if you need.

Have a good afternoon,
Kyle J
620-672-0740

On Tue, Nov 25, 2014 at 9:28 AM, Name, Chris NWK <Chris.Name@usace.army.mil> wrote:

Classification: UNCLASSIFIED
Caveats: NONE

Hello Kyle,

No rush on this project, but I wanted to email you to check on the status from our previous email. After checking, I don't be believe I ever sent you a reply. This is my fault. I wanted to send my response email through the projects manager prior to sending it to you. Here is that response that I never sent:

During construction of the proposed project located on the Smoky Hill River, Salina, Kansas, a "safety zone" as needed within the project boundaries would likely be in place until the project is completed. All Indian Rock park recreation activities inside of the construction boundaries would be temporarily limited within and/or along the river.

Any questions let me know. Did you ever find out if a waiver or other documentation is needed for the federally protected boundary?

Again I apologize for not sending this in a timely manner.

Thank you for your time,

Chris Name
Biologist PM-PR
U.S. Army Corps of Engineers -- Kansas City District
601 E 12th Street
Kansas City, Mo 64106

Office (816)-389-3829 <tel:%28816%29-389-3829> <tel:%28816%29-389-3829>
Cell (660)-528-2197 <tel:%28660%29-528-2197> <tel:%28660%29-528-2197>

-----Original Message-----
From: Jackson, Kyle [mailto:kyle.jackson@ksoutdoors.com]
Sent: Thursday, October 30, 2014 12:44 PM
To: Name, Chris NWK
Subject: [EXTERNAL] Re: salina PL84-99 project construction boundaries (UNCLASSIFIED)

Hi Chris,

I thought I would send my initial assessment to you, since this might impact how we proceed. I have attached a map of what I have interpreted to be the approximate federal 6(f) boundary associated with the LWCF project. The boundary is outlined in red. You will notice that the boundary only includes the sports complex to the south of Indian Rock Park. The good news is that the federal LWCF boundary does not include any of your northern project boundary. This means that the proposed staging area should be fine. It seems that the only portions of your project that will occur within the 6(f) boundary are the construction of the new cut-off wall, and the potential use of the inlet channel.

At this time, I am not sure what (if anything) we will have to do to approve the project through NPS. I am going to talk to our NPS officer to get some answers. I will let you know as soon as I have more information. I am sure they will ask if the new cut-off wall will have any negative impact on recreation within the river. Could you provide me with a couple of sentences about what those impacts might be? Let me know if you have any questions.

Have a good afternoon,

Kyle Jackson

On Thu, Oct 30, 2014 at 9:31 AM, Name, Chris NWK <Chris.Name@usace.army.mil> wrote:

Classification: UNCLASSIFIED
Caveats: NONE

Chris Name
Biologist PM-PR
U.S. Army Corps of Engineers -- Kansas City District
601 E 12th Street
Kansas City, Mo 64106

Office (816)-389-3829 <tel:%28816%29-389-3829> <tel:%28816%29-389-3829> <tel:%28816%29-389-3829>
Cell (660)-528-2197 <tel:%28660%29-528-2197> <tel:%28660%29-528-2197> <tel:%28660%29-528-2197>

Classification: UNCLASSIFIED
Caveats: NONE

--
Kyle Jackson
KDWPT State Parks Division
LWCF Grant Coordinator
Direct Phone: 620-672-0740

Classification: UNCLASSIFIED
Caveats: NONE

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Kyle Jackson
KDWPT State Parks Division
LWCF Grant Coordinator
Direct Phone: 620-672-0740

Classification: UNCLASSIFIED
Caveats: NONE

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Direct Phone: 620-672-0740