Karen Hardin
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Christine Polito

From: Karen Hardin <Karen.Hardin@tpwd.texas.gov>
Sent: Monday, July 20, 2015 1:18 PM
To: Christine Polito
Subject: TPWD Review of BEPC Oak Point 138-kV Study Area, TPWD Project 34767
Attachments: WL34767BEPCOakPoint138kVC07-20-2015.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Ms. Polito,

The Texas Parks and Wildlife Department comments regarding the above-referenced project are attached.

Sincerely,

Karen Hardin
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July 20, 2015

Ms. Christine Polito
Cox McClain Environmental Consulting
600 E. Carpenter Freeway, Suite 380
Irving, TX 75062

RE: Brazos Electric Power Cooperative Proposed Oak Point 138-kilovolt (kV) Transmission Line and Substation Project in Denton County
TPWD Project 34767

Dear Ms. Polito:

The Texas Parks and Wildlife Department (TPWD) received the request for review for potential impacts to fish and wildlife resources for the proposed transmission line and substation project referenced above.

TPWD, as the state agency with primary responsibility for protecting the state's fish and wildlife resources and in accordance with the authority granted by Parks and Wildlife Code §12.0011, hereby provides the following recommendations and informational comments to minimize the adverse impacts to the state's fish and wildlife resources in the routing, construction and operation of the proposed transmission and substation project.

A written response to a TPWD recommendation or informational comment received by a state governmental agency may be required by state law. For guidance, see the Texas Parks and Wildlife Code, Section 12.0011 at http://www.statutes.legis.state.tx.us/Docs/PW/htm/PW.12.htm#12.0011. Please refer to TPWD project number 34767 in return correspondence for this project.

TPWD Wildlife Habitat Assessment Program is now accepting projects through electronic submittal. Future project review requests can be submitted to WHAB@tpwd.texas.gov. If submitting requests electronically, please include **unzipped** geographic location files when available (GIS shape file, .kmz, etc.).

Project Description

Brazos Electric Power Cooperative, Inc. (BEPC) proposes to construct approximately 5.5 to 11 miles of double circuit 138-kV transmission line with single-pole structures from a new five-acre substation to be located at one of several potential locations along or near FM 720 in the vicinity of Oak Point in eastern Denton County and proceeding north to one of several potential tap points along an existing BEPC 138-kV transmission line located southeast of Krugerville in northeastern Denton County. Cox McClain Environmental Consulting (Cox

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McClain) is in the process of preparing an Environmental Report (ER) and route study to support an application for a Certificate of Convenience and Necessity (CCN) from the Public Utility Commission (PUC).

June 5, 2015, Cox McClain provided aerial photograph and topographic maps of four preliminary substation locations, four preliminary tap points, and preliminary route segments. On July 14, 2015, at the request of TPWD, Cox McClain provided electronic shapefiles of the study area, preliminary route segments, tap points and substation locations, which included an updated map with revised substation locations and route alternatives. Because environmental impact data for each of the preliminary route segments, tap points and substation locations were not included in the information provided, a full assessment of the route segments, tap points and substation locations were not possible. Therefore, most of the information below addresses the general area to assist in identifying additional constraints and guide the substation, tap point and alternative route selection process.

Recommendation: TPWD recommends using existing transmission facilities whenever possible. Where new construction is the only feasible option, TPWD recommends routing new transmission lines along existing roads, pipelines, transmission lines, or other utility rights of way (ROW) to reduce habitat fragmentation. By utilizing existing utility corridors and road ROWs, adverse impacts to fish and wildlife resources would be reduced by avoiding and/or minimizing the impacts to undisturbed habitats. Following property lines and fencelines are not minimization measures generally recommended by TPWD because many property lines and fencelines do not typically contribute to existing habitat fragmentation. Please review the *TPWD Recommendations for Electrical Transmission/Distribution Line Design and Construction,* which can be found at http://www.tpwd.texas.gov/huntwild/wild/wildlife_diversity/habitat_assessment/media/tpwd_electrical_transmission.pdf, and incorporate the measures into design and construction plans, where feasible.

Federal Regulations

Migratory Bird Treaty Act (MBTA)

The MBTA prohibits taking, attempting to take, capturing, killing, selling/purchasing, possessing, transporting, and importing of migratory birds, their eggs, parts and nests, except when specifically authorized by the Department of the Interior. The U.S. Fish and Wildlife Service (USFWS) Migratory Bird Office can be contacted at (505) 248-7882 for more information on potential impacts to migratory birds.

The project area is located between two arms of the U.S. Army Corps of Engineers (USACE) Lewisville Lake Project. Some creeks, small lakes, wetlands and stock ponds are located in the study area.

Birds typically establish flight corridors along and within river and creek drainages. Riparian corridors, creeks, wetlands, and lakes provide habitat for a host of wildlife species including wading birds, waterfowl and predator species. There is potential for collision of large-bodied wading birds, waterfowl and avian predators with electrical wires near water features.

Measures should be taken to ensure that migratory bird species within and near the project area are not adversely impacted by construction, maintenance, and operation activities. If migratory bird species are found nesting in or adjacent to the project area, they must be dealt with in a manner consistent with the MBTA.

Recommendation: TPWD recommends BEC route transmission lines to avoid crossing riparian areas, wetlands, and open water habitat, to the extent feasible. Where lines must cross or be located near creeks, drainages, wetlands, and lakes, TPWD recommends line markers be installed at the crossings or closest points to the drainages to reduce potential collisions by birds flying along or near the drainages. To prevent electrocution of perching raptors, raptor protection measures such as adequate conductor spacing, perch guards, and insulated jumper wires should also be used.

For additional information, please see the guidelines published by USFWS and the Avian Power Lines Interaction Committee (APLIC) in the updated state-of-the-art guidance document *Reducing Avian Collisions with Power Lines: State of the Art in 2012.* This manual identifies best practices and provides specific guidance to help electric utilities and cooperatives reduce bird collisions with power lines. A companion document, *Suggested Practices for Avian Protection on Power Lines*, was published by APLIC and the USFWS in 2006. For more information on both documents, please visit www.aplic.org.

Nesting dates for herons and egrets generally range from early February to late August in Texas, depending on the species. Great blue herons (GBH) are usually the first to nest. When GBH get disrupted from the nest and abandon nesting, other species of herons and egrets may not attempt to nest at the colony that year.

Recommendation: If rookeries or heronries are identified within the study area or in the vicinity of a route, TPWD recommends a primary buffer area of 300 meters (984 feet) from the heronry periphery to avoid any vegetation clearing as a protection measure to protect the heronry and its habitat. TPWD recommends re-routing, adjusting, or narrowing transmission line ROW to avoid clearing within this buffer area. Utilizing areas that have already been cleared within this buffer area may be acceptable depending on site-specific

characteristics. Additionally, TPWD recommends that human foot traffic or machinery use not occur within this buffer area during the nesting season.

Recommendation: TPWD recommends a secondary buffer area of 1000 meters (3281 feet) from the heronry periphery to avoid clearing activities or construction using heavy machinery during the breeding season (courting and nesting).

Bald and Golden Eagle Protection Act (BGEPA)

The BGEPA prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" Bald Eagles (*Haliaeetus leucocephalus*), including their parts, nests, or eggs. The BGEPA provides criminal penalties for persons who take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any Bald Eagle ... [or any Golden Eagle], alive or dead, or any part, nest, or egg thereof. The BGEPA defines "take" as pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.

Recommendation: TPWD recommends that route alternatives in the vicinity of lakes and rivers be assessed for nesting, foraging, or roosting habitat for the Bald Eagle. For protection of Bald Eagles, please refer to the USFWS National Bald Eagle Management Guidelines http://www.fws.gov/midwest/eagle/guidelines/index.html. When potential impacts to the Bald Eagle are anticipated, TPWD recommends consultation with USFWS – Arlington Ecological Services at (817) 277-1100 regarding compliance with the BGEPA. TPWD also recommends consultation with TPWD because the Bald Eagle is state-listed as threatened.

Endangered Species Act (ESA)

Federally-listed animal species and their habitat are protected from "take" on any property by the ESA. Take of a federally-listed species can be allowed if it is "incidental" to an otherwise lawful activity and must be permitted in accordance with Section 7 or 10 of the ESA. Federally-listed plants are not protected from take except on lands under federal jurisdiction or for which a federal nexus (i.e., permits or funding) exists. Please note that state law includes protections for federally-listed plants on state property or on projects for which there is a state nexus. Take of a federally-listed species or its habitat without allowance from USFWS is a violation of the ESA. The USFWS rare species lists can be obtained by choosing *Initial Project Scoping* at http://ecos.fws.gov/ipac/.

Recommendation: TPWD recommends that the EA identify the federally-listed and candidate species with potential to occur within the study area. TPWD recommends BEC conduct site surveys of the route alternatives to identify suitable habitat for federally-listed species, to assess potential impacts

to federally-listed species, and to determine route adjustments to avoid or minimize adverse impacts to federally-listed and candidate species.

Recommendation: If impact to a federally-listed species is anticipated, TPWD recommends that BEC consult with USFWS – Arlington Ecological Services pursuant to the ESA. The USFWS should be contacted for additional species occurrence data, guidance, permitting, survey protocols, and mitigation for federally-listed species.

As shown on the enclosed Figure 1 the project study area is located within the approximately 200-mile wide corridor in which 95 percent of sightings of the Aransas/Wood Buffalo flock of the federal- and state-listed endangered Whooping Crane (*Grus americana*) have been documented during migration. Safe access to stopover sites is critical for the migration of Whooping Cranes. Please note that the only naturally-occurring population of the Whooping Crane in the wild is the Aransas/Wood Buffalo flock which contained an estimated 279 individuals in 2011 and more than 250 individuals in 2013.

Collisions with power lines are the greatest known source of mortality for fledged Whooping Cranes and have accounted for the death or serious injury of approximately 46 Whooping Cranes since 1956. During migratory stopovers, Whooping Cranes use wetland habitats such as marshes, small ponds, lake edges, and some river habitat. Suitable Whooping Crane stopover habitat may be located within or near the project study area.

Recommendation: TPWD recommends that BEC avoid locating lines near areas that may provide potential stopover habitat for Whooping Cranes during migration. TPWD recommends that areas of proposed transmission line routes be evaluated for potential Whooping Crane migration stopover habitat. Areas of potential stopover habitat should be considered as avoidance areas for proposed lines to reduce potential collisions and to minimize potential impacts to this endangered species. For additional information regarding the Whooping Crane and threats to this species, please contact Dr. Wade Harrell, the USFWS Whooping Crane Recovery Coordinator, at (361) 286-3559.

Clean Water Act (CWA)

Section 404 of the Clean Water Act establishes a federal program to regulate the discharge of dredge and fill material into the waters of the U.S., including wetlands. The USACE and the Environmental Protection Agency are responsible for regulating water resources under this act. Although the regulation of isolated wetlands has been removed from the USACE permitting process, both isolated and jurisdictional wetlands provide habitat for wildlife and help protect water quality.

Recommendation: If the proposed project would impact waterways or associated wetlands, TPWD recommends consulting with the Regulatory Branch of the Fort Worth District of the USACE at (817) 886-1731 pursuant to the CWA, including jurisdictional determinations, delineations, and mitigation. Waterways, floodplains, riparian corridors, lakes, and wetlands provide valuable wildlife habitat and TPWD recommends protecting them to the maximum extent possible. TPWD recommends allowing natural buffers contiguous to wetlands or aquatic systems to remain undisturbed to preserve wildlife cover, food sources, and travel corridors. During construction, trucks and equipment should use existing bridges to cross creeks. TPWD recommends avoiding disturbance to inert microhabitats in waterways such as snags, brush piles, fallen logs, creek banks, pools, and gravel stream bottoms, as these provide habitat for a variety of fish and wildlife species and their food sources. Erosion control measures should be installed prior to construction and maintained until disturbed areas are permanently revegetated using site specific native vegetation.

State Regulations

State-listed Species

Section 68.015 of the Parks and Wildlife Code regulates state-listed species. Please note that there is no provision for take (incidental or otherwise) of state-listed species. The *TPWD Guidelines for Protection of State-Listed Species*, which includes a list of penalties for take of species, can be found at http://www.tpwd.texas.gov/huntwild/wild/wildlife_diversity/habitat_assessment/media/tpwd_statelisted_species.pdf. For purposes of relocation, surveys, monitoring, and research, terrestrial state-listed species may only be handled by persons permitted through the TPWD Wildlife Permits Office. For the above-listed activities that involve aquatic species please contact the TPWD Kills and Spills Team (KAST) for the appropriate authorization. For more information, visit http://www.tpwd.texas.gov/business/permits/land/wildlife/research/ and http://www.tpwd.texas.gov/landwater/water/environconcerns/kills_and_spills/regions/.

The Texas Natural Diversity Database (TXNDD) is intended to assist users in avoiding harm to rare species or significant ecological features. Given the small proportion of public versus private land in Texas, the TXNDD does not include a representative inventory of rare resources in the state. Please note that absence of information in the database does not imply that a species is absent from that area. Although it is based on the best data available to TPWD regarding rare species, the data from the TXNDD do not provide a definitive statement as to the presence, absence or condition of special species, natural communities, or other significant features within your project area. These data are not inclusive and **cannot be used as presence/absence data.** This information cannot be substituted for on-the-ground surveys. The TXNDD is updated continuously

based on new, updated and undigitized records. For questions regarding a record or to obtain digital data, please contact TexasNatural.DiversityDatabase@tpwd.texas.gov.

The TXNDD identified no known occurrences of state-listed species within the study area and identified two known occurrences of the following state-listed threatened freshwater mussels within ten miles of the study area, see Figure 2 map:

Sandbank pocketbook (*Lampsilis satura*): Element Occurrence (EOID) 9770
Texas Heelsplitter (*Potamilus amphichaenus*): EOID 9883

Recommendation: TPWD recommends that BEPC ensure protection of state-listed freshwater mussels during construction activities by avoiding placement of temporary fills or culverts into waters serving as suitable habitat for state-listed freshwater mussels. TPWD recommends designing routes to avoid placement of permanent structures in streams and other waters. If construction occurs during times when water is present in streams and dewatering, fill, or trampling activities are involved, then TPWD recommends relocating potentially impacted native aquatic resources in conjunction with a *Permit to Introduce Fish, Shellfish or Aquatic Plants into Public Waters* and an Aquatic Resource Relocation Plan (ARRP). The ARRP should be completed and approved by the department 30 days prior to dewatering and/or resource relocation and submitted with an application for a no-cost *Permit to Introduce Fish, Shellfish, or Aquatic Plants into Public Waters.* ARRPs can be submitted to Greg Conley or Adam Whisenant, TPWD Region 2 KAST. Please contact Greg Conley at 903-566-2518 or Greg.Conley@tpwd.texas.gov or Adam Whisenant at 903-566-8387 or Adam.Whisenant@tpwd.texas.gov for more information or to initiate coordination.

TPWD Annotated County Lists of Rare Species are available at http://tpwd.texas.gov/gis/rtest/. These lists provide information regarding state-listed and rare species that have potential to occur within each county in Texas. State-listed species could potentially be impacted if suitable habitat is present at or near the project site.

Recommendation: TPWD recommends that the EA identify the state-listed species with potential to occur within the study area. TPWD recommends BEPC conduct site surveys of the route alternatives to identify suitable habitat for state-listed species, to assess potential impacts to state-listed species, and to determine route adjustments to avoid or minimize adverse impacts to state-listed species that are identified on the TPWD list for Denton County.

Recommendation: Because snakes are generally perceived as a threat and killed when encountered during clearing or construction, TPWD recommends

BEPC inform employees and contractors of the potential for the state-listed threatened Timber rattlesnake (*Crotalus horridus*) to occur in the study area. Contractors should be advised to avoid impacts to this and other snakes. Compared to other rattlesnakes, the Timber rattlesnake is a rather docile species. Injury to humans usually occurs when the snake becomes agitated following harassment or when someone attempts to handle a recently dead snake that still contains its bite reflex. Therefore, contractors should avoid contact with the species if encountered and allow the snake to safely leave the premises. Please note that this snake and other state-listed species may only be handled by persons permitted through the TPWD Wildlife Permits Office.

Recommendation: For soil stabilization and/or revegetation of disturbed areas within the proposed project area, TPWD recommends erosion and seed/mulch stabilization materials that avoid entanglement hazards to snakes and other wildlife species. Because the mesh found in many erosion control blankets or mats pose an entanglement hazard to wildlife, particularly snakes, TPWD recommends the use of no-till drilling, hydromulching and/or hydroseeding rather than erosion control blankets or mats due to a reduced risk to wildlife. If erosion control blankets or mats will be used, the product should contain no netting or contain loosely woven, natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic mesh matting should be avoided.

Of the species listed, the state-threatened Texas horned lizard (*Phrynosoma cornutum*) is more at risk for being impacted by construction activities due to its limited mobility and because it hibernates underground. Texas horned lizards are generally active from mid-April through September. At that time of year, they may be able to avoid slow (less than 15 miles per hour) moving equipment, although when a threat is perceived they often flatten themselves against the ground to blend into their surroundings. The remainder of the year, this species hibernates only a few inches underground and will be susceptible to earth moving equipment and compaction.

Recommendation: TPWD recommends BEPC survey the project area to determine the potential of the site to support state-listed species or their habitat, including the Texas horned lizard. Please be aware that species not occurring during site surveys may utilize the habitat within the project area at times beyond those during which the survey was conducted, such as seasonally or nocturnally.

Recommendation: If the site is found to contain unavoidable habitat of the Texas horned lizard, then TPWD recommends a biological monitor be present during clearing and construction activities to relocate Texas horned lizards encountered during construction. If the presence of a biological monitor during construction is not feasible, state-listed threatened species observed during construction should be allowed to safely leave the site.

Impact avoidance and minimization measures to protect state-listed species can be chosen based on species and their habitat. For instance, with transmission line projects, aquatic species can be protected by avoiding placement of structures or equipment in wetlands and streams, by spanning wetlands and streams, by retaining riparian and stream vegetation, by employing sediment controls, and by utilizing existing road and bridge crossings rather than creating temporary roads and culverted crossings.

Many mitigation strategies can be utilized for avian and terrestrial species including, but not limited to:

- Avoiding vegetation clearing by co-locating the proposed transmission line onto existing transmission line structures and ROW.
- Reducing fragmentation and edge effect impacts by placing the route within or parallel to an existing utility or road ROW, *except* when placing the line along an existing ROW would have a greater impact on natural resources.
- Routing the line through non-native grassland and previously cleared areas to avoid native habitats and to avoid forest clearing, thus strategically placing the route away from native grasslands and bottomland, riparian, and upland woodlands.
- Mitigating avian collisions by reducing the number of stream and wetland crossings and appropriately marking lines.
- Fencing areas for exclusion or flagging areas to prevent disturbance when sensitive species or habitats are located within the proposed ROW.
- Reducing risk of injury or harm to state-listed species by educating BEPC and contract personnel about the state-listed species with potential to occur and establishing company policies regarding wildlife encounters within the ROW during construction, operation and maintenance.
- Planting and maintaining the ROW with native species of grasses, forbs, and shrubs for the benefit of wildlife.

Recommendation: TPWD recommends that the EA identify impact avoidance and minimization measures that would be employed to protect state-listed species that may occur within the study area.

Parks and Wildlife Code, Chapter 26

Chapter 26 of the Parks and Wildlife Code requires that before a state agency can approve any project that will result in the use or taking of public land designated and used as a park, public recreation area, scientific area, wildlife refuge, or historic site, that state agency must provide certain notices to the public, conduct a hearing, and render a finding that there is no feasible and prudent alternative and that the project includes all reasonable planning to minimize harm to the property.

The TPWD maintains a statewide inventory of Land and Water Resources Conservation and Recreation Plan (LWRCRP) data depicting conservation and recreation lands in Texas, which can be found at http://www.tpwd.texas.gov/gis/apps/lwrcrp//. No TPWD owned properties were identified within the study area; however Figure 3 depicts the following properties within the study area that may be subject to Chapter 26: City of Little Elm Narrow Lake Park, USACE Lewisville Lake Project Lands and Parks, USACE Ray Roberts Lake Project Lands and Parks including the TPWD-managed Ray Roberts Lake State Park.

Recommendation: TPWD recommends avoiding lands owned or managed for conservation or recreation by county, city, state, and/or federal entities such as the USFWS, USACE, US Department of Agriculture Forest Service, and the Texas Historical Commission. Such entities should be contacted early in the planning process to determine if a transmission line may impact their property.

Conservation Easements

A conservation easement is a legal agreement between a landowner and a land trust or governmental agency that permanently limits uses of the land (including future fragmentation) to protect and conserve the land's natural values such as fertile soils, mature trees, and wildlife habitat. Lands with conservation easements protect existing wildlife habitat from future fragmentation and therefore have greater environmental integrity than comparable lands without conservation easements. Fragmentation of wildlife habitat from transmission line construction on properties where conservation agreements serve to protect the state's natural resources now and in the future is of concern to TPWD.

Recommendation: TPWD recommends properties protected by conservation easements be identified in the constraints analysis and avoided during development of alternative routes. Data sources for the location of these properties include online databases such as the Protected Areas Data Portal at http://gapanalysis.usgs.gov/padus/ and the National Conservation Easement Database at http://conservationeasement.us/, although these data sources are incomplete and county records may need to be referenced to determine the location of properties with conservation easements. If properties protected by conservation easements would be affected, TPWD recommends the length of routes through these properties be included in any accounting of alternative route impacts presented in the ER.

Recommendation: For protection of natural resources, TPWD recommends BEPC avoid routing through sites that are enrolled in conservation easements through governmental or non-governmental conservation organizations. TPWD also recommends avoiding impacts to existing mitigation banks if they occur within the study area.

State Fish and Wildlife Resources

The Texas Conservation Action Plan (TCAP) provides guidance toward addressing Species of Greatest Conservation Need (SGCN) and important habitats and includes a statewide handbook as well as handbooks for each ecoregion of the state. To help guide your planning efforts, information on the TCAP, handbooks and lists of SGCN can be found at http://www.tpwd.texas.gov/landwater/land/tcap/. The TCAP identifies priority habitats as well as priority issues such as power development and transmission issues and non-native invasive species that can impact native species and habitats. The TCAP ecoregions crossed by the proposed project include the Cross Timbers and Texas Blackland Prairies.

In addition to federal- and state-threatened and endangered species, Texas contains over 1,300 species that are considered to be SCGN that, due to limited distributions and/or declining populations, may face threat of extirpation or extinction but lack the legal protections given to threatened or endangered species. Information regarding SGCN can be obtained at http://www.tpwd.texas.gov/huntwild/wild/wildlife_diversity/nongame/tcap/sgcn.p html. Special landscape features, natural plant communities, and SGCN are rare resources tracked by TPWD, and TPWD actively promotes conservation of these rare resources. TPWD considers it important to minimize impacts to special landscape features, natural plant communities, and SGCN to reduce the likelihood of endangerment.

The TXNDD identified a known occurrence of the Texas garter snake (*Thamnophis sirtalis annectens*) EOID 434, an SGCN, within the study area. Within ten miles of the study area, the TXNDD identified the following known occurrences of native grassland communities and a SGCN, see Figure 2 map:

- Little Bluestem – Indiangrass (*Schizachyrium scoparium – Sorghastrum nutans*) Series G2S2 Community, EOID 3741
- Mollisol Blackland Prairie (*Schizachyrium scoparium – Andropogon gerardii-Sorghastrum nutans— Bifora Americana* Mollisol Herbaceous Vegetation) Series G1G2SNR Community, EOID 11568

The Texas Blackland Prairies ecoregion once consisted of vast native grasslands that have become lost due to agricultural practices, development, and woody encroachment. With the loss of native grasslands, wildlife associated with grassland habitats have also declined. TPWD encourages landowners and land agents to conserve pockets of remaining native grassland habitats that are typically found along old railroad rights-of-way, forest edges and areas less accessible to cattle and plow. TPWD also encourages restoration of marginally degraded grasslands to promote wildlife diversity for grassland species. Unknown

native prairie remnants or less degraded pastures may occur within the project area.

Recommendation: TPWD recommends that precautions be taken to avoid impacts to SGCN, natural plant communities, native pasture, or special features when developing alternative routes and if encountered in the project ROW during construction and maintenance. Areas exhibiting a native grass and forbs component should be protected from disturbance and from introduction of non-native vegetation during construction, maintenance, and operation activities. Individual rare plants or areas found to contain rare plants should be clearly marked as avoidance areas prior to construction, maintenance and operation activities.

Recommendation: If native grassland remnants cannot be avoided by the proposed project activities, please contact TPWD to determine if prairie plants can be salvaged with assistance from our local Dallas-Fort Worth partners including the Texas Master Naturalist program, Fort Worth Nature Center, the Native Prairies Association of Texas, and the Botanical Research Institute of Texas.

Vegetation

The Texas Ecological Systems Classification Project created the Ecological Mapping Systems of Texas (EMST) which contains maps that are downloadable by phase or ecoregion at http://www.tpwd.texas.gov/gis/data/downloads#EMS-T. The EMST is a land classification map for Texas which can assist in planning projects to avoid impacts to important habitats or SCGN in an ecoregion.

Recommendation: TPWD recommends incorporating land classification information from the EMST into the ER to assist with avoiding, minimizing or mitigating impacts to habitats in the project area. For assistance with EMST, please contact Ms. Amie Treuer-Kuehn of the TPWD GIS Lab at Amie.Treuer-Kuehn@tpwd.texas.gov.

Aerial imagery and vegetation cover mapping from the EMST indicate the dominant cover types within the study area are:

- Savanna grassland and post oak forest in the Cross Timbers
- Disturbance or tame grassland in the Texas Blackland Prairies
- Agriculture and other human-related, azonal subsystems including low intensity urban areas
- Floodplain hardwood forest and herbaceous vegetation along major creeks

The study area also contains roadways, utility ROWs, rural residences, pastures, rangelands, streams and less dominant areas of high intensity urban, crops, swamps and native invasive deciduous woodlands.

Recommendation: TPWD recommends minimizing impacts to native vegetation during project design and construction. Areas exhibiting bottomland/riparian hardwood forests should be avoided to the extent feasible. TPWD recommends avoiding sensitive ecological areas, woodlands, and major stream corridors by widely buffering them from placement of the proposed transmission line and by routing through lower-quality habitat that has been converted to introduced pasture for livestock or has been previously fragmented by other development. TPWD recommends revegetating areas disturbed by project activities with site-specific native species to mitigate for unavoidable loss of native vegetation including pollinator species. Species appropriate for the study area can be found by accessing the Lady Bird Johnson Wildflower Center at http://www.wildflower.org/collections/.

Significant declines in the population of migrating monarch butterflies (*Danaus plexippus*) have led to widespread concern about this species and the long-term persistence of the North American monarch migration. Augmenting larval feeding and adult nectaring opportunities is part of an international conservation effort for the monarch.

Recommendation: TPWD recommends revegetation efforts include planting or seeding native milkweed (*Asclepias* spp) and nectar plants as funding and seed availability allow and scheduling ROW maintenance to occur once the seed from pollinator plants has been released.

Mitigation

TPWD recommends BEPC prepare a mitigation plan to provide compensatory mitigation for those habitats where impacts from the transmission line cannot be avoided or minimized. This would include impacts to species and habitats covered under federal law (wetlands and associated habitats, threatened or endangered species) and state resource habitat types not covered by state or federal law (riparian areas, isolated wetlands, native prairies). At a minimum, TPWD recommends a replacement ratio of 1:1 for state resource habitat types.

Mitigation plans can be developed after the selection of a route, when the acres of impact and the value of impacted habitats can be evaluated on-the-ground. However, mitigation costs and opportunities should be considered when selecting a route. Impact to federally-listed species and their habitats will need to be coordinated with the USFWS, and impact to jurisdictional wetlands will need to be coordinated with the USACE.

When assessing the alternative routes and substation locations for the ER, please consider TPWD's recommendations of this letter and minimize routes that cross waters, follow alongside streams, and fragment native habitat. TPWD will

provide input regarding the routes and substation locations once the ER has be finalized and submitted for our review.

Please provide TPWD with a copy of the ER and CCN application upon submittal to the PUC. I appreciate the opportunity to provide preliminary input on potential impacts related to this project and look forward to reviewing the ER. Please contact me at Karen.Hardin@tpwd.texas.gov or (903) 322-5001 if you have any questions.

Sincerely,

Karen B. Hardin
Wildlife Habitat Assessment Program
Wildlife Division

KBH:34767

Enclosures (3)

cc: Ms. Karen Hubbard, PUC (w/out attachments)

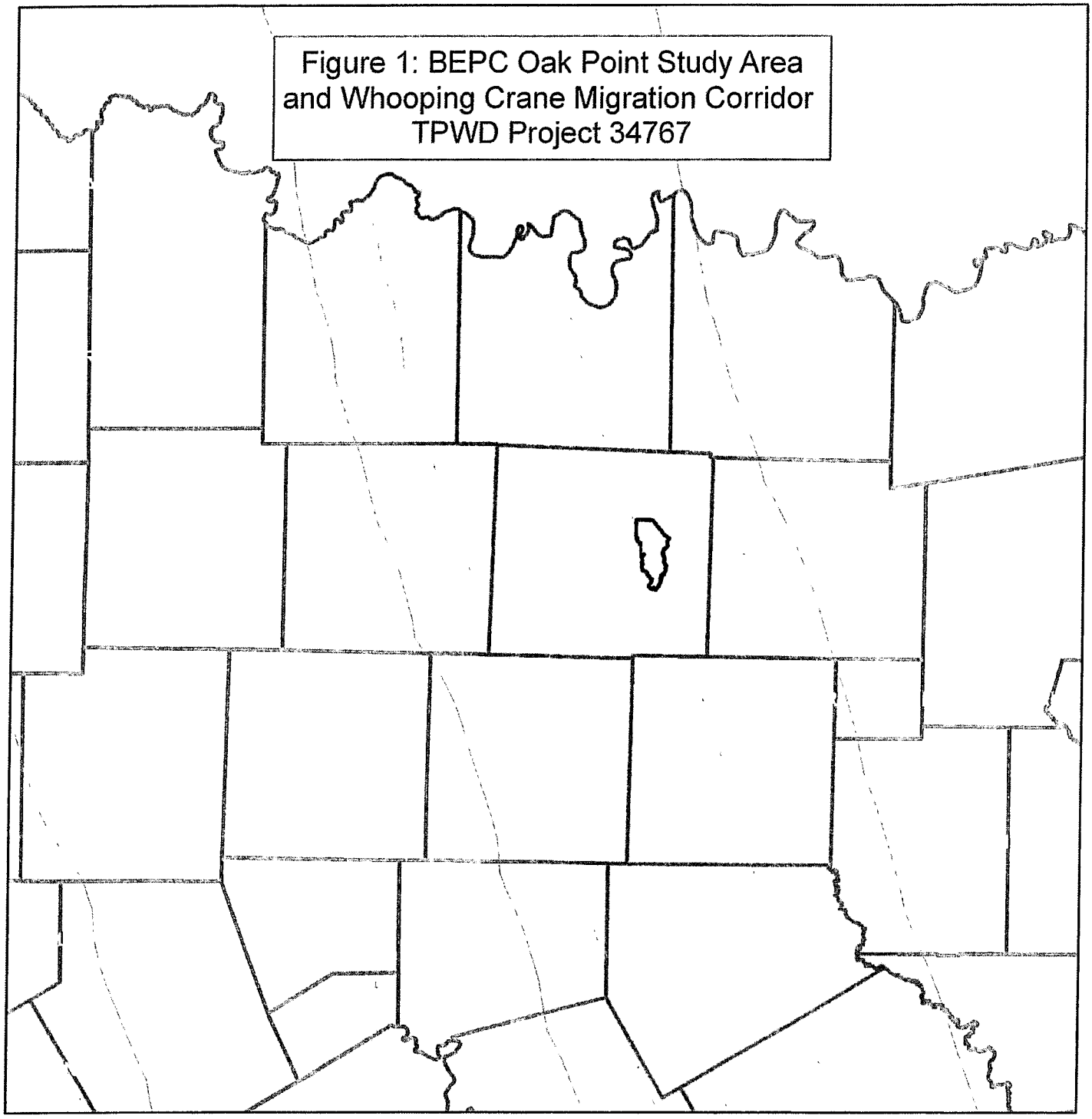
Figure 1: BEPC Oak Point Study Area
and Whooping Crane Migration Corridor
TPWD Project 34767
Legend
Study_Area
US_WC_corridor
prct
80 mi (75% of sightings)
100 mi (80% of sightings)
130 mi (85% of sightings)
170 mi (90% of sightings)
220 mi (95% of sightings)
N
W
E
S
20 July 2015
1 in = 23.67 miles
Map compiled by the Texas Parks and Wildlife Department, Wildlife Habitat Assessment Program. No claims are made to the accuracy of the data or to the suitability of the data to a particular use.
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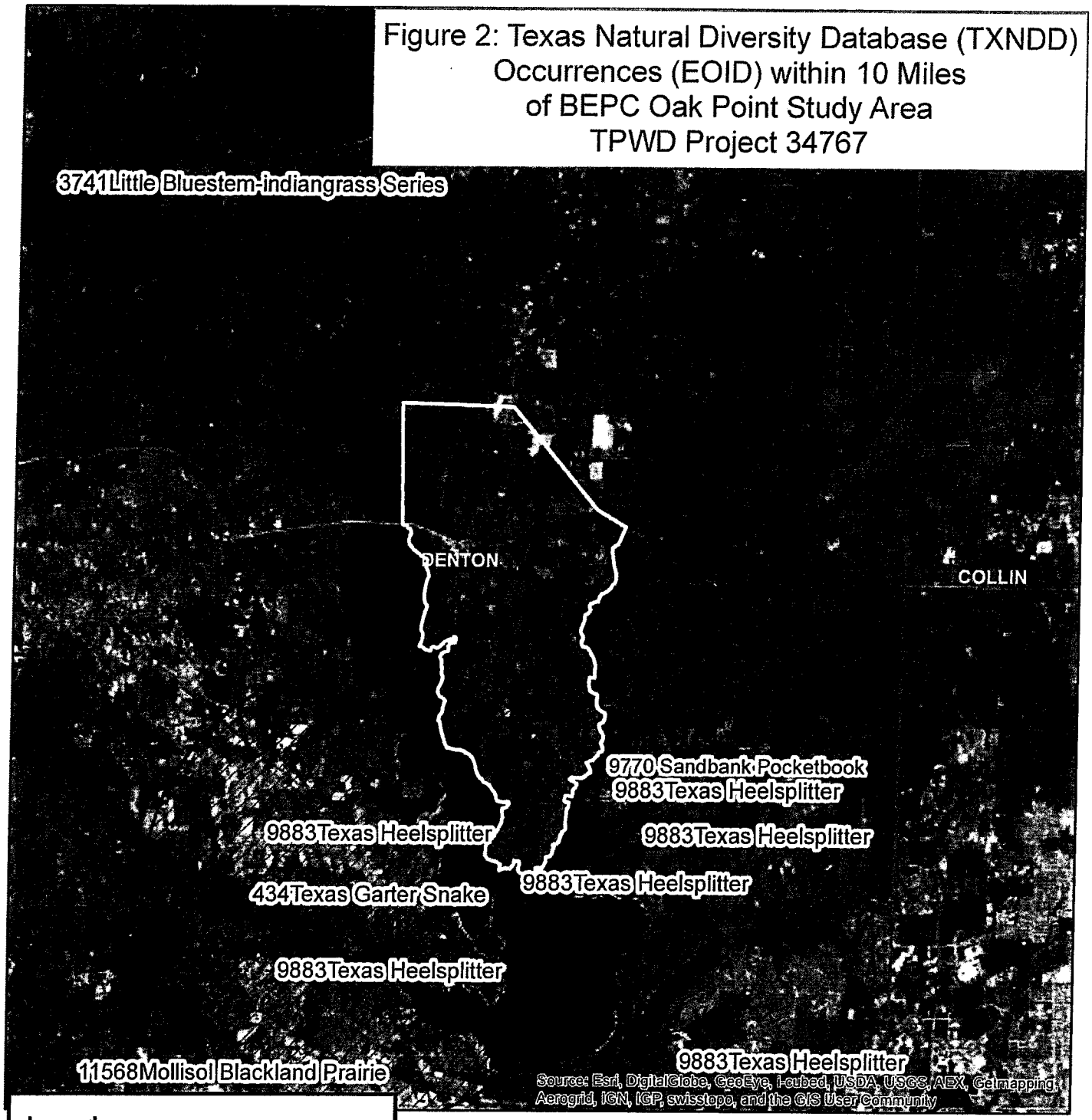
Figure 2: Texas Natural Diversity Database (TXNDD) Occurrences (EOID) within 10 Miles of BEPC Oak Point Study Area TPWD Project 34767



Legend

Study_Area

EO Type

- Animal Assemblage
- Internatl. Vegetation Classification
- Invertebrate Animal
- Nonvascular Plant
- Terrestrial Community - Other Classification
- Vascular Plant
- Vertebrate Animal

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20 July 2015 1 in = 3.49 miles

Map compiled by the Texas Parks and Wildlife Department, Wildlife Habitat Assessment Program. No claims are made to the accuracy of the data or to the suitability of the data to a particular use.

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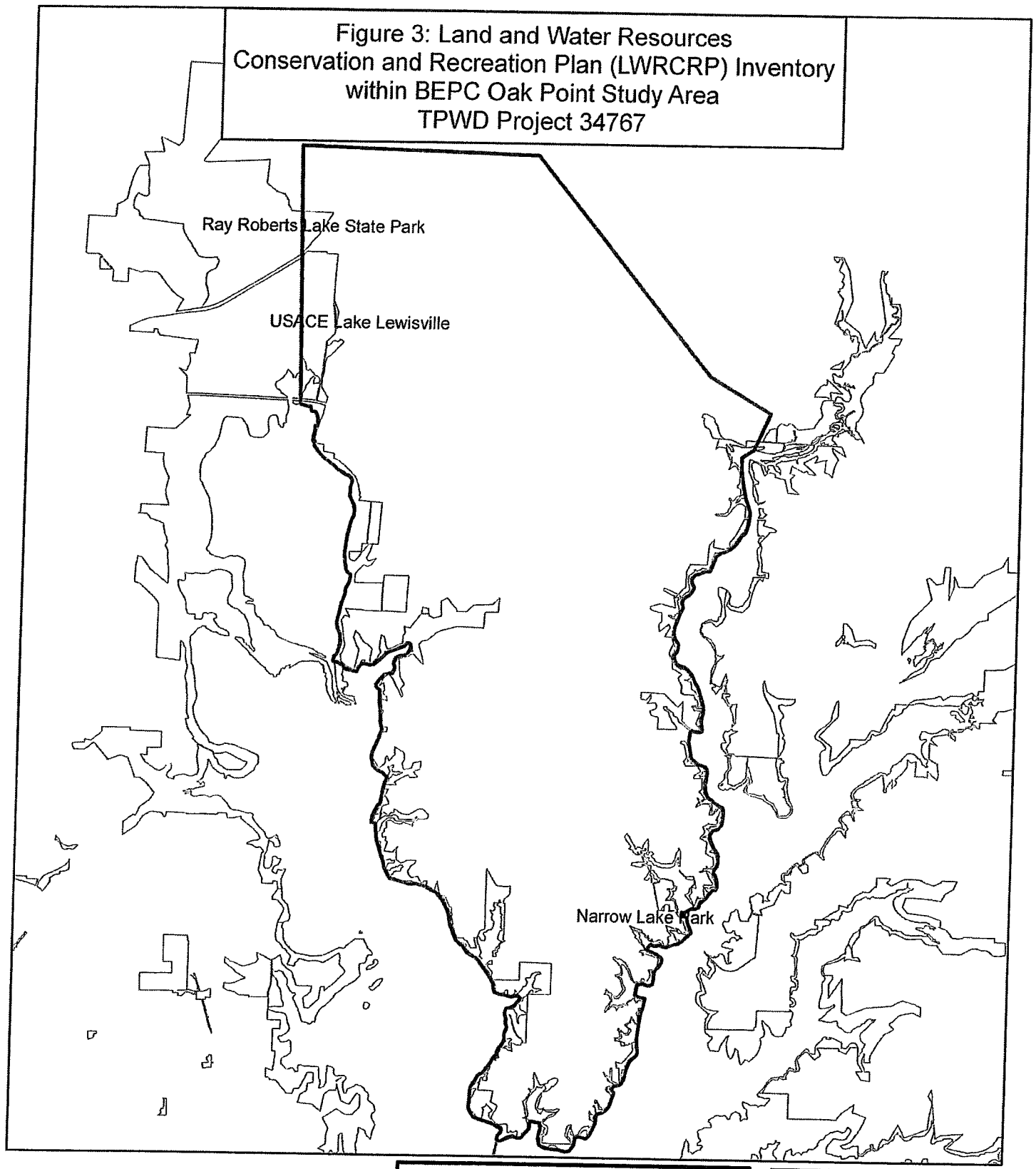
Figure 3: Land and Water Resources
Conservation and Recreation Plan (LWRCRP) Inventory
within BEPC Oak Point Study Area
TPWD Project 34767
Ray Roberts Lake State Park
USACE Lake Lewisville
Narrow Lake Park
Legend
Study_Area
BoundaryLWRCRP
N
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20 July 2015
1 in = 1.54 miles
Map compiled by the Texas Parks and Wildlife Department, Wildlife Habitat Assessment Program. No claims are made to the accuracy of the data or to the suitability of the data to a particular use.
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September 25, 2015

Karen B. Hardin
Wildlife Habitat Assessment Program
Wildlife Division
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, TX 78744

RE: Proposed Oak Point Transmission Line and Substation Project
Denton County, Texas
TPWD Project 34767

Dear Ms. Hardin:

Thank you for the recommendations you provided in your July 20, 2015 letter regarding Brazos Electric's proposed Oak Point Transmission Line and Substation Project. A copy of the Environmental Report (ER) for the project is enclosed for your review. The recommendations you provided have been incorporated into the ER, as appropriate, and responses to each of the recommendations are included below.

Recommendation #1

Texas Parks and Wildlife Department (TPWD) recommends using existing transmission facilities whenever possible. Where new construction is the only feasible option, TPWD recommends routing new transmission lines along existing roads, pipelines, transmission lines, or other utility rights-of-way (ROW) to reduce habitat fragmentation. By utilizing existing utility corridors and road ROWs, adverse impacts to fish and wildlife resources would be reduced by avoiding and/or minimizing the impacts to undisturbed habitats. Following property lines and fencelines are not minimization measures generally recommended by TPWD because many property lines and fencelines do not typically contribute to existing habitat fragmentation. Please review the *TPWD Recommendations for Electrical Transmission/Distribution Line Design and Construction*, which can be found at

http://www.tpwd.texas.gov/huntwild/wild/wildlife_diversity/habitat_assessment/media/tpwd_electrical_transmission.pdf, and incorporate the measures into design and construction plans, where feasible.

Response to Recommendation #1

New construction is the only feasible option for the proposed project. Brazos Electric considers routing factors outlined by the Public Utility Commission of Texas (PUCT) in PURA §37.056 and PUC Substantive Rule §25.101, as well as Brazos Electric's standard routing factors, as listed in Section 3.7 of the ER. Additional factors

considered by Cox|McLain Environmental Consulting, Inc., Brazos Electric's routing consultant, are also listed in Section 3.7 of the ER. During routing, attempts are made to place the transmission line routes along existing utility corridors and road ROWs as much as possible; however, it is not possible to avoid utilizing property lines and fencelines in some instances. Although it is not possible to avoid all impacts, we have tried to minimize habitat fragmentation and impacts to natural resources as much as possible, while still avoiding habitable structures and minimizing impacts to land uses which may exhibit incompatibility with transmission lines, such as airports/airstrips/heliports, surface irrigation, parks and recreation areas, and communication towers.

Recommendation #2

TPWD recommends Brazos Electric route transmission lines to avoid crossing riparian areas, wetlands, and open water habitat, to the extent feasible. Where lines must cross or be located near creeks, drainage, wetlands, and lakes, TPWD recommends line markers be installed at the crossings or closest points to the drainages to reduce potential collisions by birds flying along or near the drainages. To prevent electrocution or perching raptors, raptor protection measures such as adequate conductor spacing, perch guards, and insulated jumper wires should also be used.

For additional information, please see the guidelines published by USFWS and the Avian Power Lines Interaction Committee (APLIC) in the updated state-of-the-art guidance document *Reducing Avian Collisions with Power Lines: State of the Art in 2012*. This manual identifies best practices and provides specific guidance to help electric utilities and cooperatives reduce bird collisions with power lines. A companion document, *Suggested Practices for Avian Protection on Power Lines*, was published by APLIC and the U.S. Fish and Wildlife Service (USFWS) in 2006. For more information on both documents, please visit www.aplic.org.

Response to Recommendation #2

Minimization of the electrocution of raptors and other birds is addressed in Section 4.6. Topography, vegetation, and proximity are important factors considered by Brazos Electric during pre-construction planning to mitigate collisions of raptors and other birds with transmission lines, substations, switching stations, and associated ancillary equipment. In order to reduce raptor electrocutions, transmission lines and support structures will be designed and constructed in accordance with *Suggested Practices for Raptor Protection on Power Lines* (2006) and *Reducing Avian Collisions with Power Lines: State of the Art in 2012* by the Avian Power Line Interaction Committee. Further, Brazos Electric is committed to following raptor protection procedures as outlined in *Mitigating Bird Collisions with Power Lines*, a publication of the Avian Power Line Interaction Committee for the Edison Electric Institute (1994).

Recommendation #3

If rookeries or heronries are identified within the study area or in the vicinity of a route, TPWD recommends a primary buffer area of 300 meters (984 feet) from the heronry periphery to avoid any vegetation clearing as a protection measure to protect the heronry and its habitat. TPWD recommends re-routing, adjusting, or

narrowing transmission line ROW to avoid clearing within this buffer area. Utilizing areas that have already been cleared within this buffer area may be acceptable depending on site-specific characteristics. Additionally, TPWD recommends that human foot traffic or machinery use not occur within this buffer area during the nesting season.

Response to Recommendation #3

According to TXNDD data obtained for the project, no rookeries or heronries have been reported to occur within the study area. No rookeries or heronries were observed within the project area during the initial site assessment. No impacts to rookeries or heronries are anticipated as a result of the project. If, however, a rookery or heronry is identified within the project area, Brazos Electric will attempt to minimize impacts to it, following TPWD's recommendations as much as practicable. TPWD's recommendations were included in Section 4.6 of the ER.

Recommendation #4

TPWD recommends a secondary buffer area of 1,000 meters (3,281 feet) from the heronry periphery to avoid clearing activities or construction using heavy machinery during the breeding season (courting and nesting).

Response to Recommendation #4

See Response to Recommendation #3. TPWD's recommendation has been included in Section 4.6 of the ER.

Recommendation #5

TPWD recommends that route alternatives in the vicinity of lakes and rivers be assessed for nesting, foraging, or roosting habitat for the Bald Eagle. For protection of Bald Eagles, please refer to the USFWS National Bald Eagle Management Guidelines http://www.fws.gov/midwest/eagle/guidelines/index.html. When potential impacts to the Bald Eagle are anticipated, TPWD recommends consultation with USFWS – Arlington Ecological Services at (817) 277-1100 regarding compliance with the Bald and Golden Eagle Protection Act (BGEPA). TPWD also recommends consultation with TPWD because the Bald Eagle is state listed as threatened.

Response to Recommendation #5

The BGEPA is addressed in Section 4.6 of the ER. TPWD's recommendations regarding bald eagles have been incorporated into Section 4.5 of the ER. According to TXNDD data obtained for the project, no bald eagles have been reported within the study area. Bald eagles could migrate through the study area, but no nesting or wintering habitat for the species was identified during the initial habitat assessment. A more thorough habitat assessment will be performed for the final route to be selected by the PUCT, after right-of-entry is available. If, based on that assessment, any potential impacts to bald eagles are identified, then Brazos Electric would consult with USFWS and TPWD.

Recommendation #6

TPWD recommends that the ER identify the federally listed and candidate species with potential to occur within the study area. TPWD recommends Brazos Electric conduct site surveys of the route alternatives to identify suitable habitat for federally listed species, to assess potential impacts to federally listed species, and to determine route adjustments to avoid or minimize adverse impacts to federally listed and candidate species.

Response to Recommendation #6

Federally listed and candidate species with the potential to occur within the study area are addressed in Section 4.5 of the ER. As discussed in that section, initial assessment of the study area did not identify potential habitat for any federally listed species, and impacts to federally listed species are not anticipated. That assessment was limited to what could be viewed from publicly accessible areas, such as roads, as right-of-entry was not available for private properties. A more thorough habitat assessment will be performed for the final route to be selected by the PUCT, after right-of-entry is available.

Recommendation #7

If impact to a federally listed species is anticipated, TPWD recommends that Brazos Electric consult with USFWS-Arlington Ecological Services pursuant to the Endangered Species Act (ESA). The USFWS should be contacted for additional species occurrence data, guidance, permitting, survey protocols, and mitigation for federally listed species.

Response to Recommendation #7

As mentioned in the Response to Recommendation #6 above, impacts to federally listed species are not anticipated. The USFWS was contacted as part of the agency scoping process, and copies of correspondence with the USFWS are included in Appendix A of the ER. If the habitat assessment for the final route to be selected by the PUCT identifies any potential impacts to federally listed species, then Brazos Electric would initiate further consultation with the USFWS.

Recommendation #8

TPWD recommends that Brazos Electric avoid locating lines near areas that may provide potential stopover habitat for Whooping Cranes during migration. TPWD recommends that areas of proposed transmission line routes be evaluated for potential Whooping Crane migration stopover habitat. Areas of potential stopover habitat should be considered as avoidance areas for proposed lines to reduce potential collisions and not minimize potential impacts to this endangered species. For additional information regarding the Whooping Crane and threats to this species, please contact Dr. Wade Harrell, the USFWS Whooping Crane Recovery Coordinator at (361) 286-3559.

Response to Recommendation #8

TPWD's recommendations regarding whooping cranes have been incorporated into Section 4.5 of the ER, along with the following information: The project study area is located within the migratory path of the whooping crane; however, the species has not been reported to occur there (according to TXNDD data obtained for the study area). Further, the study area lacks the species' preferred feeding or roosting areas. Lake Lewisville property would provide the most likely potential stopover sites for the whooping crane; however, none of the proposed transmission line routes would cross USACE Lake Lewisville property. The whooping crane would not be affected by the proposed project.

Recommendation #9

If the proposed project would impact waterways or associated wetlands, TPWD recommends consulting with the Regulatory Branch of the Fort Worth District of the U.S. Army Corps of Engineers (USACE) at (817) 886-1731 pursuant to the Clean Water Act (CWA), including jurisdictional determinations, delineations, and mitigation. Waterways, floodplains, riparian corridors, lakes, and wetlands provide valuable wildlife habitat and TPWD recommends protecting them to the maximum extent possible. TPWD recommends allowing natural buffers contiguous to wetlands or aquatic systems to remain undisturbed to preserve wildlife cover, food sources, and travel corridors. During construction, trucks and equipment should use existing bridges to cross creeks. TPWD recommends avoiding disturbance to inert microhabitats in waterways such as snags, brush piles, fallen logs, creek banks, pools, and gravel stream bottoms, as these provide habitat for a variety of fish and wildlife species and their food sources. Erosion control measures should be installed prior to construction and maintained until disturbed areas are permanently revegetated using site specific native vegetation.

Response to Recommendation #9

Coordination with the USACE, including the Lake Lewisville manager, has been undertaken, and communication between Brazos Electric and the USACE may be found in Appendix D of the ER. TPWD's recommendations regarding reducing impacts to waterways, floodplains, riparian corridors, lakes, and wetland habitats have been included in Section 4.6 of the ER.

Recommendation #10

TPWD recommends that Brazos Electric ensure protection of state listed freshwater mussels during construction activities by avoiding placement of temporary fills or culverts into waters serving as suitable habitat for state listed freshwater mussels. TPWD recommends designing routes to avoid placement of permanent structures in streams and other waters. If construction occurs during times when water is present in streams and dewatering, fill, or trampling activities are involved, then TPWD recommends relocating potentially impacted native aquatic resources in conjunction with a *Permit to Introduce Fish, Shellfish, or Aquatic Plants into Public Waters* and an Aquatic Resource Relocation Plan (ARRP). The ARRP should be completed and approved by the department 30

days prior to dewatering and/or resource relocation and submitted with an application for a no-cost *Permit to Introduce Fish, Shellfish, or Aquatic Plants into Public Waters*. ARRPs can be submitted to Greg Conley or Adam Whisenant, TPWD Region 2 KAST> Please contact Greg Conley at 903-566-2518 or Greg.Conley@tpwd.texas.gov or Adam Whisenant at 903-566-8387 or Adam.Whisenant@tpwd.texas.gov for more information or to initiate coordination.

Response to Recommendation #10

State listed freshwater mussels are addressed in Section 4.5 of the ER. The Louisiana pigtoe and Texas heelsplitter could occur within project area streams; however, the transmission line would span the streams, and impacts to streams would be avoided. Best Management Practices would be utilized to minimize water quality impacts. In accordance with TPWD recommendations, Brazos Electric would ensure protection of state listed mussel species during construction by avoiding placement of temporary fills into waters serving as suitable habitat for these species. No culverts are proposed. Routes would be designed such that the placement of structures into streams or other waters would be avoided as much as possible. If impacts to habitat for state listed freshwater mussels becomes necessary (and if construction occurs during times when water is present in streams and dewatering, fill, or trampling activities are involved), then the appropriate TPWD permits would be acquired in order to relocate impacted aquatic resources, in accordance with TPWD recommendations.

Recommendation #11

TPWD recommends that the ER identify the state listed species with potential to occur within the study area. TPWD recommends Brazos Electric conduct site surveys of the route alternatives to identify suitable habitat for state listed species, to assess potential impacts to state listed species, and to determine route adjustments to avoid or minimize adverse impacts to state listed species that are identified on the TPWD list for Denton County.

Response to Recommendation #11

State listed species with the potential to occur within the study area are addressed in Section 4.5 of the ER. As discussed in that section, initial assessment of the study area identified potential habitat for state listed species, including the Texas horned lizard, timber rattlesnake, white-faced ibis, wood stork, and the mussels discussed in the Response to Recommendation #10 above. That assessment was limited to what could be viewed from publicly accessible areas, such as roads, as right-of-entry was not available for private properties. A more thorough habitat assessment will be performed for the final route to be selected by the PUCT, after right-of-entry is available. Impacts to state listed species, if they are observed within the project area during construction, will be avoided. If state listed species are observed during construction, they would be allowed to safely leave the site or would be relocated by a permitted individual to a nearby area with similar habitat that would not be disturbed by construction.

Recommendation #12

Because snakes are generally perceived as a threat and killed when encountered during clearing or construction, TPWD recommends Brazos Electric inform employees and contractors of the potential for the state listed threatened Timber rattlesnake (*Crotalus horridus*) to occur in the study area. Contractors should be advised to avoid impacts to this and other snakes. Compared to other rattlesnakes, the Timber rattlesnake is a rather docile species. Injury to humans usually occurs when the snake becomes agitated following harassment or when someone attempts to handle a recently dead snake that still contains its bite reflex. Therefore, contractors should avoid contact with the species if encountered and allow the snake to safely leave the premises. Please note that this snake and other state listed species may only be handled by persons permitted through the TPWD Wildlife Permits Office.

Response to Recommendation #12

As stated in the Response to Recommendation #11, impacts to individuals of state listed species (including the timber rattlesnake), if they are observed within the project area during construction, will be avoided. If state listed species are observed during construction, they would be allowed to safely leave the site or would be relocated by a permitted individual to a nearby area with similar habitat that would not be disturbed by construction. Brazos Electric would inform employees and contractors of the potential for the timber rattlesnake to occur within the project area, and the potential for injury that could result from handling, as recommended; this information has been included in Section 4.5 of the ER.

Recommendation #13

For soil stabilization and/or revegetation of disturbed areas within the proposed project area, TPWD recommends erosion and seed/mulch stabilization materials that avoid entanglement hazards to snakes and other wildlife species. Because the mesh found in many erosion control blankets or mats pose an entanglement hazard to wildlife, particularly snakes, TPWD recommends the use of no-till drilling, hydromulching, and/or hydroseeding rather than erosion control blankets or mats due to a reduced risk to wildlife. If erosion control blankets or mats will be used, the product should contain no netting or contain loosely woven, natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic mesh matting should be avoided.

Response to Recommendation #13

TPWD's recommendations regarding erosion control materials have been included in Section 4.6 of the ER.

Recommendation #14

TPWD recommends Brazos Electric survey the project area to determine the potential of the site to support state listed species or their habitat, including the Texas horned lizard. Please be aware that species not occurring

during site surveys may utilize the habitat within the project area at times beyond those during which the survey was conducted, such as seasonally or nocturnally.

Response to Recommendation #14

As stated in the Response to Recommendation #11, state listed species with the potential to occur within the study area are addressed in Section 4.5 of the ER. That assessment was limited to what could be viewed from publicly accessible areas, such as roads, as right-of-entry was not available for private properties. A more thorough habitat assessment will be performed for the final route to be selected by the PUCT, after right-of-entry is available.

Recommendation #15

If the site is found to contain unavoidable habitat of the Texas horned lizard, then TPWD recommends a biological monitor be present during clearing and construction activities to relocate Texas horned lizards encountered during construction. If the presence of a biological monitor during construction is not feasible, state listed threatened species observed during construction should be allowed to safely leave the site.

Response to Recommendation #15

As stated in the Response to Recommendation #11, impacts to state listed species (including the Texas horned lizard), if they are observed within the project area during construction, will be avoided. If state listed species are observed during construction, they would be allowed to safely leave the site or would be relocated by a permitted individual to a nearby area with similar habitat that would not be disturbed by construction.

Recommendation #16

TPWD recommends that the ER identify impact avoidance and minimization measures that would be employed to protect state listed species that may occur within the study area.

Response to Recommendation #16

TPWD's recommendations regarding avoidance of impacts and minimization measures have been incorporated into Section 4.5 of the ER. In accordance with PUCT routing criteria, the proposed transmission line alternatives were routed along and within existing rights-of-way as much as practicable. Some native grassland and woodland areas, including riparian areas associated with creeks, could be crossed by the transmission line depending on the alternative selected. No forests would be crossed by the proposed project. The possibility of avian collisions would be reduced as much as possible, as discussed in Section 4.6 of the ER. No sensitive species or habitats were identified within the right-of-way during field investigations. Disturbed areas within the right-of-way would be revegetated within native species as much as practicable following construction, as discussed in Section 4.7 of the ER.

Recommendation #17

TPWD recommends avoiding lands owned or managed for conservation or recreation by county, city, state, and/or federal entities such as the USFWS, USACE, US Department of Agriculture Forest Service, and the Texas Historical Commission. Such entities should be contacted early in the planning process to determine if a transmission line may impact their property.

Response to Recommendation #17

Parks and formally classified lands are discussed in Section 4.1 of the ER. Although a number of parks and managed areas occur within the study area, none of them would be crossed by project alternatives. Coordination with federal, state, and local government agencies has taken place (see Section 3.5, Section 3.9, and Appendix D of the ER).

Recommendation #18

TPWD recommends properties protected by conservation easements be identified in the constraints analysis and avoided during development of alternative routes. Data sources for the location of these properties include online databases such as the Protected Areas Data Portal at http://gapanalysis.usgs.gov/padus/ and the National Conservation Easement Database at http://conservationeasement.us/, although these data sources are incomplete and county records may need to be referenced to determine the location of properties with conservation easements. If properties protected by conservation easements would be affected, TPWD recommends the length of routes through these properties be included in any accounting of alternative route impacts presented in the ER.

Response to Recommendation #18

Conservation easements are addressed in Section 4.1 of the ER, in the discussion of parks and formally classified lands. None of the proposed transmission line alternatives are routed across lands known to be enrolled in conservation easements.

Recommendation #19

For protection of natural resources, TPWD recommends Brazos Electric avoid routing through sites that are enrolled in conservation easements through governmental or non-governmental conservation organizations. TPWD also recommends avoiding impacts to existing mitigation banks if they occur within the study area.

Response to Recommendation #19

See Response to Recommendation #18. No mitigation banks are known to occur within the study area, and none of the proposed transmission line alternatives impact any known mitigation banks.

Recommendation #20

TPWD recommends that precautions be taken to avoid impacts to Species of Greatest Conservation Need (SGCN), natural plant communities, native pasture, or special features when developing alternative routes and if encountered in the project ROW during construction and maintenance. Areas exhibiting a native grass and forbs component should be protected from disturbance and from introduction of non-native vegetation during construction, maintenance, and operation activities. Individual rare plants or areas found to contain rare plants should be clearly marked as avoidance areas prior to construction, maintenance, and operation activities.

Response to Recommendation #20

TXNDD data did not indicate recorded occurrences of any rare/remnant plant communities within the project study area. TPWD's recommendations regarding precautions to avoid impacts to SGCNs have been included in Section 4.5 of the ER. These will be incorporated into the project as much as practicable. A more thorough investigation of the final route would be undertaken, and if rare plants are identified, they would be protected as feasible. Disturbance would be minimized to the greatest extent practicable, which would minimize the establishment of invasive species.

Recommendation #21

If native grassland remnants cannot be avoided by the proposed project activities, please contact TPWD to determine if prairie plants can be salvaged with assistance from our local Dallas-Fort Worth partners including the Texas Master Naturalist program, Fort Worth Nature Center, the Native Prairies Association of Texas, and the Botanical Research Institute of Texas.

Response to Recommendation #21

No native grassland remnants have been reported within the study area, according to TXNDD data. If any native grassland remnants are identified within the ROW during the habitat assessment that will be performed for the route to be selected by the PUCT, then TPWD would be contacted to determine the best course of action.

Recommendation #22

TPWD recommends incorporating land classification information from the Ecological Mapping Systems of Texas (EMST) into the ER to assist with avoiding, minimizing or mitigating impacts to habitats in the area. For assistance with EMST, please contact Ms. Amie Treuer-Kuehn of the TPWD GIS Lab at Amie.Treuer-Kuehn@tpwd.texas.gov.

Response to Recommendation #22

EMST information has been incorporated into Section 4.7 of the ER and is shown on Figure 10.

Recommendation #23

TPWD recommends minimizing impacts to native vegetation during project design and construction. Areas exhibiting bottomland/riparian hardwood forests should be avoided to the extent feasible. TPWD recommends avoiding sensitive ecological areas, woodlands, and major stream corridors by widely buffering them from placement of the proposed transmission line and by routing through lower-quality habitat that has been converted to introduced pasture for livestock or has been previously fragmented by other development. TPWD recommends revegetating areas disturbed by project activities with site-specific native species to mitigate for unavoidable loss of native vegetation including pollinator species. Species appropriate for the study area can be found by accessing the Lady Bird Johnson Wildflower Center at http://www.wildflower.org/collections/.

Response to Recommendation #23

As stated in Section 4.7 of the ER, impacts to native vegetation, including riparian woodlands, would be avoided and minimized to the extent feasible during project design and construction. Efforts have been made to avoid routing the proposed transmission line through sensitive ecological areas, woodlands, and major stream corridors as much as practicable. Areas disturbed by project activities would be revegetated with native species.

Recommendation #24

TPWD recommends revegetation efforts include planting or seeding native milkweed (*Asclepias* spp) and nectar plants as funding and seed availability allow and scheduling ROW maintenance to occur once the seed from pollinator plants has been released.

Response to Recommendation #24

TPWD's recommendations regarding native milkweed have been incorporated into Section 4.7 of the ER.

Per your request, a copy of the Application for Certificate of Convenience and Necessity will be submitted to TPWD upon its submittal to the Public Utility Commission of Texas. If you need any further information or wish to discuss the project, please contact me at (469) 647-4866 or christine@coxmclain.com.

Sincerely,

Christine Polito
Senior Ecologist

COX | McLAIN
Environmental Consulting

June 5, 2015

Stephen Brooks
CESWF-PER-R
U.S. Army Corps of Engineers Fort Worth District
819 Taylor Street RM 3A37
PO Box 17300
Fort Worth, TX 76102-0300

RE: Proposed Oak Point Transmission Line and Substation Project, Denton County, Texas

Dear Mr. Brooks:

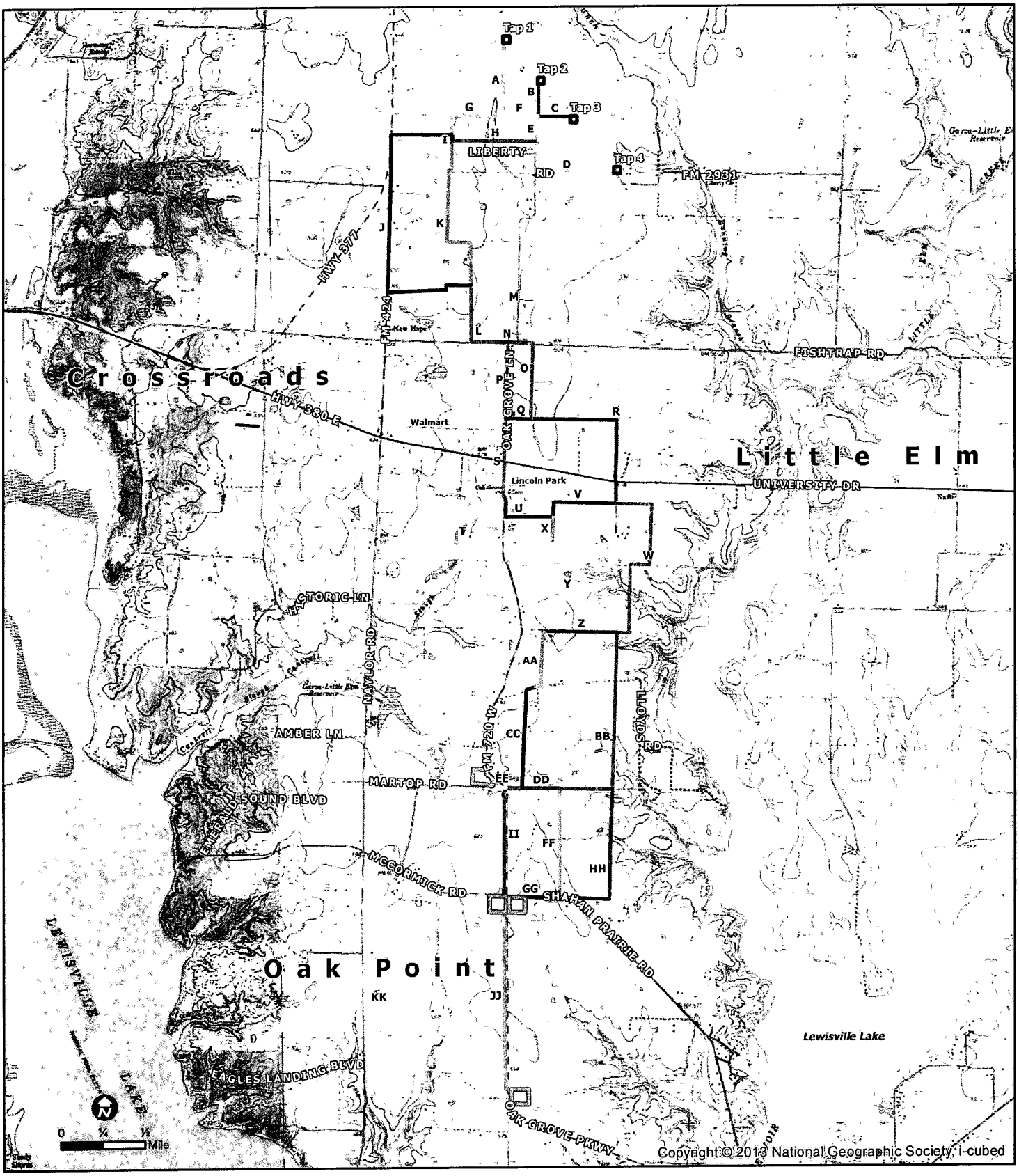
Brazos Electric Power Cooperative, Inc. (BEPC) is in the process of preparing a route study and environmental report for the Rural Utilities Service and the Public Utility Commission of Texas in order that it may assess the environmental impacts of the construction of a new transmission line and substation in Denton County, Texas. Brazos Electric plans to construct approximately 5.5 to 11 miles of 138 kV double circuit transmission line with single-pole structures from a new five-acre substation to be sited along or near FM 720 in the vicinity of Oak Point in eastern Denton County and proceeding north to a tap point along an existing Brazos Electric 138 kV transmission line located southeast of Krugerville in northeastern Denton County. The transmission line right-of-way would be 70 feet wide (100 feet wide where needed for angled structures). The proposed project will provide for increased capacity and better continuity of service for CoServ Electric, BEPC's member cooperative, and its member customers.

At this stage of the project, a study area has been established and potential constraints for substation location and transmission line routing have been identified within the study area. These constraints have been considered (and avoided as much as practicable) in the development of multiple substation location and transmission line route alternatives within the study area, as shown on the enclosed maps. An Environmental Report and a route study are being prepared to evaluate the impact of project alternatives on human and natural resources. These will be included in an Application for Certificate of Convenience and Necessity to be submitted to the Public Utility Commission of Texas (PUCT). As part of the Application, BEPC will submit multiple alternatives to the PUCT. If approved by the PUCT, only one transmission line route will be constructed.

We request that your office review the proposed project for possible impacts to 100-year floodplains, wetlands/waters of the U.S., and other important natural resources that occur in the project area. Please provide any recommendations you may have to mitigate or avoid these impacts. If you need any further information or wish to discuss the project, please contact me at (469) 647-4866 or christine@coxmclain.com.

Sincerely,

Christine Polito
Senior Ecologist



Route Segments

Existing Transmission Lines

Proposed Tap Sites

Proposed Substations

BRAZOS ELECTRIC COOPERATIVE

OAK POINT TRANSMISSION LINE AND SUBSTATION PROJECT

TRANSMISSION LINE ALTERNATIVE SEGMENTS

THE SUBSTATIONS, TAPS, AND ROUTE SEGMENTS SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE

Date Saved: 6/4/2015

NAIP Aerial Imagery Date: 7/25/2014 - 10/06/2014

Route Segments

Existing Transmission Lines

Proposed Tap Sites

Proposed Substations

BRAZOS ELECTRIC COOPERATIVE
OAK POINT TRANSMISSION LINE AND SUBSTATION PROJECT
TRANSMISSION LINE ALTERNATIVE SEGMENTS

THE SUBSTATIONS, TAPS, AND ROUTE SEGMENTS SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE

Date Saved: 5/1/2015

NAIP Aerial Imagery Date: 7/25/2014 - 10/06/2014

CONTACT REPORT FORM

Contact Person: USACE – Rob Jordon
Phone Number 972-672-9100
Address: Oak Point – Lake Lewisville Office

Agency: USACE
Date: 6-1-15
Job: Oak Point Transmission
County: Denton County

REMARKS: I talked with Rob via phone Monday morning in regards to the possibilities of an out grant policy around the Oak Point peninsula. I explained the project and the location of the proposed substations. We talked about the number of viable routes that do not affect USACE land. Rob reminded me of the out grant policy date March 2009 and if we have viable routes that do not affect USACE then the possibility of acquiring an out grant easement would be difficult.
I told him that unless the state ordered me to go through the exercise then I would let this call be my contact. I also warned him of possible landowner phone calls asking why USACE would not work with utilities and let them place lines across them.

He appreciated the phone call and said he would let me know if he got multiple calls.

Signed: Richard Chambers
Date: 6/1/15

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT, CORPS OF ENGINEERS
P. O. BOX 17300
FORT WORTH, TEXAS 76102-0300

June 23, 2015

Regulatory Division

SUBJECT: Project Number SWF-2015-00258, Oak Point Transmission Line and Substation Project

Christine Polito
Cox McLain Environmental Consulting
600 East John Carpenter Freeway
Suite 380
Irving, TX 75062

Dear Ms. Polito:

Thank you for your letter received June 10, 2015, concerning a proposal by Brazos Electric Power Cooperative, Inc. to construct approximately 5.5 to 11 miles of 138-kV double circuit transmission line and single-pole structures and a new five-acre substation located in Denton County, Texas. This project has been assigned Project Number SWF-2015-00258. Please include this number in all future correspondence concerning this project.

Mr. Billy Standridge has been assigned as the regulatory project manager for your request and will be evaluating it as expeditiously as possible.

You may be contacted for additional information about your request. For your information, please reference the Fort Worth District Regulatory Branch homepage at www.swf.usace.army.mil/Missions/Regulatory.aspx and particularly guidance on submittals at www.media.swf.usace.army.mil/pubdata/environ/regulatory/introduction/submital.pdf and mitigation at www.usace.army.mil/Missions/Regulatory/Permitting/Mitigation.aspx that may help you supplement your current request or prepare future requests.

If you have any questions about the evaluation of your submittal or would like to request a copy of one of the documents referenced above, please refer to our website at http://www.swf.usace.army.mil/Missions/Regulatory.aspx or contact Mr. Billy Standridge at the address above or telephone 817-886-1662 and refer to your assigned project number. Please note that it is unlawful to start work without a Department of the Army permit if one is required.

Please help the regulatory program improve its service by completing the survey on the following website: http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey

Stephen L Brooks
Chief, Regulatory Division

Christine Polito

From: Standridge, Billy W SWF <Billy.W.Standridge@usace.army.mil>
Sent: Monday, July 27, 2015 1:47 PM
To: Christine Polito
Subject: SWF-2015-00258, Oak Point Transmission Line and Substation (UNCLASSIFIED)
Attachments: linear project recommendations.pdf; NWP12 TX.pdf

Classification: UNCLASSIFIED
Caveats: NONE

Ms. Polito,

I have been assigned to review the subject project for permitting requirements. Under Section 404, the U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged and fill material into waters of the United States, including wetlands. Our responsibility under Section 10 is to regulate any work in, or affecting, navigable waters of the United States. Any such discharge or work requires Department of the Army authorization in the form of a permit. I am unable to determine from the information provided whether Department of the Army authorization will be required. If a Department of the Army permit is required, the project may be authorized by one or more general permits, such as Nationwide Permit 12 for utility line activities (attached). Please see the attached document in regard to what is needed for my continued review of this project.

This project appears to be within the vicinity of USACE fee property or lands encumbered by a USACE flowage easement. Please note that Regional Condition 8 states: "The applicant shall notify the Forth Worth District Engineer in accordance with the NWP General Condition 31, Pre-Construction Notification (PCN) for any regulated activity where the applicant is proposing work that would result in the modification or alteration of any completed Corps of Engineer projects that are either locally or federally maintained and for work that would occur within the conservation pool or flowage easement of any Corps of Engineers lake project. PCN's cannot be deemed complete until such time as the Corps has made a determination relative to 33 USC Section 408, 33 CFR Part 208, Section 208.10, 33 CFR Part 320, Section 320.4."

If you haven't already done so, please contact the Lake Manager for Lewisville Lake at 469-645-9100 to determine if this project will affect the Lewisville Lake Corps Project.

If this project qualifies for a nationwide permit and requires pre-construction notification, please use one of our application templates found at the link below.
http://www.swf.usace.army.mil/Missions/Regulatory/Permitting/ApplicationSubmittalForms.aspx

Please note that if we do not receive the requested information within 30 days of the date of this email, we will consider your application administratively withdrawn. If withdrawn, you may re-open your application at a later date by submitting the requested information. Please submit all additional information via hardcopy and reference your assigned project number.

Please let me know if you have any questions.

Thank you,

Billy

Billy W. Standridge

Regulatory Specialist
Evaluation Branch Regulatory Division
U.S. Army Corps of Engineers Ft. Worth District
819 Taylor Street, Room 3A37
Fort Worth, Texas 76102-0300
Phone: 817-886-1662
Fax: 817-886-6493

In the Fort Worth District Regulatory Branch we continue to seek ways to improve our Program.
We would greatly appreciate your help in improving our service by completing our Customer Service Survey.

We review these results on a monthly basis and truly welcome all feedback.

http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey

Fort Worth Regulatory Home Page

http://www.swf.usace.army.mil/Missions/Regulatory.aspx

Classification: UNCLASSIFIED
Caveats: NONE

US Army Corps of Engineers
Fort Worth District

General Recommendations for Department of the Army Permit Submittals for Linear Projects

July 28, 2003

1. A detailed project description.

2. A large-scale map showing the entire route of the project.

3. The proposed route of the project on 8½ by 11-inch copies of 7.5-minute United States Geological Survey (USGS) quadrangle maps, national wetland inventory maps, published soil survey maps, scaled aerial photographs, and/or other suitable maps. Identify all base maps, (e.g. "Fort Worth, Texas" 7.5-minute USGS quadrangle, Natural Resources Conservation Service Tarrant County Soil Survey, sheet 10). Clearly mark (such as by circling) and number the location of each proposed linear project crossing of a water of the United States and any appurtenant structure(s) in waters of the United States on the map. Waters of the United States include streams and rivers; most lakes, ponds, mudflats, sandflats, wetlands, sloughs, and wet meadows; abandoned sand, gravel, and construction pits, and similar areas.

4. For each potential linear project crossing or appurtenant structure in a water of the United States, the following site specific information when applicable:

   a. 7.5-minute USGS quadrangle map name, universal transverse mercator (UTM) coordinates, county or parish, waterway name;

   b. a brief characterization of the crossing area (stream, forested wetland, non-forested wetland, etc.) including the National Wetland Inventory classification and soil series;

   c. distance between ordinary high water marks;

   d. proposed method of crossing (bore, trench, fill with culvert, fill with bridge, etc.);

   e. length of proposed crossing;

   f. width of temporary and permanent rights-of-way;

   g. type and amount of dredged or fill material proposed to be discharged;

   h. acreage of proposed temporary and permanent adverse impacts to waters of the United States, including wetlands; and

   i. a typical cross-section.

Please refer to the "General Recommendations for Department of the Army Permit Submittals" for additional details about what to submit for linear projects. Additional information, including more detailed jurisdictional determination data, may be needed to complete the Corps evaluation of a project in some cases. We encourage you to consult with a qualified specialist (biologist, ecologist or other specialist qualified in preliminary jurisdictional determinations) who is familiar with the 1987 Corps of Engineers Wetlands Delineation Manual and the USACE Regulatory Program (33 CFR Parts 320-331).

NATIONWIDE PERMIT 12

Utility Line Activities

Effective Date: March 19, 2012

(NWP Final Notice, 77 FR 10184)

Utility Line Activities. Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project.

Utility lines: This NWP authorizes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in pre-construction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term "utility line" does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2-acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead utility line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel

roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP also authorizes temporary structures, fills, and work necessary to conduct the utility line 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.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if any of the following criteria are met: (1) the activity involves mechanized land clearing in a forested wetland for the utility line right-of-way; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to or along a stream bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than 1/10-acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (See general condition 31.) (Sections 10 and 404)

Note 1: Where the proposed utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters) within the coastal United States, the Great Lakes, and United States territories, copies of the pre-construction notification and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

Note 2: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, in accordance with the requirements for temporary fills.

Note 3: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to Section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

Note 4: For overhead utility lines authorized by this NWP, a copy of the PCN and NWP verification will be provided to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities.

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