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ADOPTION AND FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
MACON COUNTY AIRPORT AUTHORITY RUNWAY EXTENSION
MACON COUNTY, NORTH CAROLINA

Proposed Action and Need

The Macon County Airport Authority (MCAA) has applied for approval under Section 26a of the Tennessee Valley Authority (TVA) Act for proposed alterations to lotla Branch through on-site stream relocations, stream loss/mitigation, and stream encapsulation associated with an airport runway extension project. MCAA is planning to expand its west runway (Runway 7), the adjacent taxiway, and the associated runway safety area (RSA) of the Macon County Airport (Airport) by 600 feet. The Airport is located about 5 miles north of the city of Franklin in Macon County, North Carolina. The nearest surface water bodies are lotla Branch and lotla Creek, tributaries to the Little Tennessee River.

Specific activities requiring Section 26a approval include:

1. Addition of fill and grade of 749 linear feet of lotla Branch. The earthwork volume including all fill and excavation for the proposed project is 101,250 cubic yards (cu yd).
2. Relocation of 180 linear feet of stream (of 749 linear feet) to an open rock-lined channel to divert runoff into 572 feet of reinforced concrete pipe (RCP) and 260 linear feet of RCP culvert.
3. Installation of 480 cu yd of riprap within 180 linear feet along the centerline of the upstream channel of lotla Branch. An estimated 200 cu yd of riprap would be placed in the proposed stream channel at normal flow elevation, and 280 cu yd would be placed above normal flow elevation to protect a new embankment and areas outside the stream channel.
4. Addition of fill material to a 0.17 acre wetland area adjacent to Runway 7 (wildlife attractant area).

The applicant's stated purpose is to bring the Airport into compliance with Federal Aviation Administration (FAA) and North Carolina Department of Transportation (NCDOT) Department of Aviation (DOA) safety standards for airport design. Runway design criteria are based on the approach speed and wingspan of the most demanding aircraft using or projected to use the Airport. At the Airport, there were 550 operations (arrivals and departures) of jet business class (C-2) aircraft requiring that the design category for the Airport be based upon the C-2 aircraft in 2000. FAA recommends having a 5,000-foot runway and a 300-foot RSA for C-2 aircraft; currently the runway is 4,400 feet in length. Project implementation would increase the Airport's safety, utility, and accessibility to larger aircraft.

FAA is the lead federal agency for the proposed extension of Runway 7, the associated taxiway, and the RSA, in accordance with 40 CFR § 1501.5(c). The MCAA's proposal requires approval from the United States Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean

Water Act for actions associated with its proposal to extend the runway, adjacent taxiway, and RSA. An individual Section 404 Permit was issued by the USACE on July 19, 2010.

An environmental assessment (EA) and a finding of no significant impact (FONSI) were issued by the FAA in December 2008 for the proposed runway extension. On April 30, 2010, the NCDOT DOA issued a "Reevaluation of NEPA [National Environmental Policy Act] Documentation" to account for changes in the project scope since the December 2008 EA was completed.

The USACE also prepared an EA and issued a FONSI on July 16, 2010, to evaluate the potential environmental impacts of the MCAA's proposed actions. The USACE EA includes information adopted from the December 2008 FAA EA, as well as information from the NCDOT DOA's reevaluation document. The USACE EA was used as the basis for completing TVA's environmental review, and it is incorporated herein by reference. The FAA EA and the NCDOT DOA NEPA documentation are also incorporated by reference.

The environmental reviews prepared by the FAA, NCDOT DOA, and USACE involve actions for which TVA does not have a permitting action or jurisdiction. Due to the proposed number and locations of impacts to waters of the U.S., the USACE, Wilmington District, determined that the scope of analysis would encompass the existing runway, taxiway, RSAs, and all immediately adjacent property to include the areas to the west and southwest (Archaeological Site 31MA77) of the Airport and all waters of the U.S. in these areas.

The following actions are required for construction of the proposed runway extension, and the potential effects of these actions were considered in the USACE EA. Implementation of the proposed project would directly impact four jurisdictional wetland areas totaling 5.72 acres (0.17 acre, 3.74 acres, 1.38 acres, and 0.43 acre). MCAA would mitigate the direct impacts to the 0.17-acre wetland at a 2:1 ratio (good quality) based on the quality of the adjacent stream; all other wetland impacts are associated with after-the-fact authorizations and would be mitigated at a 1:1 ratio (fair quality).

MCAA also applied for after-the-fact authorization from the USACE for impacts from various unauthorized activities performed in waters of the U.S. within the last 19 years as part of Airport activities. MCAA proposes to remove all culverts installed during a 2006 perimeter fence installation and restore the stream channels to their preconstruction condition. As a result, a total of 183.5 linear feet of previously impacted steam channel would be enhanced, and the impacts from this unpermitted action would be mitigated.

Other after-the-fact authorization actions include the following:

- Fill material was placed in 1.38 acres of freshwater wetlands previously identified as an alder bog north of the runway during runway extension construction in 1991.
- Sixty linear feet of culvert was placed in three streams throughout the property for accessibility of mowing equipment.
- Wetland mitigation in the amount of 1.29 acres was constructed in 1994 in the eastern floodplain. This construction was required as compensatory mitigation for impacts to waters of the U.S. in 1993 (associated with construction of a parallel taxiway). This wetland is currently nonfunctioning.
- Payment into the North Carolina Ecosystem Enhancement Program (NCEEP) is proposed by MCAA as mitigation for the proposed project and for the previously

unauthorized impacts to waters of the U.S., the unsuccessful on-site mitigation, and the reduction of a 0.43-acre wetland area.

North Carolina participates in the State Block Grant Program (SBGP), which is administered by the FAA. Under the SBGP, the FAA retains signatory responsibility for all memorandums of agreement (MOAs) or programmatic agreements in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, Section 7 of the Endangered Species Act (ESA), and Nation-to-Nation consultation. Whenever a proposed project funded under the SBGP may have an impact on any historical, cultural, and/or archaeological resources or endangered species, the FAA (Atlanta Office) is responsible for compliance.

Alternatives

The USACE EA evaluated three alternatives derived from the five alternatives evaluated in the 2008 FAA EA. The three alternatives are: Alternative A – Avoidance (no action, uplands, and availability of other sites), Alternative B – Minimization (modified project designs, etc.), and Alternative C – Conclusions of Alternatives Analysis. TVA has adopted the USACE's alternatives' framework. The USACE's alternatives are described in the following paragraphs.

Under Alternative A, the USACE considers the No Action Alternative (Alternative E in the FAA EA). Under this alternative, there would be no effects to waters of the U.S, but there would be effects to other factors such as safety and economics. Under the No Action Alternative, TVA would not issue Section 26a approval for the proposed stream alterations and fill. Adoption of this alternative would not result in the provision of additional runway length or the fill of the 0.17-acre wetland (wildlife attractant area). Under this alternative, the applicant's purpose and need would not be met.

Alternative B of the USACE EA considers options other than the Preferred Alternative for runway realignment and extension as well as expansion of other nearby airports as described in Alternatives B, C, and D in the FAA EA. Evaluations revealed that other runway realignment alternatives would have impacts to archaeological resources, endangered and threatened aquatic species, and waters of the U.S. similar to Alternative C (the extension of Runway 7). However, a significant constraint for other potential realignments would be the proximity of the runway to the Lyle Knob Mountain Range. The mountain range would be included in the approach, thereby displacing the runway threshold and reducing the utility of the Airport. Expansion of other airports in western North Carolina (Jackson County and Andrews-Murphy airports) were also considered and dismissed because they do not have the pavement strength to accommodate larger aircraft. Furthermore, expanding these airports would not meet the needs of Macon County or the goals of the North Carolina Airport Development Plan. Under this alternative, none of these options (including Alternatives B, C, and D in the FAA EA) are feasible.

Under Alternative C, the USACE considers the applicant's Preferred Alternative (Alternative A as described in the FAA EA). This alternative is preferred because Alternative A would not meet the applicant's purpose and need, and the options under Alternative B were dismissed because they were not feasible. Alternative C would involve extending Runway 7 and the associated taxiway by 600 feet, constructing a 300-foot RSA, and filling a 0.17-acre wetland (wildlife attractant area) adjacent to Runway 7. Adoption of this alternative would impact streams, wetlands, and archaeological resources and avoid impacts to endangered and threatened aquatic animals. Impacts to wetlands, streams, and archaeological resources would be mitigated as described below.

Under Alternative C, TVA would approve the proposed stream alterations and fill under Section 26a of the TVA Act. These actions would involve placement of fill material and grading impacts to 749 linear feet of lotla Branch, including the relocation of 180 linear feet of stream and the installation of 480 cu yd of riprap within those 180 linear feet. Approximately 200 cu yd of riprap would be placed in the proposed stream channel at or below the normal flow elevation, and 280 cu yd would be placed above the normal flow elevation, and a 0.17 acre wetland area would be filled. Alternative C is TVA's Preferred Alternative.

Impacts Assessment

Impacts to air quality, wildlife and vegetation, prime farmland, and environmental justice would be minor and insignificant. Existing noise levels would not significantly increase. There may be some visual discord during the construction period due to an increase in personnel and equipment. These minor visual obstructions would be temporary until completion of construction activities. Impacts would be minor and insignificant. Economic impacts would be beneficial, but short-term and insignificant.

The proposed runway extension and associated improvements would be in close proximity to the floodplain. Methods used to minimize loss of floodplain functions and values would include standard construction controls to minimize erosion and sedimentation, such as use of permeable surfaces where practicable to control runoff, waste, and spoils' disposal to avoid contamination of groundwater and surface water. Implementation of the standard control measures would minimize adverse impacts to the floodplain. The proposal complies with Executive Order (EO) 11988 on floodplain management and the TVA Flood Control Storage Loss Guideline.

The proposed project would not impact any aquifers designated as sole or principal drinking water resources for the Airport area. Turbidity and siltation from construction activities such as excavation and grading would be short term and localized. The discharge of fill material associated with this project would not be expected to have significant effects on water quality. In order to minimize siltation impacts to streams and wetlands during construction, appropriate erosion- and siltation-control measures, including the installation of silt fencing, would be installed and maintained along construction limits near jurisdictional waters of the U.S. as described in the 401 Water Quality Certification issued by the North Carolina Department of Environmental and Natural Resources and the 404 Permit issued by the USACE. Storm water management plans have been designed to minimize potential impacts to aquatic habitats and biota in lotla Branch.

There would be impacts to jurisdictional wetlands and streams from the proposed project. A 0.17-acre wetland area would be filled adjacent to the runway to remove wildlife attractants. Impacts to wetlands would be mitigated off site within the Little Tennessee drainage basin to maintain "no net loss" throughout the watershed. There is no practicable alternative to filling the wetland because it must be altered for safety purposes in compliance with FAA regulations; the proposal complies with EO 11990, Protection of Wetlands. Stream impacts would involve placement of fill material and grading impacts to 749 linear feet of lotla Branch, including the relocation of 180 linear feet and the installation of 480 cu yd of riprap within the 180 linear feet. Mitigation for stream impacts would be accomplished through payment into the NCEEP in-lieu-fee fund ultimately resulting in implementation of a stream restoration project in Macon County.

Although no direct impacts to federally listed species would occur, there is potential for indirect impacts to the federally listed as endangered Appalachian elktoe and spotfin chub occurring downstream from the Airport project site. The MCAA and NCDOT DOA coordinated with the

United States Fish and Wildlife Service (USFWS) to create a Stream Monitoring Plan (Plan) for areas upstream and downstream of the project area on Lotla Branch. The Plan serves to document existing conditions and allow post-construction comparisons of downstream water quality. On December 8, 2009, the USFWS issued a letter stating concurrence with the FAA's FONSI as long as the underground storm water detention system functions as proposed and the Plan is implemented. Furthermore, USFWS requires immediate notification if there are indications of stream bank destabilization or impacts from excess flow downstream in Lotla Branch. Section 7 consultation under the ESA would be reinitiated, and corrective plans and actions would be developed under guidance from the USFWS. Anticipated potential impacts to federally listed species have been avoided with implementation of these measures, and the stream monitoring program has been employed to assess stream channel stability pre- and post-construction of the runway extension project.

TVA concurs with the USACE and FAA finding that the project would not adversely affect federally listed species or designated critical habitats conditioned upon implementation of the Plan. Furthermore, TVA will condition the Section 26a Permit to indicate that TVA is to be included as a cooperating agency in any reinitiation of Section 7 ESA consultation.

Archaeological Site 31MA77 occurs in the area of potential effects (APE). An MOA was developed in consultation with the FAA, the North Carolina State Historic Preservation Officer (SHPO), the Eastern Band of Cherokee Indians (EBCI) Tribal Historic Preservation Officer, the Cherokee Nation of Oklahoma, the United Keetowah Band of Cherokee Indians, the MCAA, and the NCDOT. The MOA was issued July 2008 and filed with the Advisory Council on Historic Preservation (ACHP) in January 2009. In a letter dated February 3, 2009, the ACHP acknowledged receipt of the MOA and indicated that the filing of the MOA and execution of its terms completes requirements of Section 106 of the NHPA. Since the execution of the MOA and during the data recovery effort, the data recovery scope was expanded to include all of the APE rather than the 25 percent that was proposed in the MOA. The impacts to archaeological resources at the runway extension site have been partly mitigated by the archaeological work completed on the site in 2010; the finalization of the archaeological analysis and report will complete the mitigation and fulfill the stipulations of the MOA.

TVA designated the FAA as the lead federal agency to act on TVA's behalf with respect to cultural resources. The FAA concurred with this designation and will continue to fulfill the collective responsibilities under Section 106 until project completion. TVA will include a condition in the Section 26a Permit indicating that all work shall be conducted in accordance with the executed MOA. With implementation of the MOA, impacts to cultural resources would be insignificant.

Public and Intergovernmental Review

The Macon County Airport runway extension proposal was the subject of a public notice issued by the USACE on October 29, 2009. The USACE sent this notice to all interested parties including appropriate state and federal agencies. Comments received during the comment period have been addressed in the USACE EA and FONSI issued on July 16, 2010.

Mitigation and Permit Conditions

The following mitigation measures have been proposed by the applicant to minimize impacts to wetlands, streams, endangered and threatened aquatic species, and archaeological resources.

Impacts to wetlands would be mitigated offsite within the Little Tennessee drainage basin to maintain "no net loss" throughout the watershed. Planned mitigation for stream impacts would

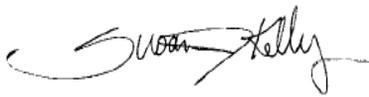
be accomplished through payment into the NCEEP in-lieu-fee fund. In order to minimize siltation impacts to streams and wetlands during construction, standard control measures would be installed and maintained as described in the 401 Water Quality Certification and the 404 Permit. To address potential impacts to endangered and threatened aquatic species, the MCAA and NCDOT coordinated with the USFWS to create a Stream Monitoring Plan for areas upstream and downstream of the project area on lotla Branch. The Plan serves to document existing conditions and allow post-construction comparisons of downstream water quality. An MOA was developed to avoid, minimize, and mitigate adverse impacts and has been executed to address impacts to archaeological resources. The impacts at the runway extension site have been partly mitigated by the work completed on site in 2010 and the mitigation and stipulations of the MOA will be fulfilled upon the finalization of the archaeological analysis and report.

TVA concurs with the above-described mitigation measures for reducing impacts to wetlands, streams, endangered and threatened aquatic species, and archaeological resources. TVA will also include the following special conditions in the Section 26a Permit:

- TVA shall be included as a cooperating agency in any re-initiation of Section 7 ESA consultation activities with USFWS.
- All work shall be conducted in accordance with the executed MOA among the FAA, the MCAA, the North Carolina SHPO, the EBCI, the Cherokee Nation of Oklahoma, the United Keetowah Band of Cherokee Indians, the ACHP, and the NCDOT.

Conclusion and Findings

TVA has independently reviewed the USACE EA and found it to be adequate. TVA is therefore adopting the 2010 EA. Based on the EA, TVA concludes that issuance of the Section 26a approval for this proposal would not be a major federal action significantly affecting the environment. Accordingly, preparation of an environmental impact statement is not required. This FONSI is contingent upon adherence to the special permit conditions described above.



October 8, 2010

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Date Signed