ADVANCING ANIMAL DISEASE TRACEABILITY
ROAD MAP FOR
THE EASTERN BAND OF CHEROKEE INDIANS

A Three-Year Plan

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I. EXECUTIVE SUMMARY
The Eastern Band of Cherokee Indians (EBCI) is a Tribal nation located in Cherokee, North Carolina and is North Carolina’s only federally recognized Tribe. Historically, the EBCI was part of a larger Cherokee Nation. However, with the implementation of the Indian Removal Act of 1830 and the forcible relocation of over 16,000 Cherokee Indians in what became known as the ‘Trail of Tears’, the Cherokee Tribe became divided into the Cherokee Nation and the United Kituwah Band, located in Oklahoma. The Eastern Band, made up of those who remained and rebuilt within North Carolina’s Qualla Boundary, has a relationship with both the United States federal government and the state of North Carolina; however, the EBCI is self-governed and, as such, has its own government, laws, elections, and institutions. Terrain on the Tribal land varies from steep mountains to agriculture lowlands and contains approximately 200 miles of streams with 100 acre-miles of wetlands known for its trout fishery, species diversity, clear mountain streams, and scenic views.

Within the last ten years, the Cherokee government has grown in size, capacity, and resources, an expansion that has driven parallel growth within key departments whose roles, responsibilities, and requirements, in some cases, overlap. This overlap has led to duplication of effort and unclear lines of authority between the Division of Agriculture and Natural Resources (DANR), the Division of Public Health and Human Services, and the Division of Police, as it concerns Animal Disease Traceability (ADT).

Currently, the DANR has management jurisdiction over all wildlife and agricultural resources for the Tribe, a change in policy that requires action plans to address new roles, responsibilities, and requirements to include the field of ADT. Presently, there are few resources dedicated to this effort. Achieving a workable Animal Disease Traceability system requires internal stakeholder input, cooperation with state and federal partners, and Tribal regulatory action, a process that is ongoing.

EBCI goals for establishing an ADT program include:

- Securing USDA funding for ADT program implementation;
- Building out a fully-functioning ADT program that includes full participation from the various stakeholder offices both internal and external to the EBCI;
- Reducing risks related to the spread of disease by having the ability to quickly complete tracebacks to determine the origin of the diseased animals;
- Leveraging the best practices, lessons learned, and resources of state and federal partners conducting ADT;
- Codifying roles and responsibilities with regard to animal health responsibilities inside Tribal lands;
- Educating stakeholders and the public on the ADT mission and requirements.
To align the EBCI with federal, state, and Tribal ADT partners, the Division of Agriculture and Natural Resources will work within USDA’s 2010 ADT framework by ensuring program compliance through an emphasis on interstate animal movement, state and Tribal-level program administration, low-cost technology options, and transparency through the full Federal rulemaking process. Additionally, the EBCI will work with the state of North Carolina to share best practices, lessons learned, and resources with special emphasis on animal identification/tagging (i.e. Animal Identification Numbering tags or National Uniform Ear Tagging System), animal inspections, and record-keeping.

A joint, coordinated, and standardized ADT program will allow the Division of Agriculture and Natural Resources to effectively manage EBCI animal resources, trace interstate animal movement, mitigate risk through early detection of vulnerable animal populations, safeguard both animal and human health, coordinate ADT response, de-conflict overlapping levels of effort, and oversee program compliance. Compliance with an ADT program will facilitate interstate commerce for producers within the EBCI that wish to export animals to NC or any other state within the United States.

II. CURRENT TRACEABILITY SITUATION

II.1 Who are we?

Within the EBCI, the Division of Agriculture and Natural Resources (DANR) is charged with developing, managing, implementing, and maintaining the ADT Roadmap.

Internal stakeholders within the EBCI include, but are not limited to:

- Office of the Attorney General
- Division of Police (Natural Resource Enforcement Program and Animal Control Program)
- Division of Public Health and Human Services
- Division of Information Technology
- EBCI Fisheries & Wildlife Management

External constituents include but is not limited to:

- Producers
- Managers of exhibition venues such as fairs and zoos
- Non-producer participants, such as the captive cervid hunting facility in Graham County
- Private accredited veterinary practitioners
- North Carolina Department of Agriculture and Consumer Services (NCDA&CS)
- North Carolina Wildlife Resources Commission (NCWRC)
- U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services (USDA APHIS VS)
II.2 Where are we now?
Animal disease traceability - or understanding the movements of diseased and at-risk animals, where they have been, and when this movement occurs - is important to ensuring a rapid response when animal disease events take place. Although animal disease traceability does not prevent disease, an efficient and accurate traceability system reduces the number of animals and response time involved in a disease investigation, which, in turn, reduces the economic impact to owners and affected communities.

Currently within the EBCI, limited operational resources exist for ADT. Burden-sharing on animal issues, specifically as it relates to inspections, exists between DANR, offices external to the EBCI (i.e. USDA APHIS, NCDA&CS), and offices within the EBCI, specifically, the Division of Police (Animal Control and Natural Resource Enforcement), as it concerns captive facilities (e.g. zoos) and private hunting pens. However, this coordination is based on immediate needs and personal relationships and not comprehensively mandated in EBCI regulation. Additionally, while piecemeal efforts to trace animals through inspections do exist to some extent at the EBCI program level, the extent of those efforts and the resources related to those efforts (e.g. tagging, record-keeping) are currently unknown.

Tribal, state, and federal resources are required to establish, implement, and maintain an Animal Disease Traceability (ADT) system. Funding for ADT is not currently dedicated in the Tribe’s budget; however, federal grants provide some level of funding for select initiatives. No full-time staff is dedicated to ADT.

Current categories of need include: Personnel, Programmatic, Financial, Educational, Technological, Informational, and Regulatory.

- Personnel resources include one to two dedicated staff to initially implement and manage program administration and field operations.
- Programmatic resources include building out key programs, most notably on animal identification, tagging, inspections, compliance, and outreach.
- Financial resources include funds allocated from within the Tribe and from USDA for ADT implementation.
- Educational resources include training for Tribal ADT stakeholders (e.g. EBCI Tribal Council, EBCI programs with an ADT mission, producers) and outreach materials for the general public.
- Technological resources include a comprehensive, interoperable, and up-to-date Animal Information Database or records management system.

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• Informational resources include canvassing data from within the EBCI to determine the state, number, and type of animal resources and premises.

• Regulatory resources include updated EBCI codes, statutes, regulations, and policies that are coordinated between departments; that provide guidance, clarify roles, and outline authorities for all ADT stakeholders; and that are approved by Tribal leadership.

II.3 Strengths and Weaknesses

Strengths of the current ADT landscape include:

• Constructive, ongoing relationships with key stakeholders within the EBCI (i.e. Animal Control, Public Health, Legal, Natural Resource Enforcement, Fish and Wildlife) and external constituents to include USDA APHIS and NCDA&CS

• Prioritization of ADT program within the DANR

• Opportunities for external resourcing and resource-sharing with external constituents to include USDA

Weaknesses include:

• Lack of funds dedicated to ADT program development and implementation

• Lack of examples of successful ADT implementation across Tribes

• No full-time staff dedicated to ADT

• Varied and uncoordinated levels of effort for ADT across the different sections of the EBCI

• Unclear lines of authority originating from outdated codes, ordinances, statutes, and regulations related to animal resources

• Absence of a unified record-keeping system and technology offerings for digital records management and databasing

• Limited canvassing data available to provide accurate inventories of producers and animal premises

• Limited historical data on previous USDA-funded ADT work on cattle tagging and vaccinations

• No educational or outreach materials for public awareness

II.4 Opportunities and Threats

Without a comprehensive ADT plan, the EBCI is at risk for animal-to-human and animal-to-animal disease transmission such as Tuberculosis, Brucellosis, and Chronic Wasting Disease (CWD) and other diseases as of yet unknown. In addition to safeguarding human and animal populations, this plan will allow the EBCI to collect information to better understand animal population centers, producer and premise information, disease risk factors, and community concerns, among many others. It will also provide the DANR an opportunity to connect with other internal stakeholders and external constituents on ways to improve coordination especially as it relates to inspections, tagging, record-keeping, information management
and databasing, and rapid response. Without immediate attention for ADT, the EBCI is at risk for intra-Tribal and interstate disease transmission.

II.5 Inventory of existing infrastructure and suitability assessment
Currently, the EBCI has limited resources dedicated to ADT. Managers within the DANR are assigned high-priority tasks related to ADT but only as additional duties. Within the Division of Police, the Animal Control department has conducted inspections and performed other ADT functions. However, both offices’ efforts have taken place without the structure, accountability, and standardization of a unified framework, as outlined in the Code of Federal Regulations (CFR) Title 9 Part 86, Animal Disease Traceability.

III. VISION AND MISSION CONTEXT FOR ADVANCING TRACEABILITY

III.1 Vision Statement
An EBCI Animal Disease Traceability program that protects human, livestock and wildlife health and animal-related economic resources through the identification, prevention, and mitigation of animal diseases introduced onto EBCI lands.

III.2 Mission Statement
The mission of the Division of Agriculture and Natural Resources within the Eastern Band of Cherokee Indians is to manage, enhance, and protect agricultural and natural resources for the present-day Cherokee community and future generations.

IV. TRACEABILITY REQUIREMENTS

IV.1 Strategic goal(s)
To develop and implement an EBCI-wide infrastructure for advancing Animal Disease Traceability that is compatible with Tribal, state, and USDA standards.

IV.2 Programmatic Goals (Objectives):
Objective 1: Secure funding for ADT implementation

Objective 2: Train dedicated staff on full scope of ADT program

Objective 3: Build out and disseminate programs for Animal Identification, Tagging, Inspections and Compliance

Objective 4: Assess future ADT-related financial needs

Objective 5: Develop a responsive educational outreach program
Objective 6: Maintain paper-based or electronic animal information through
technological solutions by using existing databases (e.g. NCDA's Animal
Health Database) and/or developing an in-house capability

Objective 7: Gather information on the number of premises to include
farms, exhibition venues, fish hatcheries, and non-producer participants

Objective 8: Update EBCI codes, ordinances, and regulations to define key
terms, clarify roles, establish clear lines of authority, and outline
responsibilities related to ADT, specifically in Chapters 19 and 113 of the
Code of Ordinances

IV.3 Animal disease traceability performance measures
The EBCI does not currently have a unified ADT program. As such, there
is no opportunity to measure progress. Once this program is up and running,
the EBCI will formulate performance metrics to determine progress. These
metrics will take into account performance measures outlined in the
FY2011 Animal Disease Traceability Cooperative Agreement, namely:

1. Time required for the State or Tribe of destination to notify the State or
Tribe in which the reference animals were officially identified.

2. Time required for the State or Tribe where the official animal number
(i.e., official ear tag) was issued to validate the application and/or issuance
of the reference animal numbers for which they were notified (in
Performance Standard 1). This can be accomplished using distribution
records that contain contact information for the business or operation to
which the numbers were issued.

3. Time required for the State or Tribe of destination to notify the State or
Tribe from which the reference animals were shipped. Increasing
electronically searchable data from the Interstate Certificates of Veterinary
Inspection (ICVI) as well as the use of electronic ICVIs will make achieving
this performance standard easier.

4. Time required for the State or Tribe of origin to validate the movement
of the reference animals for which they were notified (in Performance
Standard 3) from the State or Tribe of origin to the State or Tribe of
destination. This can be accomplished using required ICVI information,
which includes the location where the inspection by an accredited
veterinarian takes place and the location to which the animals are moved
interstate. A movement permit or other document may be used when the
equivalent information reflecting the shipped from location and location of
destination can be determined.
5. Compliance with ADT identification requirements of producers located within EBCI boundaries.

IV.4 Data requirements  
The amount and quality of data collected on animal movement and disease within the EBCI is unknown. Additionally, there is no centralized data collection point or data standards in place. General data management does occur within the EBCI through the Division of Information Technology; however, to date, ADT information has not been maintained on currently accessible servers.

When funding is secured, the EBCI will develop or adopt an existing data management plan that is coordinated with the Division of Information Technology and is in alignment with 9 CFR, the Animal Identification Management System (AIMS), the National Uniform Ear Tagging System (NUES), the Animal Identification Number (AIN) system, and the Interstate Certificate of Veterinary Inspection (ICVI) process as outlined in the Animal Disease Traceability Comprehensive Report and Implementation Plan.

Traceability data will be shared with other State/Tribes/Territories/USDA upon request and only when approved by the EBCI Department of Agriculture and Natural Resources.

IV.5 Information Technology plan  
No current Information Technology (IT) plan exists for ADT. However, DANR will develop an ADT IT plan in coordination with:
• EBCI Division of Information Technology
• USDA’s premise identification systems through a federally-owned but locally hosted data center
• USDA’s Animal Identification Management System (AIMS)
• Animal Trace Processing System (ATPS), and
• Animal Health Information Repository

Other areas of IT coordination include using North Carolina’s Animal Health Program (AHP) database or SCS Core One. The AHP database is housed on a Sequel server platform at the NCDA & CS and is part of the Multi-Hazard Threat Database (MHTD), which serves the entire Department in emergency response situations.

IV.6 Resource requirements  
Building out an ADT program from the ground up will require robust, comprehensive resources. Described in detail above, these resources include Personnel, Programmatic, Financial, Educational, Technological, Informational, and Regulatory needs, specifically.
- Investigating resource-sharing and funding opportunities with USDA on EBCI ADT program implementation.
- Coordinating with USDA, NCDA&CS, and Tribal stakeholders to build out key programs, most notably an Animal Identification and Tagging program and an Animal Inspections and Compliance program.
- Allocating funds from within the Tribe and from USDA for ADT implementation.
- Creating educational resources such as training materials for Tribal ADT stakeholders (e.g., EBCI Tribal Council, EBCI programs with an ADT mission, producers) and outreach materials for the general public.
- Implementing IT solutions that are comprehensive, interoperable, and up-to-date.
- Collecting canvassing data from within the EBCI to determine the state number, and type of animal resources and premises.
- Updating EBCI statutes, regulations, and policies that are coordinated between departments; that provide guidance, clarify roles, and outline authorities for all ADT stakeholders; and that are approved by Tribal leadership.

IV.7 Organizational needs
The standing up of the DANR within the EBCI has necessitated new roles and responsibilities regarding animal resources. Currently, DANR is well-positioned to house the ADT program and associated EBCI codes, ordinances, and regulations are being updated to reflect this reality. However, DANR recognizes that the success of this program relies on full partnerships with programs within the EBCI that have an ADT mission to include the Division of Police, the Division of Public Health and Human Services, and the Office of the Attorney General and external stakeholders, most notably USDA and NCDA&CS. Leveraging the full support and regular participation of these stakeholders is critical to ensuring mission success.

IV.7.1 Executive support
The ADT program has the full support of the Division of Agriculture and Natural Resources and the Office of the Principal Chief.

IV.7.2 Coordination and oversight procedures
The ADT Advisory Committee comprises those offices listed in Section II.1 and includes offices with animal resource responsibilities within the EBCI and external constituents with an ADT mission. Regular and as-needed meetings will occur to review roles and responsibilities related to ADT as well as to discuss mission requirements, performance metrics, measures of effectiveness, and progress in key areas to include emergency
preparedness and rapid response. As the program manager for the ADT program, DANR will solely handle routine mission responsibilities, coordination with key stakeholders, and general oversight.

IV.7.3 Policy
The EBCI is updating its code related to animal health resources, specifically Chapters 19 and 113 of the EBCI Code of Ordinances to reflect the authority of the DANR for all animal health issues to include ADT. The ADT Roadmap must be consistent with the EBCI Code of Ordinances.

IV.7.4 Staffing
Current staff organization within the DANR is not poised to address the requirements of the ADT plan. With input from external constituents and ADT specialists, the DANR will consider the full range of human resource options to include USDA grant assistance, cross-leveling existing or future staff within the DANR, and hiring full-time employees for ADT plan implementation.

IV.7.5 Budget requirements
ADT is currently unfunded. In coordination with the EBCI Tribal Council, the DANR will outline funding requirements and cost-sharing options to include USDA grant requests, specifically the [USDA ADT Cooperative Agreement](#) and requests to share resources with NCDA&CS.

IV.7.6 Outreach
One of the main objectives of the EBCI Animal Traceability Program is to conduct outreach activities to producers, accredited veterinarians, livestock markets, harvest facilities and other industry shareholders.

IV.7.6.1 Accredited veterinarians
Accredited veterinarians are important in animal identification efforts; however, the EBCI has no in-house veterinarians. As such, to support the ADT mission, the DANR will partner with external state and private constituents to conduct inspections and produce veterinary certificates on to and out from Tribal lands. Once the program is up and running, the requirement for inspections will be reduced to incoming animals and disease outbreaks, greatly reducing the need for veterinarians.

IV.7.6.2 Livestock markets
The EBCI does not maintain livestock markets.
IV.7.6.3 Industry as a whole

Outreach to industry and other stakeholders within the EBCI is critical to this plan and will occur in several communication forums to include ADT Advisory Committee meetings. An outreach plan to inform the public will be part of the ADT program.

IV.8. Monitoring and reporting interstate movement activity

Animal movements, the numbers of shipments, and the number of Interstate Certificates of Veterinary Inspection (ICVIs) for both imports and exports are not currently being monitored or recorded. When monitoring and movement data collection does occur, it will comply with 9 CFR 86. Quarterly reports are mandated by USDA and will include:

- Number of ICVIs and other interstate movement documents created within the State/Tribe/Territory on a year-to-date basis for move-out animals
- Number of ICVIs and other interstate movement documents received for move-in animals
- Number of animals by species and class for move-in events associated with ICVIs and other interstate movement documents, indicating the number of animals officially identified and the number not officially identified
- Number of animals by species and class for move-out events associated with ICVIs and other interstate movement documents, indicating the number of animals officially identified and the number not officially identified
- Volume of distribution for each official numbering system/device issued by the State/Tribe/Territory and/or AVIC office, including backtags by market or processing (slaughter) facility

V. TRACEABILITY IMPLEMENTATION

V.1 Ranking of priorities for advancement

1. Secure approval of vetted and reviewed ADT Roadmap; publish Roadmap
2. Secure approval of updated Code of Ordinances to reflect ADT Roadmap responsibilities
3. Develop and secure approval for ADT implementation
4. Secure USDA-funding for ADT implementation
5. Hire new staff or train existing staff on ADT implementation
6. Build out programs for Animal Identification, Inspections, Tagging, Compliance, Canvassing, Record-keeping and Databasing, Information Sharing, Performance Measures, Rapid Response, and Outreach
7. Capture and track traceability data from ICVIs
8. Engage in public outreach and education
Implementation of objectives

Objective 1: Secure USDA funding for ADT implementation through the Veterinary Services Grants and Agreements Program, part of the Animal and Plant Health Inspection Service (APHIS). Investigate other funding opportunities to include internal to the Tribe.

Objective 2: Train ADT program manager and ADT staff on ADT architecture, program requirements to include record-keeping, data management and Information Technology, duties, key points of contact both internal and external to the Tribe, reporting requirements, legal obligations, and other aspects of the program.

Objective 3: Build out programs for Animal Identification, Tagging, Inspections and Compliance. Programs will include purpose, program objectives, key offices and contact information, program requirements, forms, and implementation guidance. Upon review and publication, disseminate.

Objective 4: Assess future financial needs by:
- Requesting funds for ADT implementation through USDA, NCDA&CS, and EBCI Tribal Council
- Exploring partnership opportunities

Objective 5: Develop an educational outreach program that includes physical pamphlets and posters, site-specific informational visits, town hall meetings, and social media awareness campaign.

Objective 6: Maintain paper-based or electronic animal information through technological solutions by using existing databases (E.g. NCDA's Animal Health Database) and/or developing an in-house capability.

Objective 7: Gather information on the number of premises to include farms, exhibition venues, and non-producer participants by canvassing within the EBCI.

Objective 8: Update EBCI codes, ordinances, and regulations in order to define key terms, clarify roles, establish clear lines of authority, and outline responsibilities related to ADT, specifically in Chapters 19 and 113 of the EBCI Code of Ordinances. Coordination should occur with NCDA&CS, USDA APHIS, and key stakeholders within EBCI to include the Division of Police (Animal Control and Natural Resources Enforcement), the Division of Public Health and Human Services, Fish and Wildlife Management, and the Office of the Attorney General.