ARTICLE 1 - PURPOSE
The purpose of this Memorandum of Understanding (MOU) is to outline and agree on the requirements for split state status regarding the risk of bovine tuberculosis (TB), namely, Modified Accredited status and Accredited Free status pursuant to Title 9, Code of Federal Regulations (CFR) Part 77, and the Tuberculosis Eradication Program's Uniform Methods and Rules, effective January 1, 2005, (UM&R). It outlines an agreed upon framework for implementing and assessing strategies to address bovine TB in both livestock and wildlife in Michigan with the objective of achieving Accredited Free status.

ARTICLE 2 - BACKGROUND
In October 2004, the Michigan Department of Agriculture and Rural Development (MDARD) submitted an application for split state status using the criteria established by the United States Department of Agriculture (USDA) for recognition of a zone or region with distinct bovine TB status, as delineated in 9 CFR 77.3 et seq.

Bovine tuberculosis regulations as delineated in 9 CFR 77.4(a)(3) require, in pertinent parts, that a State must enter into an MOU with USDA Animal and Plant Health Inspection Veterinary Services (USDA APHIS VS) in which the state agrees to adhere to any condition for zone recognition particular to that request within the Cooperative Tuberculosis Eradication Program.

In 2009, 2011, 2014, 2016 and 2019, MOUs were signed by MDARD, the Michigan Department of Natural Resources (MDNR), and USDA APHIS VS, which established criteria for maintenance of an Accredited Free, Modified Accredited Zone (MAZ) and Modified Accredited Advanced Zone (MAAZ) for bovine TB in Michigan. Pursuant to the CFR, the MOUs were executed by the State of Michigan in order to agree on conditions for maintaining and advancing zones based on disease risk, and to continue progression toward the ultimate goal of eradicating bovine tuberculosis from the northern portion of Lower Michigan. Michigan obtained Accredited Free status for all counties except Alcona, Alpena, Montmorency, and Oscoda on September 10, 2014.

ARTICLE 3 - AUTHORITIES
The USDA APHIS VS's (referred to as the "Service") authority to control and/or eradicate bovine TB exists under the Animal Health Protection Act, in section 10411 (7 USC 8310) and in 10409 (7 USC 8308). This Act provides, among other things, the authority for the Service to cooperate with states or political subdivisions thereof, domestic or international
associations or organizations, Indian Tribes, and individuals, to improve livestock and to control or eradicate any communicable diseases of livestock.

MDARD and MDNR's authorities exist under Michigan’s Animal Industry Act, P.A. 466 of 1988, as amended; the Natural Resources and Environmental Protection Act, P.A. 451 of 1994, as amended; and the Privately Owned Cervidae Producers Marketing Act, P.A. 190 of 2000, as amended.

ARTICLE 4 - MUTUAL AGREEMENT
It is mutually agreed upon that the cattle, bison, and cervid rules and regulations of the National Tuberculosis Eradication Program will be followed, including VS Memos, VS Notices, pertinent parts of the Code of Federal Regulations; the Uniform Methods and Rules, January 1, 2005, including any future revisions; and the Cervidae Uniform Methods and Rules, January, 1999, including any future revisions.

ARTICLE 5 - COOPERATOR RESPONSIBILITIES
Michigan Department of Agriculture and Rural Development (MDARD) is responsible for the following provisions:

1. Requiring official electronic identification for any live cattle and bison moved from premises in the Modified Accredited Zone (MAZ) and Presque Isle County and the ability to retrieve information concerning animal identification and animal movement within 48 hours. Cattle may move from a premises and receive official electronic identification at a licensed livestock auction market if they do not cross a zonal boundary.

2. All MAZ and Presque Isle County cattle will be required to be double-tagged at the time of TB testing with a producer-supplied official electronic identification tag and a secondary identification tag. The goal is complete double-tagging for all Presque Isle County herds by July 1, 2021.

3. MDARD will maintain and enforce a certificate system to track interzone movements of live cattle from farm of origin to final destination from the MAZ and will implement the same process in Presque Isle County by July 1, 2020. This certificate system shall be substantially the same as CFR (77.3) requirements for interstate movements.

All individual cattle and bison data as specified in 9 CFR, 86.1 Definitions, Interstate Certificate of Veterinary Inspection (ICVI), will be included on the certificate. The certificate must accompany the cattle and bison upon movement across a zonal boundary except as exempted below:

- Cattle moving directly to slaughter from the first livestock market can move on the market invoice listing the individual animal back tags, as an interim measure, until MDARD and USDA, APHIS, VS can develop and implement an alternative certificate system that does not impede the flow of commerce.
- This requirement does not apply to cattle moving to the Gaylord market because the tuberculosis test status of all incoming animals is verified on-site. The invoice generated by the Gaylord market meets this requirement provided it contains the same information required on a movement certificate (excluding the sellers name, address, and animal age) along with individual animal weights.
4. Movement of live cattle (other than directly to slaughter) from herds in the MAZ and Presque Isle County that do not maintain Wildlife Risk Mitigated verified status will be prohibited.

5. Movements of cattle and bison from the MAZ and Presque Isle County will be monitored in livestock auctions within the state on sale days to confirm that the cattle and bison are identified, tested, and permitted, as required, and through other methods as necessary to ensure compliance with requirements. Market coverage by MDARD and/or USDA APHIS VS staff will be based on the likelihood of MAZ animals being sold in each market. The following markets will have routine and continuous coverage on sale days: Gaylord, St. Louis, and Cass City. Other markets will be monitored as needed to verify compliance with applicable laws.

6. MDARD will utilize state authority to randomly intercept and inspect vehicles that are transporting livestock on public roads within Michigan for compliance with state and federal split state status requirements and this MOU. MDARD will maintain an agreement with a law enforcement agency for an average of 10 hours of patrols per week conducting stops and inspections pertaining to vehicles that may be transporting cattle between zones within Michigan to ensure that they are being moved in compliance with testing, official identification, and movement certificate requirements. MDARD will establish the amount of monitoring to be done (which includes at least one stop per three days when averaged over each calendar year) and routinely evaluate data to ensure that if the trend for illegal movements over the period of one year is increasing, that additional measures are implemented to decrease illegal movements. Total movements will be calculated by the number of permits and certificates issued. If funding levels change, MDARD and USDA will develop a mutually agreed upon plan for monitoring movements of animals that is consistent with controls necessary between Modified Accredited and TB Free zones.

7. MDARD will include information regarding the following in the annual and semiannual bovine TB reports (VS Form 6-38 Form narratives).
   - Metrics of activities in the TB program as follows:
     - The number of exposed cattle identified since the previous report
       - Number of exposed
       - Number slaughtered
       - Number necropsied and results of necropsy
       - Number tested
       - Number traced out of state
       - Other
     - Number of stops conducted by law enforcement
     - Number of violations identified
     - Results of action taken as a result of identified violations
     - Number of farms in the Wildlife Risk Mitigation area
     - Number of farms that are Wildlife Risk Mitigated
     - Number of warning letters issued for failure to comply with Wildlife Risk Mitigation program
     - Number of days between notification and correction of problems
     - Number of farms which have been removed from the Wildlife Risk Mitigation program due to failure to comply with standards
o Number of days between notification and removal from the Wildlife Risk Mitigation program
o Number of farms in the Enhanced Wildlife Biosecurity area
o Number of farms that fulfill Enhanced Wildlife Biosecurity requirements
o Number of warning letters issued for failure to comply with Enhanced Wildlife Biosecurity requirements
o Number of days between notification and correction of problems
o Number of farms which have been removed from the Enhanced Wildlife Biosecurity program due to failure to comply with standards
o Number of days between notification and removal from the Enhanced Wildlife Biosecurity program
o Number of farms enrolled in the targeted deer removal program in the Enhanced Wildlife Biosecurity area
o Number of farms in the Enhanced Wildlife Biosecurity area that had deer removed
o Number of visits conducted on farms enrolled in the targeted deer removal program in the Enhanced Wildlife Biosecurity program and total number of active commercial cattle herds in the Enhanced Wildlife Biosecurity area
o Number of deer removed during targeted deer removal efforts
o Number of herds tested for surveillance in the MAZ and Presque Isle County
o Number of herds tested due to circle testing, and 6-4A, 6-4B, and 6-35 traces
o Number of educational visits conducted in custom slaughter plants
o Average number of days to complete inventory reconciliation for herds tested in the MAZ and number of herds in which an inventory reconciliation was completed more than 60 days from the whole herd test

• Other activities as specified in VS Memorandum 552.29 or mutually agreed upon

8. MDARD will conduct risk-based surveillance for bovine tuberculosis in cattle as follows:

**MAZ - Counties of Alcona, Alpena, Montmorency, and Oscoda**
   a. Annual whole herd testing of all herds except freezer beef herds.
   b. Whole herd testing will include all cattle 12 months of age and older, and all non-natural additions of any age.

**Presque Isle County**
   a. For the balance of FY 2020 thru Dec 31, 2020
      i. Circles identified as a result of Herd 75 and herds previously selected for triennial testing will complete whole herd testing by January 31, 2020.
      ii. Beginning in Spring 2020, all remaining herds in Presque Isle County last tested before January 2019 will be tested by December 31, 2020.
   b. Beginning January 2021, all cattle herds in the county will be tested annually. This includes feedlots that do not meet the requirements to be considered a VS-approved feedlot (9 CFR 77.5) or a Michigan Registered Terminal Operation.
   c. Freezer beef herds and feedlots meeting the 9 CFR 77.5 requirements for a VS-approved feedlot and Michigan Registered Terminal Operations are not included in this testing.
   d. Whole herd testing will include all cattle 12 months of age and older, and all non-natural additions of any age.
   e. Annual whole herd surveillance testing in Presque Isle County will continue through at least 2022. Surveillance results will be evaluated in late 2022 to determine if additional annual whole herd testing is needed in Presque Isle County.
Counties Surrounding the MAZ (Potentially including Cheboygan, Otsego, Crawford, Roscommon, Ogemaw, and Iosco)

a. Annual whole herd testing of at least 150 cattle herds across the six surrounding counties listed above within one year of the publication of the Zoning Order (2021 testing season) and continue at this same level of testing for at least a second year (2022 testing year).

b. Surveillance results will be evaluated in late 2022 to determine if additional annual surveillance testing is needed in these counties.

Circle Testing

a. Circles around TB-positive free-ranging deer found in the MAZ (Montmorency, Alpena, Alcona and Oscoda counties) and Presque Isle County will be expanded to 15-mile radius. Cattle herds will be tested within the portion of the circles that extend into Cheboygan, Otsego, Roscommon, Crawford, Ogemaw, and Iosco counties. No circle testing will occur in the MAZ or Presque Isle County due to the required surveillance testing.

b. All circles around a TB-positive free-ranging deer or cattle herd discovered in Cheboygan, Otsego, Roscommon, Crawford, Ogemaw, losco counties or any of the remaining counties within the State of Michigan will be a 10 km radius for cattle herds and a 10 mile radius for free-ranging deer.

The entire State of Michigan

a. Trace Source testing (6-4A).

b. Trace Exposed testing (6-4B).

c. Slaughter Trace testing (6-35)

Any herds which are not in compliance with surveillance requirements will be handled according to MDARD Compliance and Enforcement Policies.

9. MDARD will quarantine all premises that contain animals suspicious for the presence of M. bovis as outlined in the 2005 Uniform Methods and Rules until determined to be negative for bovine tuberculosis. On a case by case basis, USDA APHIS VS may approve movement of animals off a quarantined premises where animal welfare or other concerns related to quarantined animals exist. USDA APHIS VS will expedite appraisal and approval of indemnity for cattle or bison as described in Article 6, # 3, below.

All TB infected herds in Michigan are quarantined until depopulated or until a test-and-removal program as specified by USDA is completed. Herds designated as TB-affected in the MAZ and Presque Isle County will be required to participate in the targeted deer removal program thru Wildlife Services as a condition of quarantine release.

10. MDARD and the Service will continue to collaborate with USDA APHIS Wildlife Services (WS) (as USDA APHIS WS resources allow), university and agency-based researchers, and representatives of livestock producers to increase the biosecurity of herds in the highest risk area of the MAZ. This effort is designed to change the long-term cattle raising practices that may lead to an increased risk of bovine TB infecting herds from surrounding deer populations.

MDARD, USDA APHIS VS, or USDA APHIS WS personnel will conduct inspections of each herd participating in a biosecurity program located in the MAZ and Presque Isle County on a bi-annual basis. These herds will be encouraged to allow deer surveillance and targeted
removal by USDA APHIS WS personnel. Herds that are considered to be of nominal risk for being exposed to tuberculosis from free-ranging white-tailed deer will receive inspections on an annual basis.

11. MDARD will implement an Enhanced Wildlife Biosecurity program for cattle herds located in the highest risk area of the MAZ in and around Deer Management Unit 452. All herds in this Enhanced Wildlife Biosecurity area must have completed a herd assessment and implemented all High-Risk Enhanced Wildlife Biosecurity recommendations by January 1, 2020 or will not be considered as WRM-verified and will not be eligible to move live cattle other than directly for slaughter.

12. Each herd located in the Enhanced Wildlife Biosecurity area of the MAZ must enter into an agreement that allows USDA APHIS WS access to conduct targeted deer removal on their farm. Any herds which do not enter such an agreement or inhibit the ability of WS to conduct targeted removal of deer, will not be considered as WRM-verified and will not be eligible to move live cattle other than directly for slaughter.

- The Targeted Removal program includes USDA APHIS WS removing deer on farms during three periods a year: March 1 - April 30, July 15 - August 30, and January 1 - February 28. Up to four attempts will be made per period to remove deer from a farm, depending on the level of deer activity on the farm.

13. MDARD will complete herd inventory reconciliation for freezer beef herds and any whole herd test performed in the MAZ and Presque Isle County by regulatory or accredited veterinarians within 60 days of a whole herd test. Herd inventory reconciliation means comparing herd inventories between two dates, identifying animals that cannot be accounted for by current databases, contacting owners to gather any additional information, and assigning animals to the compliance unit for investigation or placing the animal on the watch list. It is recognized that prioritization of workload during high-volume testing and movement seasons may result in herds extending beyond the 60 day timeline.

14. All testing for quarantine release or testing of high-risk herds will be performed by regulatory veterinarians only. High-risk herds shall consist of:
   a. 60-day whole-herd retests after the removal of a reactor animal, 90 days for privately owned cervids
   b. Herds under test and remove herd plans
   c. Herds with a history of lesions suggestive of bovine TB
   d. Newly assembled herds on premises where a herd has been depopulated because of bovine TB
   e. Herds in contact with affected herds, e.g., fence line contact
   f. 6-4A herds (trace-ins)
   g. 6-4B herds (trace-outs)
   h. 6-35 herds (slaughter traces)
   i. Other herds of high interest as defined through collaboration with VS and the Cattle Health Program

15. A bovine TB management plan will be maintained and updated as significant developments occur that may alter the implementation of the plan, or within six months following the end of the bovine TB management plan period.
Michigan Department of Natural Resources (MDNR) is responsible for the following provisions:

MDNR will develop and implement a Wildlife Disease Management Plan that will contain the following activities:

1. MDNR will conduct active surveillance for bovine TB in free-ranging white-tailed deer as indicated below. Active surveillance is defined as testing of free-ranging cervids resulting from deliberate MDNR actions to gather samples including out-of-season hunting opportunities, active promotion of testing of hunter-harvested deer at check stations, mandatory testing of all elk, and mandatory testing of deer taken under Deer Management Assistance Permits, Crop Damage Permits, and Disease Control Permits.
   A. Alcona, Alpena, Montmorency, and Oscoda Counties (aka MAZ): Active sampling of free-ranging deer at a rate of 2,800 deer annually in the MAZ.
   B. Cheboygan, Crawford, Iosco, Ogemaw, Otsego, and Roscommon Counties: Active sampling of free-ranging deer at a rate of 300 deer annually per county.
   C. Presque Isle County: Active sampling of free-ranging deer at a rate of at least 500 deer annually with a goal of testing 700 deer annually.

   If (a) the active sampling of 300 free ranging deer per county in item 1B above is not achieved or (b) 2 or more cases of TB are found in free-ranging deer in any one of the six counties surrounding the MAZ (Cheboygan, Otsego, Roscommon, Crawford, Ogemaw, and Iosco), then surveillance will be performed as follows in the specific county:
   a. Whole herd testing of all cattle herds over a three-year period on a rotating basis (i.e., one-third of all herds are tested annually) until renegotiated. This includes feedlots that do not meet the requirements to be considered a VS-approved feedlot (9 CFR 77.5) or a Michigan Registered Terminal Operation.
   b. Freezer beef herds and feedlots meeting the 9 CFR 77.5 requirements for a VS-approved feedlot and Michigan Registered Terminal Operations are not included in this testing.
   c. Whole herd testing will include all cattle 12 months of age and older, and all non-natural additions of any age.
   d. Surveillance testing of these counties will continue for at least three years after the latest detection of TB in any species of free ranging wildlife in the county.

   If no cases of bovine TB are detected in free-ranging cervids or livestock by sampling at the agreed upon rate for a period of at least three consecutive years subsequent to 2019, the prevalence of bovine TB will be considered to have reached an undetectable level.

2. Passive surveillance will be conducted through examination and testing of potentially lesioned animals submitted to the MDNR by hunters throughout Michigan. This surveillance will be in addition to any active surveillance.

3. Hunters are educated to look for tuberculosis lesions through information in the MDNR's Hunting and Trapping Guide. Passive surveillance is defined as testing of free-ranging cervids voluntarily submitted to MDNR by the public as a part of ongoing statewide monitoring of wildlife health. Other than being promoted through MDNR public education efforts, passive surveillance does not entail active effort on the part of the agency to acquire samples.
4. Animals submitted to the Wildlife Disease Laboratory for Chronic Wasting Disease surveillance will be screened for bovine TB whenever possible.

5. If bovine TB is detected by MDNR active or passive surveillance in free-ranging cervids or tuberculosis is detected by MDARD in livestock in any county, excluding the counties listed in 1A through 1C above, heightened active sampling of free-ranging deer will be initiated within a 10-mile radius of the location of the TB-positive animal, at a rate sufficient to detect a TB prevalence of at least 1% with 95% confidence (≥300 deer annually). Sampling will continue at the agreed upon rate for a period of at least three consecutive years following the last year that a case of bovine TB was detected in free-ranging cervids in that 10-mile radius area. In the event the free-ranging deer population in an area is insufficient to allow the agreed upon rate to be met, or other conditions warrant, a sampling rate sufficient to meet the intent of this provision will be mutually agreed upon by USDA, APHIS, VS and MDNR on a case-by-case basis.

6. MDNR will target deer management efforts in the MAZ on a local scale to prevent transmission of TB between deer and livestock. Beginning in January 2018, MDNR will authorize additional hunts in Alpena County in and around the area that contains the highest concentration of cattle herds. Following this additional harvest season MDNR, in cooperation with MDARD and livestock and wildlife cooperators, will conduct an evaluation of the season and develop recommendations for increasing the use of additional hunting opportunities in the MAZ.

7. MDNR will designate a full-time Bovine Tuberculosis Coordinator to work with hunt clubs, landowners, and other cooperators in the MAZ and Presque Isle County to increase efforts to eradicate TB from the deer herd. This will include working to develop deer management cooperatives to increase the harvest of antlerless deer in the MAZ.

8. MDNR will continue to assign conservation officers to enforce feeding and baiting bans in the TB area.

9. MDNR will provide USDA APHIS WS with approval to conduct targeted removal of deer on cattle farms in the MAZ and Presque Isle County.

10. MDNR will actively promote the Hunter Access Program (HAP) to all landowners in the MAZ and Presque Isle County to incentivize increase of antlerless deer harvest. This program compensates private landowners for allowing hunters access to their properties; revisions to the enrollment requirements have increased property eligibility in the MAZ.

11. MDNR will simplify the process for cattle producers and adjacent land owners to obtain no-cost disease control permits valid for harvesting deer year-round in the MAZ and Presque Isle County.

12. The MDNR, with collaborators, will continue to conduct research concerning the epidemiology of bovine tuberculosis and potential intervention strategies, including targeted removal and vaccination. Relevant research findings will be incorporated into existing surveillance and disease reduction activities as resources allow.
13. MDNR will include information regarding the following in the annual bovine TB reports (VS Form 6-38 narratives):
   - Number of deer tested for TB in each of the active surveillance areas per calendar year, and the percentage of the surveillance target reached by target area.
   - Number of deer tested for TB through passive surveillance per calendar year in the Accredited Free zone.
   - Number of deer tested for TB through active surveillance per calendar year by county in Cheboygan, Crawford, Iosco, Ogemaw, Otsego, Presque Isle, and Roscommon Counties.
   - Location of each TB positive free-ranging deer identified by county and township.
   - Number of deer tested for TB per calendar year that were initially submitted to the Wildlife Disease Lab for Chronic Wasting Disease surveillance.
   - A summary of efforts to develop deer management cooperatives and conducting herd health checks on hunt clubs in the MAZ.
   - A summary of feeding and baiting ban enforcement activities by conservation officers in the MAZ.
   - Number of landowners and number of acres enrolled in the Hunter Access Program in the MAZ.
   - Number of additional deer harvest seasons held in the MAZ and number of deer harvested during these seasons.
   - Estimated population of deer in the MAZ.
   - Summary of efforts to develop and implement new intervention strategies, including targeted removal of deer and vaccination.
   - Number cattle producers receiving no-cost disease control permits in the MAZ, total number of permits issued, and number of deer harvested through use of the disease control permits.
   - Number of deer tested outside the Active Surveillance area per calendar year related to the finding of a TB infected deer or livestock herd.
   - Apparent prevalence of TB in DMU 452 in deer of all ages other than fawns in the current year and the trend over the preceding 5 years.
   - Apparent prevalence of TB in DMU 452 in yearling deer (ages 1 and 1.5 years) in the current year and the trend over the preceding 5 years.
   - Age-specific force of infection in DMU 452 in the current year and the trend over the preceding 5 years.

ARTICLE 6 - SERVICE RESPONSIBILITIES

USDA APHIS VS (referred to as the "Service") is responsible for the following:

1. Providing expertise in epidemiology, diagnostic support, risk assessment, and testing.

2. Providing assistance with improving slaughter surveillance at federal slaughter establishments, including assisting MDARD with obtaining cattle movement data from other states.

3. Assisting with indemnity payments for diagnostic exposed cattle and bison and those that are suspects to secondary tuberculosis testing (i.e., CCT or gamma tests) in the following:
   A. High-risk herds as described in Article 5 MDARD Items 8 and 14
B. Cattle in herds undergoing whole herd surveillance testing or movement testing in the MAZ and Presque Isle County or testing in circles related to the finding of TB in wildlife or cattle
C. Herds that must be tested by regulatory veterinarians
D. Cattle and bison that are positive to the caudal fold tuberculin test only during the removal phase of testing in herds undergoing a test and remove herd management plan
E. Any animals that are designated reactors

4. Assisting with payments for animal and specimen transportation fees, laboratory analysis, data storage, and management support. The Service will assume responsibility for timely appraisal and payment for animals indemnified with federal funds.

5. Assisting the Cooperator with cattle and bison movement monitoring and compliance investigations involving movement of cattle between zones and interstate through the activities of USDA, APHIS Investigative and Enforcement Services (IES) officers.

6. Providing sufficient USDA APHIS WS personnel to carry out deer surveillance and targeted removal of deer on farms located within the MAZ and Presque Isle County. WS would also conduct WRM/EWB verification activities as time and personnel allow.

7. Providing support for acquisition and development for electronic identification, hardware and software in accordance with Animal Disease Traceability and USDA regulations. Provide data entry assistance necessary to monitor tuberculosis testing and animal movements within the MAZ and Presque Isle County, and between zones, and assist with fulfilling reporting requirements of split state status and this MOU.

8. Reviewing the progress of the bovine TB eradication activities covered under the split-state status and this MOU and reporting recommendations to the Cooperators.

9. Supporting implementation of the Wildlife Risk Mitigation Project as outlined in Article 5, MDARD Responsibilities, Items 11-12.

10. The Service will conduct annual reviews of the TB eradication program in Michigan to determine compliance with this MOU and all other applicable regulations.

ARTICLE 7 – STATUS
The requirements and agreements of the MOU must be in place and the prevalence rates in cattle and bison for each zone are in compliance with requirements of the CFR to maintain status. If it is determined that the conditions of this MOU or any other applicable regulations are not being met after conducting a program review, USDA will withdraw Michigan’s split state status and reclassify the entire State of Michigan in accordance with the CFR and the state’s overall herd prevalence.

If one or more TB-affected cattle herds with the whole genome sequence associated with white-tailed deer in the MAZ is detected in the accredited-free zone, USDA, MDARD, and MDNR will discuss appropriate actions given the epidemiology and circumstances surrounding the situation. These discussions will occur within 30 days of receipt of the whole genome sequence information. Actions under consideration will include options such
as: withdrawing Michigan's split state status and reclassifying the entire State of Michigan in accordance with the CFR and the state's overall herd prevalence; adjusting the MAZ to include additional counties; adjusting surveillance approaches; adjusting movement restrictions; and other program adjustments designed to reduce the spread of TB.

The administrator will use his/her discretion to allow up to three newly identified TB affected cattle and bison herds during any consecutive 12-month period for maintaining status in the MAZ. In the event that more than (3) newly infected herds are identified in the MA zone in any consecutive 12-month period, USDA's recognition of split state status will be withdrawn and the entire State of Michigan will be reclassified in accordance with the CFR and the state's overall herd prevalence at the time.

To be eligible to apply for advancement from modified accredited to modified accredited advanced status, the MAZ must demonstrate to the Administrator that it complies with the provisions of the Uniform Methods and Rules Bovine Tuberculosis Eradication, effective January 1, 2005 and that tuberculosis has been found in one or fewer cattle and/or bison herds for each of the most recent two years.

Progress toward both preventing the spread of tuberculosis among and eradicating the disease from wildlife through a successful Wildlife Disease Management Plan, will be monitored utilizing trends over time in three indices within Deer Management Unit (DMU) 452:

1) apparent prevalence in deer of all ages other than fawns;
2) apparent prevalence in yearling deer (ages 1 and 1.5 years); and
3) age-specific force of infection.

Reporting of these indices will be included in the annual bovine tuberculosis report. Other trend indices may be added to or substituted for these as mutually considered appropriate by MDNR and USDA. For purposes of this MOU, trends will be assessed over the five year period including and preceding the most recent deer hunting season. For the purposes of this MOU, statistical trends in prevalence will be assessed using a two-tailed Cochran-Armitage Test for Trend.

The Wildlife Disease Management Plan must be reviewed by MDNR annually and a new plan jointly developed between the MDNR and the Service when needed. If two or more of the Wildlife Disease Management Plan indices noted above demonstrate a statistically significant increasing trend over the preceding five year period for three consecutive reporting years, USDA will conduct an evaluation and initiate discussions with MDARD and MDNR regarding approaches to either modify the zone boundaries or implement additional actions.

**ARTICLE 8 - FINANCIAL OBLIGATION**
Execution of this MOU does not constitute a financial obligation on the part of the Service or Cooperator. Each signatory party is to use and manage its own funds in carrying out the purpose of this MOU.

**ARTICLE 9 - LIMITATIONS OF COMMITMENT**
This MOU, and any continuation thereof, shall be contingent upon available funds appropriated by each party's funding source. The Service receives its funds through
appropriations from the Congress of the United States. It is understood and agreed that any monies allocated for purposes covered by this MOU shall be expended in accordance with its terms and in the manner prescribed by the fiscal regulations and/or administrative policies of the party making the funds available. If fiscal resources are to transfer, a separate agreement must be developed by the parties.

Cooperator (MDARD and MDNR) funds are subject to and contingent upon, available funding from the Michigan Legislature and/or Executive branches. Funds may be limited, discontinued, or eliminated if the Legislature fails to appropriate sufficient funds, or if an Executive Order, directive, or departmental decision limits, discontinues, or eliminates the ability of the Cooperator to utilize appropriated funding.

ARTICLE 10 - CONGRESSIONAL RESTRICTION
Pursuant to 41 USC 22, no member of or delegate to Congress shall be permitted to share any or part of this MOU or to any benefit to arise there from.

ARTICLE 11 - LIABILITIES
APHIS will hold the Cooperator harmless from any liability arising from the negligent act or omission of the APHIS officer or employee acting within the scope of his or her employment to the extent compensation is available pursuant to the Federal Tort Claims Act (FTCA), except for negligent actions or omissions of the Cooperator, its employees, agents or subcontractors, and employees or agents of the subcontractor(s). Such relief shall be provided pursuant to the procedures set forth in the FTCA and applicable regulations. The United States of America will not be held liable for any property damage or personal injury resulting from the use of federally owned real estate and personal property loaned to the Cooperator under this MOU. The Cooperator assumes responsibility for any and all property damage and personal injury resulting from the use of said real and personal property and further agrees to save and hold harmless the United States of America from any and all claims for such property damage and personal injury. The Cooperator further agrees to reimburse the United States of America by and through the Service for any property damage to any Federally-owned real and personal property, less normal wear and tear, which may occur through the use of said property under this MOU.

ARTICLE 12 - CONDITIONS
Upon signature of this MOU, MDARD and MDNR agree to the conditions for split-state status for bovine TB as defined in 9 CFR Part 77 and described within. This MOU is effective for two years following the date of signature, unless additional TB-affected cattle herds are detected in the accredited free zone (except cases detected in Presque Isle County). Both parties acknowledge that a signed MOU is required for maintenance of split state status and that in the absence of a current MOU split-State status may be rescinded by the Service.

ARTICLE 13 - AMENDMENTS AND TERMINATION
This MOU may be amended at any time by mutual agreement of the parties in writing. This MOU may be terminated by either party upon 60 days written notice to the other party.
UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
VETERINARY SERVICES

BY:
Burke Healey
Deputy Administrator
Veterinary Services

16 Dec. 2019
Date

MICHIGAN DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT

BY:
Gary McDowell
Director

12/12/19
Date

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

BY:
Daniel Eichinger
Director

12/18/19
Date
February 3, 2020

RE: Memorandum of Understanding (MOU) Between Michigan Department of Agriculture and Rural Development and the Michigan Department of Natural Resources and the United States Department of Agriculture Animal (USDA) and Plant Health Inspection Service Veterinary Services signed December 16, 2019

Per email exchange with USDA the following are to be considered part of the MOU:

- **Cattle Herd Surveillance in Buffer Counties:**
  - Testing will begin April 1, 2020 with 150 cattle herds to be whole herd tested by March 31, 2021. From April 1, 2021 until March 31, 2022, 150 more herds will be tested. Surveillance results will be evaluated in 2022 to determine if additional cattle surveillance is needed in these surrounding counties.
  - Other reasons for regulatory herd TB Tests will count toward the 150-herd annual testing requirement.

- **Wild Deer Surveillance:**
  - Beginning in January 2020, annual surveillance of 300 free-ranging deer from each of the six counties in the buffer zone, with the exception Presque Isle County which requires surveillance of 500 deer, is required.

- **Wildlife Risk Mitigation (WRM) Program:**
  - The WRM verification program will be discontinued in Cheboygan and Otsego Counties in order to reallocate resources to the additional required surveillance testing. Producers in these areas are encouraged to continue wildlife risk mitigation practices to protect their herds.

Sincerely,

Nora E. Wineland, DVM, MS, DACVPM
State Veterinarian and Division Director
Animal Industry Division