

Information / metadata file (FGDC standard) for Geospatial Data Layer of <u>Wildlife Management Units White-Tailed Deer "2021" polygons</u>

(species scientific name "Odocoileus virginianus") version 2021 (revised 2022 Aug. 31 cob) by Marshall Strong, MI DNR Wildlife Division, Lansing, MI.

Geospatial file name or layer name:

" wildlife_management_unit_white-tailed_deer_historical_polygons (v2021) " or may also be seen as new DNR GIS environment EGDB standard name of "WildlifeManagementLinitWhitetailedDeerHISTORICAL polygons "

"WildlifeManagementUnitWhitetailedDeerHISTORICALpolygons ".

and this file should be available as the dated "2021" metadata file, online, named: <u>https://www2.dnr.state.mi.us/publications/pdfs/huntingwildlifehabitat/WLDmetadata/DNR-WLD wildlife management units whitetailed deer 2021 polyon gislayer metadata.pdf</u>. *-and-* as this data layer will not be "current but will be folded-over or included into a combined data set " WildlifeManagementUnitWhitetailedDeerHISTORICALpolygons ", which is a combination of historical data layers (meaning before the "current" year's layer), which is identified with an attribute field as the 2021 set, and able to be separated out from other data sets in that layer using that same attribute field. This data set is specific for the white-tailed deer or species scientific name of "Odocoileus virginianus ".

- Date: 2022 Aug 31 cob (current durable draft, subject to change with DNR GIS environment, etc.).
- By: State of Michigan, Michigan Department of Natural Resources (MDNR, <u>www.michigan.gov/dnr</u>), Wildlife Division (WLD; specifically, M. Strong; see Section 1.9).
- Description: <u>This file</u> is a data layer information in the FGDC geospatial data metadata standard, and contains important comments, constraints, and qualifiers to accompany geographic information system files (ESRI format shapefile or layer). This longer and more-complete documentation for this data set's metadata approximates and follows the FGDC and NBII Metadata Standards at primary required levels, where applicable and appropriate; additional details added if needed. However, these metadata below should include all the mandatory FGDC compliant elements for this data set (a single layer). Some text may be duplicated (and the standard does have purposefully duplicated blocks within the standard), but will be improved with next update of these metadata. This metadata file follows the US FGDC metadata format (see Sec.), but has purposefully been constructed with this front introductory page and sections written without the assumption the reader is deeply trained or experienced in technology, technical terms, or GIS.

<u>A detailed data layer description</u> is in Section 1; Section 1.2.1 a subject-specific abstract.

For subject-specific questions, after reading this entire metadata file on this GIS data layer, contact: Marshall Strong, Wildlife Mapping & Geotechnology Program Specialist, (<u>strongm@michigan.gov</u>; <u>517-256-5397</u>); DNR Wildlife Division- Planning & Adaptation Section- Management Information Unit; State of Michigan - Department of Natural Resources (DNR; <u>http://www.michigan.gov/dnr</u>), Wildlife Division (WLD)(<u>DNR-Wildlife@michigan.gov</u>; <u>517-284-WILD(9453)</u>), Constitution Hall (N tower, 4th floor, NW), 525 West Allegan Street, PO Box 30444, Lansing, MI 48909-7944 USA. ... plus see later content Section 1.9 for more completed contact information.

[Below is the start of FGDC (+NBII) compliant metadata, in Section 0 to Section 7, then supplementary information follows, if there are any included. Content above the dashed-line, below, is header provided for those unfamiliar with the FGDC GeoSpatial Content Standard and to help readers].

Section 0 - Metadata:

Section 1 - Identification Information:

(1.) Identification_Information:

(1.1) Citation_Information:

- (1.1.1) Originator: Michigan Department of Natural Resources (MDNR), Wildlife Division (WLD).
- (1.1.2) Publication_Date: 20220831.
- (1.1.3) Publication_Time: unknown (not notably relevant).
- (1.1.4) Title: State of Michigan, Department of Natural Resources (DNR), Wildlife Division (WLD) geospatial data layer of Wildlife Management Units White-Tailed Deer "current" polygons (for species scientific name "Odocoileus virginianus", ver. 2021 (rev. 2022 Aug. 31 draft) ... after 2022 is over, this set will be in the historical combined layer, selected or identified by using the attribute field Year = 2021; see Section 5).
- (1.1.5) Edition: 2021; if use year of data set like an edition label (which it can be considered), plus use the publication date for the metadata file; note that as of this date for metadata version, the information is being updated to match new migrated location(s) of this data layer, during a large and detailed DNR GIS server and services upgrade (still ongoing as of date of this metadata documentation).
- (1.1.6) Geospatial_Presentation_Form: vector digital data

(see the listed domain is partially from pp. 88-91 in Anglo-American Committee on Cataloguing of Cartographic Materials, 1982, Cartographic materials: A manual of interpretation for AACR2: Chicago, American Library Association). Specifically, data set is an ESRI (<u>http://www.esri.com</u>) compatible GIS data as sourced by citation: ESRI 2011. ArcGIS Desktop: Release 10.x. Redlands, CA: Environmental Systems Research Institute. See "Section 1.13 Native_Data_Set_Environment" for more information, plus other sections of this file.

- (1.1.7) Series_Information: .
 - (1.1.7.1) Series_Name: Species (specifically white-tailed deer, or species scientific name "Odocoileus virginianus") management unit polygons from the DNR-WLD, or annual unit sets over time. Layers in the series are not numbered but named for species and year of relevancy (i.e. for this data set and it's metadata, a summarized identification is: White-tailed deer, Odocoileus virginianus, DNR -WLD wildlife management units data set 2021, which is a summarized version of the title of this data set and which would also serve as identification too, or the recommended citation in Section 1.1.11).
 - (1.1.7.2) Issue_Identification: Use the title in Section 1.1.4 or Section 1.1.11, to identify this data set, or the summarized name given as example in Section 1.1.7.1.
- (1.1.8) Publication_Information:
 - (1.1.8.1) Publication_Place: Lansing, MI, USA.
 - (1.1.8.2) Publisher: State of Michigan, Department of Natural Resources (MDNR),
 - Wildlife Division (WLD).
- (1.1.9) Other_Citation_Details: See other details provided in appropriate sections of this data documentation or metadata file, which includes appropriate citations and details.
- (1.1.10) Online_Linkage: (not applicable).
- (1.1.11) Larger_Work_Citation: not prepared as applicable, but data layer would group with other current and historical species management units, for game species or nongame species, by the MDNR-WLD ... Citation Comments: Recommended citation:

2021. State of Michigan - Michigan Department of Natural Resources (MDNR or DNR). **"Wildlife Management Units White-Tailed Deer "current" polygons ("Odocoileus virginianus", ver. 2021**; see exact date/time-details given earlier, if a draft file version) **geospatial data layer and metadata file** (using FGDC metadata content standard)". Publication format is as-is, as digital GIS data (ESRI format or served data layer ESRI, as detailed in Sections 1.1.6 Geospatial_Presentation_Form and 1.13 Native_Data_Set_Environment). MDNR Wildlife Division, Lansing, Michigan, USA.

MDNR authority is conferred by <u>1994 Public Act 451 (Sec.504)</u>, <u>Michigan Compiled</u> <u>Laws (MCL) 324.504</u>. Complete rules, regulations, and laws are accessed off the MDNR website at <u>www.michigan.gov/dnrlaws</u>. Rules are primarily in State Land Rules, R 299.922 to R 299.933 (Rules 21-33), with more rules in: 1994 Public Act 451 (Sections 301, 401, 504, 99919 to 99921; as amended MCL 324.301, 324.401, 324.504, 324.99919 to 324.99921); MCL299.13; Executive Orders (EO) 1991-22, EO 2009-45, and EO 2011-1; the Wildlife Conservation Order (WCO); State Administrative Code; State Rules, R 257.601 to R 324.1410; Boating and Off-Road Vehicle Laws; and more. Please contact MDNR Offices if questions: phone 517-284-6000, or 517-284-9453 for the MDNR Wildlife Division. Because the WCO is sited as the authoritative, official and legal definition source for the majority of so many regulations like these species' management units (although, if appropriate and referenced from other official regulations, then those sources will also be cited), the WCO is again cited here besides in other sections/subsections, etc. (like Section 5.1.41.3 Attribute Definition Source) as cited source: 2021. State of Michigan – Department of Natural Resources (DNR). Michigan Wildlife Conservation Order (WCO), Chapter XII, Management Areas Defined, excerpt of WCO sections 12.1 to 12.499, and sections 12.900 to 12.903, related to all white-tailed deer management units (DMUs) Online source is DNR regulations WCO at defined. "https://www.michigan.gov/dnr/-/media/Project/Websites/dnr/Documents/Orders/Wildlife-Conservation-Order/WCO.pdf " (accessed and inserted into this doc, 2022 Aug 19).

(1.2) Description:

(1.2.1) Abstract: This "current" white-tailed deer management units ("DMU"; species scientific name Odocoileus virgininus) polygon layer represents the most up-to-date data (ignoring pending unit edits preparing for a following year or for new regulations, etc.) for a utility representation of the only official, legal and authoritative DMU annual set from Michigan regulations like the Wildlife Conservation Order (WCO; see http://www.michigan/gov/dnrlaws). This DNR Authoritative layer is managed by the DNR-Wildlife Division's GIS authoritative contact of Marshall Strong (DNR WLD, strongm@michigan.gov, 517-256-5397; see metadata Section 1.9) as lead editor, data manager and data contact as there are extenuating details which are not described in the data layer nor perhaps in the lengthy and detailed metadata file online at

https://www2.dnr.state.mi.us/publications/pdfs/huntingwildlifehabitat/WLDmetadata/DNR-WLD wildlife management units whitetailed deer current polyon gislayer metadata.pdf. DMUs can change each year, potentially. If you are seeking earlier historical yearly sets of DMUs, then be aware this current layer is paired with a historical combined data layer which is an aggregate combination of older yearly DMU data sets of polygons. Note that if there is any difference in GIS data polygon features versus WCO or other official regulations text, then the authoritative master is the WCO text or other regulations. Read all the metadata file for other important warnings, caveats, limits, etc. then route unanswered questions to data contact (above).

Michigan is divided into many deer management units which are areas or zones of specific wildlife species management planning activities for the appropriate species, in this case the white-tailed deer or species scientific name "Odocoileus virginianus" and are defined in official and legal text regulations like the Michigan Wildlife Conservation Order (WCO; see Section 5.1.41.3 for complete citation of this official and legal source regulations, and clarifications given in Section 1.1.11); the WCO legal text definitions are the only official and final authoritative version of the given specific species' management units; This dataset is a graphic representation of the management units defined and described in the WCO and other official and legal regulations of the State of Michigan, Department of Natural Resources (MDNR or DNR), being created by the MDNR Wildlife Divisions staff over time, as the lead entity in the MDNR. This data layer is the authoritative MDNR (WLD) layer for most-current white-tailed deer (species scientific name Odocoileus virgininus) management units, area, zones or polygons; these deer management units (DMUs), special management areas or zones, and other specifically defined polygons in this layer are tools used by DNR staff, particularly DNR Wildlife Division (WLD) staff, to manage, represent and depict the extent of deer populations, hunting quotas, open/closed DMUs for applying for drawings or hunting licenses, and other related geospatial activities regarding white-tailed deer. It is your responsibility as a user of these data, to ensure, if you are using these data to determine, plan or do recreational activities, that you personally investigate all regulations or rules related to those activities (acts, place, etc.) before doing those activities or face legal repercussions; if questions, contact DNR offices (http:///www.michigan.gov/dnr).

DMUs: Specific for this documented metadata representing details in a specific GIS data layer, these white-tailed deer management units (or DMUs) are many, spanning the entire State of Michigan, are overlapping; although each may be officially Defined in regulations (like

WCO), the specific and formally named unit may not be open for all deer hunting, may not have a quota or may not have any allowed hunting. A DMU can be defined and apply to a specific year, yet have no quota set for one or more seasons and therefore be closed for those specific one or more seasons; the DMU may have been used in years previous and be retained as existing and Defined but waiting for "activation" for later when relevant again to planning and management. See WCO excerpt at end of this document plus the attribute field details following the unit definitions. This means this layer is not the representation of huntable DMUs but officially defined DMUs, including open / huntable and closed units.

This layer information, over time, in this "current" layer and later in a combined "historical" data layer: "wildlife management units deer current polygons" may be served under new DNR (EGDB) standardized GIS server/data-layer-services name "WildlifeManagementUnitsWhiteTailedDeerCURRENTpolygons" on new DNR GIS servers/services; however, internally it may be named with underscores between words in layer This layer "wildlife management units white-tailed deer current polygons" will be name. served with a companion layer(s) containing previous deer management unit polygons, named

" wildlife_management_units_white-tailed_deer_historical_polygons" (or " wildlife_management_units_deer_historical_polygons_YYYY-YYYY (where YYYY-YYYY represents a range of years, for when a single historical set layer gets too large a file). When there is a transition to a new year of deer related management units, area or zone polygons, then the most recent year which was in the "current" layer will be added (copied) into the "historical", and the newest updated polygons will be in the "current" layer (with appropriate update in year/dates of applicability). This data manag4ement method was strategically designed so the layer does not have to have a year in the layer name, and therefore any internal tools like viewers, webmaps, etc. will continue to list and serve the latest set of DMUS valid as "current", over time as changes.

To confirm year of dates if data applicability, read the provided metadata (link below) and see the feature-based metadata included with each polygon, such as "Year", "YearOrDateFeatureDeveloped", or "YearOrYearsFeatureApplies" (i.e. identify the "current" version to set based on year, and use these fields to identify if these data have been updated for a new year). In the past a given year's deer units/area/zones (call "DMUs" even if not all are officially DMUs) were stored in and provided as a set of DMU layers because in reality there are situations where defined DMUs overlap other defined DMUs (and this is correct; see official/legal source documents); this one layer does include overlapping polygons so use appropriate review, care, and investigation when review or attempting to use these data.

At the end of this file are three important reference blocks of text which data users may need, and are served at the end of this document while data layer and data servers/services are under flux, with the first two planned to be being moved into Section 5 Entity_and_attribute_Information (meaning it is known that supplement 1 and 2 will move):

- (1.) Attribute information defining data fields and purposes, etc. which are normally stored in Section 5. Entity and Attribute Information, for individual data entity types (data fields); Section 5 describes the 4 required system-generated and managed fields by the ESRI software information software (see the as detailed in Sections 1.1.6 Geospatial Presentation Form and 1.13 Native Data Set Environment) for more information), but all layer attribute fields are listed at the end of this document, as they are subject to change while data layer being migrated through steps and to the new DNR data servers, services, standards and practices, etc.; note the added data fields should be obvious based on field name and contents, but are described at the end of the document and will be moved into Section 5.1 subsections when information is under less change than at current situation.
- (2.) The excerpts of WCO official/legal text language for "valid" blocks (units) as cited, are provided to help understand the exact extent of polygons; source is : Michigan Wildlife Conservation Order (WCO), Chapter XII, Management Areas Defined [except of WCO sections 12.1 to 12.499, and sections 12.900 to 12.903, re: all deer management units (DMUs) defined) then later will be under the appropriate attribute field which will contain the regulations definition blocks as quoted source text under Section 5.1.41.
- (3.) The complete WCO section for white-tailed deer units, including any repeals, publisher's comments, and other details not relevant for insert into a DMU attribute field as source text

definition block text; this is provided for context of DMU information, from the source regulations.

Summary statement on utility: Note: These data should be usable and applicable at local to county scales or larger, be similar in use and spatial overlay with other data sets as USGS 1:24,000 scale data (or even 1:12,000 scale data) which is related data used in development of either these polygons or in data used to help develop these polygons. Note that currently regarding representation of polygon versus official/legally defined DMUs: any county or unit which, as defined in official sources (see below) runs along a great Lakes shoreline then the polygon ends at that shoreline; officially every portion of each Great Lake of State of Michigan territory is part of one county in Michigan; small offshore islands may not be evident in these data yet are officially/legally in a unit (every portion of Michigan is in some defined unit and covered by appropriate laws, regulations and rules), and polygon lines may not be congruent with other base data you may compare to these data on a small-scale; hence the official legal representation is the Michigan Wildlife Conservation Order (WCO) or in Land-Use Orders of the DNR Director (LUOoD), etc. and these should be consulted for fine-scale or small-scale details. These data are in a State specific geographic projection: the Michigan Geographic projection (MGR) type, and use of these data may require special setting changes, define of projection details, re-projection data or other data manipulations by you on your side, in order to use with your data as you wish; details on MGR are in the provided metadata.

Summary statement on accuracies: Significant efforts have been made to ensure the same layer used for various DNR viewers or tools, is the same GIS layer served to cooperators and public requestors, and that the attribute fields are strategically constructed, named and described in provided metadata. Some data fields may appear duplicates, but they are not; some data fields are internal or related to a specific DNR use (like a specific viewer or tool) and either may not make sense to non-DNR or general public users or only make sense when used in the appropriate viewer or tool; read metadata for explanations which make these data facets clear. New for 2020-2022 is development of attribute fields supporting a deer management unit (DMU) viewer tool and deer regulations interactive map viewer tool, and therefore several fields have been added to facilitate that functionality; every effort is made to ensure the best, clear and official legal information is included in both those attribute fields attached to each polygon and the polygon outlines. There may be critically important contextual, legal and other important information required to use these data correctly and appropriately, and these supporting data and information are found online off the DNR website http://www.michigan.gov/dnr, current or matching (match date of polygons) Hunting and Trapping Digest, Antlerless Digest, Michigan WCO or in LUOoD, Michigan Compiled Laws, and other supporting resources: directions to each and every one of these resources are not always provided.

Data layer is in meters units and area measures in square meters.

Data projection/datum is WGS84 and Michigan Georeference Projection; see <u>http://www.michigan.gov/maps</u> and <u>http://www.michigan.gov/dnrmaps</u> (<u>http://gis-midnr.opendata.arcgis.com</u>) for more information on MGR projection, etc.

User warning summary: Official representation of any Michigan Department of Natural Resources game or nongame management units, areas, zones, polygons, boundaries, lines, etc. are the official and legal text language in WCO or in LUOoD, as appropriate; to find these official language source documents, see http://www.michigan.gov/dnrlaws . If you use these data, you agree these data are as-is, provided as-id with no guarantees or warrantees. Any provided maps or GIS data are simply a tool and not any official data product. Ensure as a user of these data, that you read any provided metadata and understand those needed contextual and background pieces appropriate to your use. The DNR is not responsible for any incorrect use of these data, fitness-for-use issues, or other problems; every effort has been made to create the best appropriate version of the deer management unit information for DNR needs, and then those spatial data are shared as a convience with the public. These data are not for resale and not able to be trademarked by others as considered trademarked, copyright and property of the Michigan DNR for the public trust of citizens of the State of Michigan. FGDC compliant geospatial metadata is available and may not be attached or included with this layer, PDF but is also provided as а linked Adobe format document at http://www.michigandnr.com/ftp/wildlife/wildlife requested geospatial/DNR 2021 deer manag

<u>ment_units_polygon_metadata.pdf</u>; plans are that our metadata will be updated to newer FGDC approved ISO formats when such can be done, yet the file name and link will stay the same; if unaware of FGDC format metadata, see <u>http:///www.fgdc.gov</u>.

The official and legal representation of all units or boundaries from the DNR are as defined in text in the Michigan WCO (WCO; online off <u>www.mi.gov/dnrlaws</u>; as is the LUOoD and other regulations served to public); if any differences (which can occur at small scales) in GIS polygons, lines or points which are for-convivence tools, then the correct official representation is the official legal text in the Mi. WCO. Best efforts and reasonable due-diligence are used to create our data

Michigan DMUs, particularly or exclusively for lower the peninsula units, can be overlapping units where official and defined units may exist but not have any quota or used for any hunting (public or private land) in a year yet those units are retained in the data layer because they are units defined in the Michigan WCO(online off <u>www.mi.gov/dnrlaws</u>). As one example: DMU 011 for Berrien County (in southwest lower peninsula) is defined and so is DMU 311 (which is 3 counties including Berrien County) as well as DMU 486 (much of the southern lower peninsula counties including Berrien County DMU011 and the 3-county DMU 311); not all of these are open units with quota set for public, private or both hunting options or seasons. A user needs to use these data with other DNR online deer season information, to completely understand the applicably of these defined units (for example in browse-graphic PDF of all State units, DMU486 is not shown because although was defined it had no quota and wasn't open in any season * condition combination; likewise for DMU011 and some other units). Species features, zones or units could also be sourced from other regulations (see http:///www.michigan.gov/dnrlaws) or even Michigan Compiled Laws (MCLs).

(1.2.2) *Purpose:* The official and legal boundaries for current white-tailed deer management unit area definitions the text definitions (not any GIS data) published within the WCO (see Section 5.1.41.3 Attribute_Definition_Source for Source Citation for the MDNR Wildlife Conservation Order and other specifics) or other official and legal regulations text definitions (which will also be detailed in Section 5.1.41.3). This geospatial data layer is the for-convenience "authoritative" data representation of the official and legal text definitions for the "current" set for the current year (typically in a year, that is that year's fall into January of the next year) for white-tailed deer or species "Odocoileus virginianus" within the State of Michigan, as a regulatory and management spatial tool used by DNR for deer management, implementation of hunting seasons, populations management, etc.

This dataset is intended to provide a simple graphical representation in GIS of those official boundary descriptions, which may be overlapping features, and which needs other information, regulations or specific details for a complete understanding of deer management, hunting regulations, and other related factors. Note that in several location there is a notable difference in the WCO official legal definition text and the spatial representation in the GIS data layer detailed in this metadata file; for any units defined with a specific county name and if those counties are on any of the Great Lakes shorelines (where the county extents out including the water, to the State boundary), then the spatial representation for the portion of that county in a unit extents only to the Great Lakes shoreline and not out into the water (unless notable islands included, for example, like Charlevoix county). These data are draft, as-is, data and not a formal publication, but rather a step to production of the cartographic product (map) which is used as a supporting graphic in a later MDNR digest document, representing the official and legal WCO Defined units (again the official and legal representation of areas are the text definitions in WCO for the area and dates of relevancy). Therefore data set is specifically by itself a formal published resource, as it is used within specific context, and as a tool for understanding WCO Definitions plus deer regulations for deer management work.

(1.2.3) Supplemental_Information: See other details provided in appropriate sections of this data documentation or metadata file, which includes appropriate citations and details.

(1.3) Time_Period_of_Content = Time_Period_Information in Section 9:

(1.3.3) Range_of_Dates/Times:

(1.3.3.1) Beginning_Date: 20220801

(or the most recent update of 2021 DMUs in the WCO; see Section 5.1.41.3).

(1.3.3.2) Beginning_Time: (not applicable).

(1.3.3.3) Ending_Date: none scheduled but may occur if needed, as needed, without notice.

(1.3.3.4) Ending_Time: (not applicable).

- (1.3.4) Currentness_Reference: There are different dates and times associated with several hunting, trapping, and management regulations for various wildlife species within the WCO, and valid DMUs for the 2021 year set of features may have different effective date when regulations (WCO) were finalized and official. While there are different seasonal dates for the management of different wildlife species, WCO regulations may use the same "zone" designations or unit names as defined within the order for several years, for a given species for various activities. Therefore the management units represented by this dataset are current until a change is made (without notice or warning, and not on a specific given cycle or not as any required edits per year) to the legal description of such in the WCO, as needed and appropriate for deer management.
- (1.4) Status:
 - (1.4.1) Progress: complete (data set is complete, as of date stated at top, or in Section 1.1.9.,

but this metadata file is an in-progress durable draft, being updated as data services being upgraded).

(1.4.2) *Maintenance_and_Update_Frequency:* none planned.

(1.5) Spatial_Domain:

- (1.5.1) Bounding_Coordinates:
 - (1.5.1.1) West_Bounding_Coordinate: -90.426000
 - (1.5.1.2) East_Bounding_Coordinate: -82.122000
 - (1.5.1.3) North_Bounding_Coordinate: 48.307000
 - (1.5.1.4) South_Bounding_Coordinate: 41.695000
 - (1.5.1.5) Bounding_Coordinates_Supplemental_Information: These are simple, statewide bounding coordinates, and are provided in standard geographic longitude and latitude decimal degree values. However, possible users need to be aware that the geographic data coordinate system is not in standard geographic longitude and latitude decimal degree values (signed or otherwise); instead, the data set geocoordinate values are in the Michigan GeoReference Projection (MGR; see "Section 4 Spatial Reference
 - Information" for more details), in units of meters; When using data sets that display beyond the State's physical boundaries, the data will extend beyond the above Bounding Coordinates (just outside the State of Michigan). ... Extent from GIS software is listed as: West -90.556846, East -82.070412, North 48.284132, South 41.632049; however these may not include great Lakes portions which are in the official and legal definitions of regulations, and could hold small islands which are not included as polygons in this GIS data set but would still be included in the official and legal defined units (and therefore be valid; this is example of the spatial scale dependencies of the GIS data set, which might miss very small scalar features that are legal but not included as below the spatial resolution and logical completedness of the polygon data used to represent the Michigan features and thereby become representational of management units.
- (1.5.2) Data_Set_G-Polygon:
 - (1.5.2.1) Data_Set_G-Polygon_Outer_G-Ring:
 - (1.5.2.1.0) Data_Set_G-Polygon_Outer_G-Ring_comment:
 - (1.5.2.1.1) G-Ring_point: (not applicable).
 - (1.5.2.1.2) G-Ring_polygon: string ordered xy pairs (as signed longitude and latitude values) in order of surrounding polygon around the layer features; this is G-ring polygon is pending and will be added when compiled.
 - (1.5.2.1.3) G-Ring_Supplemental_Information: Use the box for Bounding Coordinates, simple representation (see Section 1.5.1, in 1.5.1.1 to 1.5.1.5), because an applicable G-ring_polygon at a matching relevant scale would be too detailed, irregular, and would contain a huge number of coordinate pairs for it to be included here at that same matching scale, etc. The G-ring_polygon provided in Section 1.5.2.1.2 is more detailed than the 4 bounding coordinates (in Section 1.5.1) but less detailed than a matching scalar State of Michigan bounding polygon.

(1.6) Keywords: (1.6.1) Theme:

(1.6.1.1) Theme_Keyword_Thesaurus: none.

(1.6.1.2) Theme_Keyword: management unit, management area, management zone, whitetailed deer, deer, Odocoileus virginianus, hunting, trapping, Michigan, Department of Natural Resources, Wildlife Division, MDNR, DNR.

(1.6.2) Place:

(1.6.2.1) Place_Keyword_Thesaurus: none

(1.6.2.2) Place_Keyword: Michigan.

(1.6.3) Stratum:

(1.6.3.1) Stratum _Keyword _Thesaurus: none.

(1.6.3.2) Stratum _Keyword: none.

(1.6.4) *Temporal*:

(1.6.4.1) Temporal_Keyword_Thesaurus: none.

(1.6.4.2) Temporal_Keyword: 2021.

(1.7) Access_Constraints: Warnings, Disclaimers, and Notifications for Access to these metadata

and data: This portion of the documentation is to provide legal statements, restrictions, and prerequisites for accessing the data set, including those to assure protection of privacy, assure protection intellectual property, assure protection of those involved (data developers, provider and potential end users), provide and explain any special restrictions or limitations on obtaining the data set, or provide other reasonably-expected information needed by potential end users when considering accessing these metadata and described data.

There are several important notices, warnings, access, and use statements for any potential user of these data. These constraints and warnings are to assure protection of data, State property (including physical, digital and intellectual property), and protect both the developers and potential end users by appropriately discussing these data and data development factors. Some of these same warnings may be duplicated in sections of longer documentation (if exists); however, use care in reading the entire metadata even if it looks similar in case detail within the statements is indeed different.

It is assumed any users of these data have read all metadata or summary files provided with these matching data resources. These stated constraints and warnings are a combination of official MDNR policy statements at the time this metadata was last updated, State of Michigan statements, conventional or metadata-format required technical statements, and added explanatory and geospatial-related qualifiers provided for users of any geospatial data included with this file. These data comments are not specific to just geospatial (location) details, but also relate to attributes and other data factors of these data, documented by these metadata comments. These warnings and statements have been carefully gathered, and significant attempts made to present and explain them for potential users. If you disagree with any of these warning comments, then do not use these data or those data resources packaged with this metadata.

A general data liability disclaimer applies: Data is considered as-is at the time this metadata was written or last updated. These data are not for cadastral or legal use, even after considered published. Users should be aware that in comparison with other data sets for the same area, inaccuracies and inconsistencies may be identified due to (i.) previous data creation methods, (ii.) changes mapping conventions over time, (iii.) changes in technology, (iv.) changes in understandings of what details need to be documented, and (v.) other such factors impacting data creation, documentation, and packaging product data and documentation.

Best efforts have been made with both the details in this metadata documentation, with the matching data described in this metadata, with the packaging, and with access and download preparations for both these metadata and the companion data, including other documents or digital files packaged with the project data.

Regarding downloading: Downloading and/or use of these data signifies a user's agreement to comprehension and compliance with all stated constraints and warnings in this metadata/summary file. Make certain all portions of any metadata are read and clearly understood before using these data in order to protect both user and data-developer interests. Review of this metadata information doesn't limit a potential user's access to consider the warnings and restrictions; any downloading or use of the data partnered with these metadata details means you as a user agree to all terms and conditions stated within these metadata and with accessory files included with those data referred to by these metadata.

Regarding updates or changes: These data resources may be updated and the related

data layer(s) could be updated or changed without notice. If interested in using these data over time, it is strongly recommended that users repeatedly investigate for any possible updates of these data, and that newer data are directly acquired from MDNR Wildlife staff, not

indirectly through other sources which may have modified the data in some way. It is also strongly recommended that careful attention be paid to the contents of metadata and any other files associated or provided with these data.

Be aware, as is possible in all government situations, other constraints may have been required and added since the compilation and completion of this metadata summary file. Every effort has been made to provide users the best information, including in these metadata details; however, updated data and metadata information may have changes. Look for possible changes to ensure you can gain the best possible use of these data and metadata.

(1.8) Use_Constraints: Warnings, Disclaimers, and Notifications for Use of these metadata and data:

This portion of the documentation is to provide legal statements, restrictions, and prerequisites for using the data set, including those to assure protection of privacy, assure protection intellectual property, assure protection of those involved (data developers, provider and potential end users), provide and explain any special restrictions or limitations on using the data set, or provide other reasonably-expected information needed by potential end users when considering using these metadata and described data.

There is no expressed warrantee; the State of Michigan, the Department of Natural Resources (MDNR) nor any employees shall be held liable for any portions of these metadata or companion data, or for improper or incorrect use of any information provided, data described and/or contained herein. Although these data have been processed successfully on computer systems at the MDNR and the MDNR Wildlife Division (WLD), no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general, scientific, or legal purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. These data are provided "as is" and without any express or implied warranties, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose. If other files are provided with these data, see those associated files for more information including some details which may not be summarized in these metadata.

The companion data are not legal information or documents and are not to be used as such. These data involve geographic and attributed representations which might be related to property representations, jurisdictional ranges, or enforcement-related regulations and rules. Because these issues are critical for both data developers and potential end users, these are carefully explained here.

The information presented or in these data may represent some details which might be relevant to geographic areas, land, land use, rules and regulations, or other natural resources. However, be aware and avoid making incorrect assumptions or misunderstandings of applicability of these data, using these data beyond intended purposes or scales, etc. These documentation and data products are a tool issued to assist or for convenience on this specific subject with specific applicable conditions.

Regarding representations, implied official geographic representations which might be seen in these data, or such information which might be possibly misunderstood by potential end users: The boundary outline information contained in these data are for identification of regional areas on larger scales, and is not a legally or notarized survey system nor judicially recognized property line system. The boundary outline information contained in these data are based on the best available Public Land Survey System (PLSS) data for town, range and section level land ownership frameworks for the State of Michigan (at the time these data were developed); however, newer information may be provided since these data were developed and, if so, may be available on the Department of Technology, Budget and Management (DTMB), at the Michigan Geographic Data Library (MGDL) website at http://www.mcgi.state.mi.us/MGDL and this internet location includes links to other State governmental archives for data beyond the MDNR and DTMB.

These data do include polygons and attribute information which are similar or related to representations of PLSS, property boundaries, county or State boundaries, etc. However the context of these data are not intended to represent those possible property or jurisdictional related factors, but are instead a frame for observational data collected within those boundaries. Beware repurposing these data incorrectly, beyond intended purposes of data collection or use.

Regarding jurisdictions, implied jurisdictions which might be seen in these data, or such information which might be possibly misunderstood by potential end users: There is not any attempt, in either these data, metadata, data design, products or documentation of these data, to define the limits of the proprietary jurisdiction of any Federal, State, or local government, or to establish the geographical scope of the regulatory programs of such government agencies. Governmental agencies means any Federal or adjoining Nation, State (including adjoining States), local government or municipality (meaning a county, township, city, village), governing body (meaning the board, council, commission, or body in which the policy- making powers of the local government are vested), public agency (meaning a single- or multi- purpose public body, etc.), authority (meaning an authority formed by according to the Michigan Municipal Partnership act or other official State recognized authority), Michigan Indian tribe (meaning a Federally recognized Indian tribe, band, nation, or other organized group or community of Indians that is recognized as eligible for services by the United States Secretary of the Interior because of their status as Indians, and that has trust lands located within this State); all defined as per (a.) the Michigan Compiled Laws, Municipal Partnership Act (Michigan Compiled Laws, Municipal Partnership Act, Act 258 of 2011, Section 124.112 Definitions, Sec. 2, Item J., Eff. Dec. 14, 2011 ; accessed online at http://legislature.mi.gov/doc.aspx?mcl-28- 602 "); (b.) the Michigan Compiled Laws, Commission on Law Enforcement Standards Act (Michigan Compiled Laws, Commission on Law Enforcement Standards Act, Act 203 of 1965; Section 28.602 Definitions; Sec. 2, Item J; Eff. Oct. 12, 2004; accessed online at "http://legislature.mi.gov/doc.aspx?mcl-28-602"); and (c.) the Michigan Compiled Laws, Municipal Sewage and Water Supply Systems Act (Michigan Compiled Laws, Municipal Sewage and Water Supply Systems Act, Act 233 of 1955; Section 124.281 Definitions; Sec. 1, Item C and D; Eff. Dec. 14,2009; accessed online at "http://legislature.mi.gov/doc.aspx?mcl-124-281 ").

Potential users must consult other more appropriate information resources if need to relate these data or the represented geographic extents to legal representation of properties, formal boundaries, or other depictions of any official extents (i.e. relate these data to an official county extent). Property ownerships may have changed since these data were created and updated. All potential users should be aware that there could be instances where the represented boundaries or ownership (as may be seen in these data) may be quite different than actual ownership (for the realworld, current situation). Specific geographic areas could be out-of-date due to changes in the realworld since these data were developed and packaged.

Regarding apparent or implied regulations, rules, enforcement-related information which might be seen in these data, or such information which might be possibly misunderstood by potential end users: These documentation details and these companion data are not a set of rules and regulations (either in excerpt or complete), and may not be as immediately updated as current legislation and rules relevant to these data. These documentations or data products are neither legal notice nor a collection (either in excerpt or complete) of possible rules, regulations and laws which might be valid and applicable for the represented geographic areas, subjects or context.

Regulatory rules and management authority has been conferred on the MDNR by section 504 of 1994 Public Act 451, Michigan Compiled Laws 324.504; the official Michigan Compiled Laws are accessible online at "<u>http://legislature.mi.gov/doc.aspx?mcl-324-504</u>." The official and full legal representations of any enforcement-related information is those official text documentations such as Public Laws, Acts of government, amendments to the Michigan Wildlife Conservation Orders, Director's Orders, or other appropriate legal code. It is possible that these data contain lines or polygons which could be considered direct representations of enforcement-related areas (townships, State extent, etc.); however, these polygons are data tools to assist.

A complete listing of regulations and legal descriptions are available on the MDNR website at <u>http://www.michigan.gov/dnrlaws</u> and this internet location includes links to other State governmental archives for data beyond the MDNR.

Regarding plans or activities of potential users, based on these metadata and companion data: Potential users intending to engage in activities involved within or adjacent to lands controlled by private landowners or properties controlled by any government agencies (as defined earlier in these warnings) should seek appropriate permissions and additional information before planning any activities. These data do not provide sufficient details to define land extents, land use or access issues, extents concerning specific regulations, specified agency regulatory programs, proprietary jurisdictions that may affect activities, etc. Do not misunderstand the existence of observational data

within a specific geographic area, within these data, as permission for potential end users to go into portions of that geographic area.

Potential users of these data should contact appropriate agency staff and should discuss the current ownership, rules and regulations, and other situations with local knowledgeable contacts before engaging in any activities which could be unlawful, illegal, violations or cause various possible repercussions, penalties, civil or criminal infractions, fees or fines, and/or jail- time for potential end users.

It is the responsibility of each individual, as a user of public lands, to ensure they are informed of all current rules and regulations relevant to planned activities before doing those planned activities. <u>Contact the MDNR offices</u> if you have questions or to verify regulations relating to possible activities before engaging in those activities. A complete listing of regulations and legal descriptions are on the MDNR website <u>www.michigan.gov/hunting</u> under "Laws & Legislation" or provided within the Michigan Wildlife Conservation Order, which is available online at <u>www.michigan.gov/dnrlaws</u>.

Regarding rights, copyrights, etc.: The MDNR retains all rights to these metadata, data, physical and conceptual materials, and related information products. These data are not to be repackaged or sold by other parties, as owned by the MDNR. The MDNR, in public trust for the citizens of Michigan, retains the Rights, Copyrights, and all other expressed or implied legal rights over these data, these information resources or tools, etc.

Use of trade names or commercial product names are solely for the purpose of providing specific information, reporting data development environments and methods, and does not imply blanket recommendation or endorsement by the Michigan State Government, the MDNR, the Wildlife Division, or any associated staff.

Assistance and development of these metadata and/or companion data: The MDNR and the MDNR Wildlife Division do consider possible project cooperation opportunities. The MDNR does work with many agencies and cooperators on projects using MDNR information resources, ideas, etc. as part of continued mission and goals. However, any cooperative project idea or relationship would require more consideration, discussions, a data use agreement procedure, and other details to be developed and finalized. If interested, discuss the situation with the data contact on this metadata document.

Lastly, if you are uncomfortable with any of these Access and Use Constraints, then do not use these data.

- (1.9) Point_of_Contact (Contact_Information):
 - (1.9.1) Contact_Person_Primary:

(1.9.1.1) Contact_Person: Mapping and Geotechnology Program Specialist, currently Marshall Strong (or M. Strong).

- (1.9.1.2) Contact_Organization: State of Michigan, Department of Natural Resources (MDNR), Wildlife Division
- (1.9.2) Contact_Organization_Primary: State of Michigan, Department of Natural Resources (MDNR), Wildlife Division
- (1.9.3) Contact_Position: Mapping and Geotechnology Program Specialist, currently M. Strong.
- (1.9.4) Contact_Address:
 - (1.9.4.1) Address_Type: mailing address.
 - (1.9.4.2) Address: PO Box 30444
 - (1.9.4.3) City: Lansing .
 - (1.9.4.4) State_or_Province: MI
 - (1.9.4.5) Postal_Code: 48909-7944.
 - (1.9.4.6) Country: United States of America.
- (1.9.5) Contact_Voice_Telephone: 1-517-284-WILD (1-517-284-9453) .
- (1.9.5b) Contact_Voice_Telephone (alternate/direct line): 1-517-256-5397.
- (1.9.6) Contact_TDD/TTY_Telephone: 711 (Michigan Relay Center).
- (1.9.7) Contact_Facsimile_Telephone: 1-517-241-0015.
- (1.9.8) Contact_Electronic_Mail_Address: DNR-Wildlife@michigan.gov; Those interested can also see the MDNR website online at <u>http://www.michigan.gov/dnr</u> for more information, and to contact the DNR Wildlife Division using additional, current electronic methods. Specific to DNR-WLD data, the email address is: <u>strongm@michigan.gov</u>.
- (1.9.9) Hours_of_Service: recommended Universal/GMT 12:00 noon to 8:00 pm, or United States of

America's Eastern Standard Time 9:00 am to 5:00 pm.

- (1.9.10) Contact_Instructions: No significant instructions, other than: (i.) please have patience as may take a couple days to reply back to questions, depending on those methods used (email, etc.) to contact our organization; and (ii.) please refer to this data set by its proper title or by a more descriptive data set description along with any other relevant details (like publication date), in any message or with questions.
- (1.10) Browse_Graphic: A simple browse graphic is provided online at

https://www2.dnr.state.mi.us/publications/pdfs/huntingwildlifehabitat/WLDmetadata/DNR-WLD_wildlife_management_units_whitetailed_deer_current_polyon_gislayer_metadata.jpg or https://www2.dnr.state.mi.us/publications/pdfs/huntingwildlifehabitat/WLDmetadata/DNR-WLD_wildlife_management_units_whitetailed_deer_current_polyon_2021_gislayer_metadata.jpg .

A graphic may be found within the online version or within hardcopy of the 2021 Deer Antlerless Digest or 2021 Michigan Hunting and Trapping Digest, and annual aid for hunters, which includes simplified text definition and a simple map showing line. Online version of the digest might be found of a link off webpage at http://www.michigan.gov/hunting or <a href="http://www.michig

- (1.11) Data_Set_Credit: Michigan Department of Natural Resources, Wildlife Division, held for the public trust of the citizens of Michigan. The layer is the product of many staff working in an official public sector capacity.
- (1.12) Security_Information: not applicable; Not applicable as there are no access, use or handling restrictions imposed on the metadata or data set because of national security, privacy, or other concerns appropriate to limit data set access/use, or to define in this portion of the metadata; there are data caveats and disclaimers, provided elsewhere in these metadata content fields.
- (1.13) Native Data Set Environment: The data set was developed on and is compatible with several requirements and software brand names plus versions of: (i.) IBM-format compatible computer; (ii.) operating system for Microsoft Windows (see company details on the internet at http://www.microsoft.com for more information) starting previously with version XP Professional and version 2000 for servers (from 1993-2006; and Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 3, then Microsoft Windows 8.x and recently Microsoft Windows 10.x (with updates circa 2022) : (iii.) Compatible with database management software of Microsoft Access starting with 2003 version program, build 11.8321.8341, service pack 3 (from 1992-2003; see company details on the internet at http://www.microsoft.com for more information) and Microsoft Access 2010 version 14.0.6123.5001, and recently Microsoft Office 10.x (with updates circa 2022) ; (iv.) Geographic software by ESRI (see company details on the internet at information system (GIS) http://www.esri.com for more information) starting with ArcGIS Desktop Suite, ArcGIS9.3.1 service pack 2b and ESRI ArcGIS10.1.0.3035, to ArcGIS Desktop Suite v. 10.7.1x (10.7.1.11595, circa 2019, or newer version/build relevant to 2022 use) of ArcMap and ArcCatalog modules for data management, plus the newer ESRI ArcPro software up to v. 2.9.1x with updates, circa 2022 with ArcGIS Pro patch 3.0x / 3.0.1; Note that software developer company ESRI (see company details on the internet at http://www.esri.com for more information) does provide freeware software tools called ESRI ArcGIS Online and ESRI ArcGIS Explorer, which load on almost every computer type and operating system current at the time of this documentation, and are downloadable off the company web site at http://www.esri.com. Version numbers change as software is developed over time but the software company ESRI has a long history of backward compatibility with their own older software's data formats; (v.) This metadata documentation was generated using software Microsoft Word (see company details on the internet at http:// www.microsoft.com for more information) starting with 2003 program, build 11.8348.8341, service pack 3 (from 1992-2003; or later) then Microsoft Word newer versions like Microsoft Office 365 for Enterprise v. 2022; (vi.) This documentation may have been converted to be compatible with Adobe & PDF format (see company details on the internet at http://www.adobe.com for more information); the PDF format created using Adobe Acrobat v 2022; Note that Adobe Reader for Adobe PDF files is a freeware software tool which loads on almost every computer type and operating system current at the time of this documentation, and is downloadable off the company web site at <u>http://www.adobe.com</u>. Version numbers change as software is developed over time but the software company Adobe has a long history of backward compatibility with their own older software's data formats ; (vii.) Other files provided with the compiled GIS data set are compatible with plain ASCII text viewer formats or internet browser formats (i.e. txt, HTML, JPG image formats).

(1.14) Cross_Reference: (not applicable); Information about other related data sets may be available on the Department of Technology, Budget and Management (DTMB), at the Michigan Geographic Data Library (MGDL) website at <u>http://www.mcgi.state.mi.us/MGDL</u> and this internet location includes links to other State governmental archives for data beyond the MDNR and DTMB.

Section 2 - Data Quality Information:

(2.) Data_Quality_Information:

(2.1) Attribute_Accuracy:

(2.1.1) Attribute_Accuracy_Report: Attribute and feature accuracy is believed to be very high,

based on the steps involved, the number of staff involved in generating the updated WCO polygon features, or staff seeing the product maps, etc. – which is a gualitative estimate of the accuracies. However, there is no quantitative test been done on these data except confirming valid features and feature labels for the polygons, using the layer in product maps, viewers or displays, summary tables, etc. The data set consists of a single continuous multipoint polyline (composed of a series of x/y points) divided into subareas using other polylines, to form a specific set of individual polygons; These individual polygons are the basic minimum features in this data layer, and directly support an as-is representation of the only official and legal DMU features defined in WCO (as cited in detail in Section 5.1.41.3). For these data set features, there are no attributes other than: (a.) those 4 data fields automatically generated and managed by the ESRI software (as detailed in Sections 1.1.6 Geospatial Presentation Form and 1.13 Native Data Set Environment) for object ID (a unique non-repeating number), object type "shape", shape-area and overall length of shape-length for perimeter ; plus (b.) DNR-WLD created standard attribute fields representing information in the appropriate matching WCO This dataset is derived as an updated version of its legal text definition block of text. predecessor "ancestor layer", the "2017 Deer Management Units" coverage format data loaded onto ESRI SDE server space. The line-work runs along (follows) county lines, the approximate center of roads or other appropriate features as named in the specific legal text-definitions for the appropriate management units in WCO. Using ESRI Best Imagery base layer, and the Michigan DOQQ 1998 leaf off imagery plus other small-scale data resources such as other detailed imagery dates, reference basemap layers, including the best at the time State County boundary layer (derived from the late 1980's USGS Digital Raster Graphic linework converted to vector-based lines/polygons), then corrections to the 2017 data were made over time each year as appropriate with WCO DMU block edits or changes, and up to 2021 with as per any changes for 2021 units and boundary lines were made to more closely follow the centerline of the roads or features present in the legal description. Screen digitization was done at display scale of 1:1,000. Attributes are tied to positional information in many situations (i.e. county road in a county extent) so such errors might be expected to be seen, noticed and corrected when the source base data is corrected by DTMB and DNR during regular data management processes. Odd or anomaly values should have been noticed; best efforts were employed to create a usable and accurate data set, however there is possibility that some errors might exist. Checks for road or other feature names from the WCO text were done with Microsoft BING imagery or ESRI imagery, a cooperating data provider with the State of Michigan. Several informal tests, checks, and review steps were done on various parts of these data; however no specific tests were done on attribution data. Be aware, as is possible in all government situations, other constraints may have been required and added since the compilation and completion of this metadata summary file.

(2.1.2) Quantitative_Attribute_Accuracy_Assessment:

(2.1.2.1) Attribute_Accuracy_Value: unknown.

(2.1.2.2) Attribute_Accuracy_Explanation: As introduced in Sec.2.1.1 ... No specific and/or exhaustive quantitative tests were done on either component pieces of these data, on all tabular data for tests of valid values, general tests for tabular data, general tests for geographic data, specific topological tests, or other rigorous testing for quality check and assurance measures – yet such check may have been made, where can. Every effort has been made to provide users the best information, including in these metadata details; however, updated data and metadata information may have changes. Due to the many internal review steps and staff formal plus informal reviews involved in the data development of the 2021 layer, it's expected that the attribute confidence is rather high and data accurate. A check has been done of the current

regulations blocks of definition texts, like the State of Michigan Wildlife Conservation Order (WCO; see Section 5.1.41.3) and confirming that the valid non-repealed blocks are present in this data set, plus a check going the other way (the included units are found in regulations); this is a complete check of consistency and accuracy.

(2.2) Logical_Consistency_Report: Logical consistency follows best efforts for these as-is data. These data are intended for geographic display and analysis at or above qualitatively a city block level (~500 feet wide), county and state level, and should be compatible and consistent with 1:24,000 scale digital GIS datasets. These data used and/or were derived from multiple layers which should be National Mapping Accuracy Standard (NMAS; see USGS online at http://www.usgs.gov) for 1:24,000 scale at +/- 40 feet with USGS sited photo check points +/-16.6 feet or combination +/- 56.6 feet; therefore anticipation is common usage data should be within at worst case +/- 113.2 feet per set or a 226.4 foot bubble. So the estimate of qualitative reliance on a 500 foot bubble representing a "city block" (or +/- 250 feet) should be a reasonable approximation. Again a reminder: if the feature edge disagrees with a base feature piece on small-scale (for example, like centerline of a street in the definition) then the official regulations legal text definition is still the Authoritative rule and over-rules the feature, or any feature error.

These data are a combination of multi-generational or multiple-years of data development and editing phases or projects which may have been done with slightly different methodology details for the collected observational data (see the rest of these metadata comments for additional relevant details). No responsibility is assumed by the Michigan Department of Natural Resources (MDNR) in the use of these data. Deductive estimates based on experience with these data, professional expertise and more, suggest these data are reasonably useful for the scale described (above) in geospatial comparison at similar levels and while taking all user notices, warnings and caveats into consideration. Professional expert source for this estimate should be M. Strong, cited as distribution contact for this data set.

Several informal tests, check queries, and review steps were done on various parts of these data; however no specific and exhaustive quantitative tests were done on all attribution or tabular data for tests of valid values, general tests for tabular data, general tests for geographic data, specific topological tests, or other rigorous testing for quality check and assurance measures. Attributes are tied to positional information in many situations (i.e. county road in a county extent) so such errors might be expected to be seen, noticed and corrected. Odd or anomaly values should have been noticed; best efforts were employed to create a usable and accurate data set, however there is possibility that some errors might be in the attribution.

(2.3) Completeness_Report: Completeness was not tested; however, best efforts were employed to create a usable and accurate data set. Data appears, upon working comparison with other layers, to geographically associate well, be positionally close or accurate, and because these data do not exist in other formats (this is the only layer) it is the best data we have for use.

Data were visually compared to high-resolution small-scale detailed aerial imagery while doing data creation, checking and later use with other data. Because the final data very closely matches various detailed aerial image data resources, it's expected that these data are qualitatively accurate even if no quantitative testing or assessments were done.

These data are intended for geographic display and analysis at or above qualitatively a city block level (~500 feet wide), county and state level, and should be compatible and consistent with 1:24,000 scale digital GIS datasets. These data used and/or were derived from multiple layers which should be National Mapping Accuracy Standard (NMAS; see USGS online at http://www.usgs.gov) for 1:24,000 scale at +/- 40 feet with USGS sited photo check points +/- 16.6 feet or combination +/- 56.6 feet; therefore anticipation is common usage data should be within at worst case +/- 113.2 feet per set or a 226.4 foot bubble, so our estimate of qualitative reliance on a 500 foot bubble representing a "city block" (or +/- 250 feet) should be a reasonable approximation.

These data are a combination of multi-generational projects which may have been done with slightly different methodology details for the collected observational data (see the rest of these metadata comments for additional relevant details). No responsibility is assumed by the MDNR in the use of these data. Deductive estimates based on experience with these data, professional expertise and more, suggest these data are reasonably useful for the scale described (above) in geospatial comparison at similar levels and while taking all user notices, warnings and caveats into consideration. Professional expert source for this estimate should be

M. Strong, cited as distribution contact for this data set.

(2.4.) Positional_Accuracy:

(2.4.1) Horizontal_Positional_Accuracy:

(2.4.1.1) Horizontal Positional Accuracy Report: Horizontal positional accuracy was not

actually tested, but deductive estimates can be made based on experience with these data, professional expertise and more, suggest these data are reasonably useful for the scale described (above) in geospatial comparison at similar levels and while taking all user notices, warnings and caveats into consideration. Professional expert source for this estimate should be M. Strong, cited as distribution contact for this data set. Horizontal positional accuracy is based on the accuracy of the digital Public Land Survey System (township/range) and USGS (online at http://www.usgs.gov) 1:24.000 coverages of data wherein USGS cites National Mapping Accuracy Standard compliance (NMAS; see USGS online at http://www.usgs.gov) for 1:24,000 scale at +/-40 feet with USGS sited photo check points +/-16.6 feet or combination +/- 56.6 feet, or a bubble of 113.2 feet wide. These data are intended for geographic display and analysis at or above qualitatively a city block level (~500 feet wide), county and state level, and should be compatible and consistent with 1:24,000 scale digital GIS datasets. These data used and/or were derived from multiple layers which should be National Mapping Accuracy Standard (NMAS; see USGS online at http://www.usgs.gov) for 1:24,000 scale at +/- 40 feet with USGS sited photo check points +/-16.6 feet or combination +/- 56.6 feet: therefore anticipation is common usage data should be within at worst case +/- 113.2 feet per set or a 226.4 foot bubble. So the estimate of qualitative reliance on a 500 foot bubble representing a "city block" (or +/- 250 feet) should be a reasonable approximation. In reality, observed from use of these data with other smaller-scale data, it's noted that these data should be more accurate than that estimate for the majority of the linework making up those feature polygons in the data layer.

(2.4.1.2) Quantitative_Horizontal_Positional_Accuracy_Assessment:

(2.4.1.2.1) Horizontal_Positional_Accuracy_Value: plus or minus 76.2 meters (or +/-250 feet).

(2.4.1.2.2) Horizontal_Positional_Accuracy_Explanation: The horizontal position

accuracy value estimate for this project was calculated using National Mapping Accuracy Standards (NMAS) and compliance statement information for geosptatial data used within this project, with the FGDC guidelines for calculating accuracy based on NMAS; using 1:24,000 scale data this results in an estimate of positional accuracy estimates of within plus or minus 21.95 meters (or +/- 72 feet). However, concerns of over-representing the positional accuracies of these data cause recommendation to handle these as more like 1:100,000 scale data, which results in calculated estimate (same FGDC calculation methods) of positional accuracy estimates of within plus or minus 109.7 meters (or +/- 360 feet). This revision is because ultimately the observational data collected on the ground by volunteers is of untested scale, and although observers may think they are close, recommendation at the next higher level of standard map products does provide a more conservative representation of accuracies for position.

(2.4.2) Vertical_Positional_Accuracy:

(2.4.2.1) Vertical_Positional_Accuracy_Report: (not applicable); Vertical accuracy was

not tested as there is no interpreted vertical component (altitude) to this data set.

(2.4.2.2) *Quantitative_Vertical_Positional_Accuracy_Assessment:* (not applicable)

- (2.5) Lineage: (not defined in detail, yet this subsection pending and may not be able to be completed); Lineage, methodology, and sources are complicated; and not described in great detail within this basic summary for these are "as-is" data, and are "living" data used from year to year, which may have an origination with USGS Digital Raster Graphic lines converted to USGS Digital line data decades in the past, but exact details are not completely documented in detail from the origination; newer GIS polygon data may have been used, and just not documented in detail. The official and legal management unit boundaries are text definitions (and not any GIS data) provided within the Michigan Wildlife Conservation Order (updated 09/16/2015), which is available online at <u>www.michigan.gov/dnrlaws</u> or contact the nearest MDNR Customer Service Center. Data Lineage and Process Contact is the Data Distribution Contact listed in Section 6.1.
- (2.6) *Cloud_Cover:* (not applicable).

Section 3 - Spatial Data Organization Information:

- (3.) Spatial_Data_Organization_Information:
- (3.1) Indirect_Spatial_Reference: Michigan Department of Natural Resources (MDNR), Wildlife Division (WLD), wildlife management unit data for current white-tailed deer (or 2021 summer to 2022 Jan., referred to as "2021" annual data set). This data set is the State of Michigan, split into the relevant and appropriate number of currently valid deer management units (DMUs), of currently valid areas/MUs as published in the current valid State of Michigan regulations like the WCO (see Section 5.1.41.3). Data is in vector-based system for lines and polygon coverage, using ESRI's ArcGIS or ArcPro compatible software tools (see "Section 1.13 Native Data Set Environment" for details); Information details about ESRI software can be found on the internet at http://www.esri.com, where a GIS file reader (ArcReader software or ArcGIS Online, etc. both by ESRI) can be downloaded for free to allow you/users to view this data set.
- (3.2) Direct_Spatial_Reference_Method: vector.
- (3.3) Point_and_Vector_Object_Information:
 - (3.3.1) SDTS_Terms_Description:
 - (3.3.1.1) SDTS_Point_and_Vector_Object_Type: layer.

(3.3.1.2) SDTS_Point_and_Vector_Object_Count: 126 defined polygon features (some multipart features, some single feature), totaling

- (3.3.2) VPF_Terms_Description:
 - (3.3.2.1) VPF_Topology_Level: 2 (see MIL-STD-2407, p37)

(3.3.2.2) VPF_Point_and_Vector_Object_Information:

- (3.3.2.2.1) VPF_Point_and_Vector_Object_Type: edge.
- (3.3.3) Spatial_Data_Organization_Comment: Data is in vector-based system for lines and polygon coverage, using ESRI's ArcGIS or ArcPro compatible software tools (see Sections 1.1.6 Geospatial_Presentation_Form and 1.13 Native_Data_Set_Environment for details); Information details about ESRI software can be found on the internet at <u>http://www.esri.com</u>, where a GIS file reader (ArcReader software or ArcGIS Online, etc. both by ESRI) can be downloaded for free to allow you/users to view this data set

(3.4) Raster_Object_Information: (not applicable for vector data)

Section 4 - Spatial Reference Information:

- (4.) Spatial_Reference_Information:
- (4.1) Horizontal_Coordinate_System_Definition:
 - (4.1.1) Geographic: (not applicable) (4.1.2)
 - Planar:
 - (4.1.2.1) Map_Projection:
 - (4.1.2.1.1) Map_Projection_Name: Oblique Mercator

(also know as Hotine_Oblique_Mercator_Azimuth_Natural_Origin or NAD_1983_Hotine_Oblique_Mercator_Azimuth_Natural_Origin)

(4.1.2.1.13) Oblique_Mercator:

(4.1.2.1.23) Map_Projection_Parameters: (assembled in FDGC order)

(4.1.2.1.23.10) Scale_Factor_at_Center_Line: 0.9996

- (4.1.2.1.23.11) Oblique_Line_Azimuth:
 - (4.1.2.1.23.11.1) Azimuthal_Angle: 337.25556
 - (4.1.2.1.23.11.2) Azimuth_Measure_Point_Longitude: -86.000000
- (4.1.2.1.23.3) Latitude_of_Projection_Origin: 45.30916667
- (4.1.2.1.23.4) False_Easting: 2546731.496
- (4.1.2.1.23.5) False_Northing: -4354009.816
- (4.1.2.1.23.6) Map_Projection_Comments:

These data use the Michigan Geographic Reference Projection (MGR). Additional detailed specifications, graphics, and discussion of this projection are available online from the Michigan Geographic Data Projections" "Map Library. under the link at http://www.mcgi.state.mi.us/mgdl/ - which is now being replaced by the State of Michigan DTMB website http://www.michigan.gov/maps, and developing DNR website content the at http://www.michigan.gov/dnrmaps as of the date of this metadata file

details.

- (4.1.2.2) Grid_Coordinate_System: (not applicable).
- (4.1.2.3) Local_Planar: (not applicable).
- (4.1.2.4) Planar_Coordinate_Information:
 - (4.1.2.4.1) *Planar_Coordinate_Encoding_Method:* coordinate pair.
 - (4.1.2.4.2) Coordinate_Representation:
 - (4.1.2.4.2.1) Abscissa_Resolution: 0.002048
 - (4.1.2.4.2.2) Ordinate_Resolution: 0.002048
 - (4.1.2.4.3) Distance_and_Bearing_Representation: (not applicable).
 - (4.1.2.4.4) Planar_Distance_Units: meters.
- (4.1.3) Local: (not applicable).
- (4.1.4) Geodetic_Model:
 - (4.1.4.1) Horizontal_Datum_Name: North American Datum of 1983 (NAD83); Geographic Coordinate System: GCS North American 1983;
 - Prime Meridian: Greenwich (0.0); Angular Unit: Degree (0.0174532925199433).
 - (4.1.4.2) Ellipsoid_Name: spheroid: Geodetic Reference System 80 (GRS_1980)
 - (4.1.4.3) Semi-major_Axis: 6378137.00000000
 - Semi-minor_Axis: 6356752.314140356
 - (4.1.4.4) Denominator_of_Flattening_Ratio: Inverse Flattening: 298.257222
 - (4.1.4.5) Geodetic_Model_Comments: These data use the Michigan Geographic Reference Projection (MGR). Additional detailed specifications, graphics, and discussion of this projection, are available from the Michigan Geographic Data Library, online at <u>http://www.mcgi.state.mi.us/mgdl/</u> under the "Map Projections" link - which is now being replaced by the State of Michigan DTMB website <u>http://www.michigan.gov/maps</u>, and the developing DNR website content at <u>http://www.michigan.gov/dnrmaps</u> as of the date of this metadata file details.
- (4.2) Vertical_Coordinate_System_Definition: (not applicable; no vertical component to the data set).

Section 5 - Entity and Attribute Information:

- (5.) Entity_and_Attribute_Information:
 - (5.1) Detailed_Descriptiton:
 - (5.1.1) Entity_Type:
 - (5.1.1.1) Entity_Type_Label: management unit .
 - (5.1.1.2) Entity_Type_Definition: An as-is spatial data feature representation used for visual representation, mapping or displaying units from the official and legal units defined in regulations (such as WCO, in Section 5.1.41.3, or other regulations, cited if relevant). The official and legal MDNR wildlife management unit zones and the lines separating these zones are text definitions (and not any GIS data) provided within the Michigan Wildlife Conservation Order, which is available online at www.michigan.gov/dnrlaws (look for a link on that page to the WCO).
 - (5.1.1.3) Entity_Type_Definition_Source: Source Citation:

2021. State of Michigan – Department of Natural Resources (DNR). Michigan Wildlife Conservation Order (WCO), Chapter XII, Management Areas Defined, excerpt of WCO sections 12.1 to 12.499, and sections 12.900 to 12.903, related to all white-tailed deer management units (DMUs) defined, Online source is DNR regulations WCO at "<u>https://www.michigan.gov/dnr/-/media/Project/Websites/dnr/Documents/Orders/Wildlife-Conservation-Order/WCO.pdf</u> " (2022 Aug 19).

(5.1.1.4) Entity_Type_Definition_Comment: Overall important contextual notes follow but may be in other sections of these metadata in this document:

Note on default system generated and system managed attribute fields for ESRI data (where ESRI is detailed in Sections 1.1.6 Geospatial_Presentation_Form and 1.13 Native_Data_Set_Environment): Attribute information defining data fields and purposes, etc. are normally stored in "Section 5. Entity and Attribute Information", under "5. Entity_and_Attribute_Information", "5.1 Detailed_Description" for individual data entity types (data fields); Section 5 first describes the 4 required system-generated and managed fields by the ESRI software (see the software information under section 1.13 for more information), yet frequently when this ESRI compatible data layer served or

moved between servers, as service, etc. then the first two attribute fields of the total set of layer attribute fields typically is the ESRI software required "ObjectID" (or "OBJECTID"; see 5.1.1) then "Shape" (see 5.1.2), and then the last two attribute fields are the other two required ESRI software fields of "Shape_Area" (for polygon "shape" type data; see 5.1.3) and "Shape_Length" (which for polygon "shape" types, is perimeter; see 5.1.4). When ESRI compatible layers are see or viewed in other non-ESRI software, often have seen the four required fields moved to the front first four fields, or moved to the end as the last four fields.

Note on new naming conventions for attribute fields versus older attribute fields for same subject-matter layers: If you have older data from DNR Wildlife Division for wildlife management units, you should still see similar attribute fields in our new data but those data have been updated while data layers have been being migrated through steps to the new DNR data servers, services, standards and practices, etc. and the new attribute field standards now match "Pascal naming conventions". However, hopes and field naming plans are that the added subject-specific data fields should hopefully be obvious based on the field name and contents, yet are still described in Section 5 (see 5.1.5 and later) in the order intended or seen in the Authoritative data layer on DNR systems and should match what seen by internal and external users.

Note on attribute field order of items: Be aware that it's still possible with current ongoing data management work that data fields may switch order versus what listed below in Sections 5.1.1 to 5.1.41, etc.; we will do utmost best to correct this yet this metadata lists the subject-specific attribute fields which are added for this specific named layer, in an order that groups related fields, progresses from default polygon simple name fields to more complex, and are followed later by data management related fields, hyperlink fields for connecting feature-based metadata to external files (like this file), and other more technical feature-based data quality related attribute fields.

Notes on logical consistency, etc. – see those sections of the metadata, but a major topology impacting consideration worth repeating: A DMU can be defined and apply to a specific year, yet have no quota set for one or more seasons and therefore be closed for those specific one or more seasons. See WCO excerpt at end of this document plus the attribute field details following the unit definitions; the except of WCO in the Supplemental information at the end of this file includes valid text blocks plus repealed sections, publisher's notes (which assist readers of the WCO Chapter 12 in the sections relevant to the species defined as management units and therefore those in this data set), plus notes included by the metadata author after seeing a reader may need explanations if there are gaps in expected sections of WCO, etc. (or overall notes to help readers).

Attributes in Sections 5.1.2 to 5.1.41, represent the attribute fields in the layer for the features (polygons), and directly relate to both the appropriate represented WCO text definition block for an area (the polygon feature) or to feature representational needs internally in DNR-WLD (as explained in the Attribute details within Section 5.1.2 to 5.1.41) or data management of the features (meaning feature update information, dates updated, by whom, etc.); there are some feature-based metadata details included within a few data fields or "Attribute" sections in 5.1.2 to 5.1.41, as explained and are relevant to data management or appropriate use of the features in this data set.

(5.1.2) Attribute:

(5.1.2.1) Attribute_Label: OBJECTID.

- (5.1.2.2) Attribute_Definition: numeric field containing a unique integer that identifies
 - each object in the data set; field generated by default and maintained by ArcGIS. Data field type is "Object ID"; is ESRI std field of unique object-id number per feature; Field provides a unique non-repeating number identifying the feature for system/software purposes. A software user cannot change or manage the values in this attribute field; these are managed by the ESRI software.

(5.1.2.3) Attribute_Definition_Source: ESRI (for source citation, see Sections 1.1.6, 1.13)

Native_Data_Set_Environment, and 3.1 Indirect_Reference).

(5.1.2.4) Attribute_Domain_Values:

(5.1.2.4.1) Enumerated_Domain:

- (5.1.2.4.1.1) Enumerated_Domain_Value: (not applicable).
- (5.1.2.4.1.2) Enumerated_Domain_Value_Definition: (not applicable).
- (5.1.2.4.1.3) Enumerated_Domain_Value_Definition_Source: (not applicable).
- (5.1.2.4.2) Range_Domain:
 - (5.1.2.4.2.1) Range_Domain_Minimum: integer >0
 - (5.1.2.4.2.2) Range_Domain_Maximum: 126.
- (5.1.2.4.3) Codeset_Domain:
 - (5.1.2.4.2.1) Codeset_Name: (not applicable).
 - (5.1.2.4.2.2) Codeset_Source: (not applicable).
- (5.1.2.4.4) Unrepresentable_Domain: (not applicable).
- (5.1.2.5) Attribute_Units_of_Measure: (not applicable).
- (5.1.2.6) Attribute_Measurement_Resolution: (not applicable).
- (5.1.2.7) *Beginning_Date_of_Attribute_Values:* publication date.
- (5.1.2.8) Ending_Date_of_Attribute_Values: last update of the dataset.
- (5.1.2.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.
- (5.1.2.10) Attribute_Measurement_Frequency: none planned.
- (5.1.3) Attribute:
 - (5.1.3.1) Attribute_Label: Shape .
 - (5.1.3.2) Attribute_Definition: text field containing the geometry type of vector data for the ArcGIS feature class; field generated by default and maintained by ArcGIS. Data field type is "geometry"; is ESRI std field of what is the feature in the layer; For polygons, it is "polygon", lines it is "lines", points are "points, etc.; Field provides a specific category text value identifying the feature for system/ software purposes.
 - (5.1.3.3) Attribute_Definition_Source: ESRI (for source citation, see Sections 1.1.6, 1.13)
 - Native_Data_Set_Environment, and 3.1 Indirect_Reference).
 - (5.1.3.4) Attribute_Domain_Values:
 - (5.1.3.4.1) Enumerated_Domain:
 - (5.1.3.4.1.1) Enumerated_Domain_Value: "polygon".
 - (5.1.3.4.1.2) Enumerated_Domain_Value_Definition: a shape defined by an
 - ordered collection of one or more paths, in which the path is a series of connected segments; it optionally has measure, height and ID attributes. No other value than "polygon" is allowed in this field, by the software settings.
 - (5.1.3.4.1.3) Enumerated_Domain_Value_Definition_Source: ESRI (for source citation, see Sections 1.1.6, 1.13 Native_Data_Set_Environment, and 3.1 Indirect_Reference).
 - (5.1.3.4.2) Range_Domain:
 - (5.1.3.4.2.1) Range_Domain_Minimum: (not applicable).
 - (5.1.3.4.2.2) Range_Domain_Maximum: (not applicable).
 - (5.1.3.4.3) Codeset_Domain:
 - (5.1.3.4.2.1) Codeset_Name: (not applicable).
 - (5.1.3.4.2.2) Codeset_Source: (not applicable).
 - (5.1.3.4.4) Unrepresentable_Domain: (not applicable).
 - (5.1.3.5) *Attribute_Units_of_Measure:* (not applicable)
 - (5.1.3.6) Attribute_Measurement_Resolution: (not applicable)
 - (5.1.3.7) *Beginning_Date_of_Attribute_Values:* publication date.
 - (5.1.3.8) Ending_Date_of_Attribute_Values: last update of the dataset.
 - (5.1.3.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.
 - (5.1.3.10) Attribute_Measurement_Frequency: none planned.
- (5.1.4) Attribute:
 - (5.1.4.1) Attribute_Label: Shape_Area.
 - (5.1.4.2) Attribute_Definition: numeric field containing the calculated area of the polygon; field generated by default and maintained by ArcGIS. These data are not user-editable or user-managed data, but a default field controlled by the software and with any changes as the result of edits in the polygon, or polyline completing the x,y coordinate pairs within the software (encircling an area, creating the polygon). A software user

cannot change or manage the values in this attribute field; these are managed by the ESRI software.

- (5.1.4.3) Attribute_Definition_Source: ESRI (for source citation, see Sections 1.1.6, 1.13 Native_Data_Set_Environment, and 3.1 Indirect_Reference).
- (5.1.4.4) Attribute_Domain_Values:
 - (5.1.4.4.1) Enumerated_Domain:
 - (5.1.4.4.1.1) *Enumerated_Domain_Value:* (not applicable).
 - (5.1.4.4.1.2) Enumerated_Domain_Value_Definition: (not applicable).
 - (5.1.4.4.1.3) Enumerated_Domain_Value_Definition_Source: (not applicable).
 - (5.1.4.4.2) Range_Domain:
 - (5.1.4.4.2.1) Range_Domain_Minimum: >0
 - (5.1.4.4.2.2) Range_Domain_Maximum: 60045368181.44735 .
 - (5.1.4.4.3) Codeset_Domain:
 - (5.1.4.4.2.1) Codeset_Name: (not applicable).
 - (5.1.4.4.2.2) Codeset_Source: (not applicable).
 - (5.1.4.4.4) Unrepresentable_Domain: (not applicable).
- (5.1.4.5) Attribute_Units_of_Measure: square meters.
- (5.1.4.6) Attribute_Measurement_Resolution: (not applicable)
- (5.1.4.7) Beginning_Date_of_Attribute_Values: publication date. (5.1.4.8)
- *Ending_Date_of_Attribute_Values:* last update of the dataset.
- (5.1.4.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.
- (5.1.4.10) Attribute_Measurement_Frequency: none planned.
- (5.1.5) Attribute:
 - (5.1.5.1) Attribute_Label: Shape_Length .
 - (5.1.5.2) Attribute_Definition: numeric field containing the calculated length of the polyline or the perimeter of the polygon; field generated by default and maintained by ArcGIS. These data are not user-editable or user-managed data, but a default field controlled by the software and with any changes as the result of edits in the polygon, or polyline completing the x,y coordinate pairs within the software (encircling an area, creating the polygon). A software user cannot change or manage the values in this attribute field; these are managed by the ESRI software.
 - (5.1.5.3) Attribute_Definition_Source: ESRI (for source citation, see Sections 1.1.6, 1.13 Native Data Set Environment, and 3.1 Indirect Reference).
 - (5.1.5.4) Attribute Domain Values:
 - (5.1.5.4.1) Range Domain:
 - (5.1.5.4.1.1) Range_Domain_Minimum: >0
 - (5.1.5.4.1.2) Range_Domain_Maximum: 1819826.735466 .
 - (5.1.5.4.1.3) Enumerated_Domain_Value_Definition_Source: ESRI (for source citation, see Sections 1.1.6, 1.13 Native Data Set Environment, and 3.1
 - Indirect_Reference).
 - (5.1.2.4.2) Range_Domain:
 - (5.1.2.4.2.1) Range_Domain_Minimum: (not applicable).
 - (5.1.2.4.2.2) Range_Domain_Maximum: (not applicable).
 - (5.1.2.4.3) Codeset_Domain:
 - (5.1.2.4.2.1) Codeset_Name: (not applicable).
 - (5.1.2.4.2.2) Codeset_Source: (not applicable).
 - (5.1.2.4.4) Unrepresentable_Domain: (not applicable).
 - (5.1.5.5) Attribute_Units_of_Measure: meters.
 - (5.1.5.6) Attribute_Measurement_Resolution: (not applicable)
 - (5.1.5.7) Beginning_Date_of_Attribute_Values: publication date.
 - (5.1.5.8) Ending_Date_of_Attribute_Values: last update of the dataset.
 - (5.1.5.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.
 - (5.1.5.10) Attribute_Measurement_Frequency: none planned.
- (5.1.6) Attribute:
 - (5.1.6.1) Attribute_Label: FeatureType .
 - (5.1.6.2) Attribute_Definition: Data field type is "text", length 100 characters; Field is a
 - readable (text) description of the type of unit, which may be long for some; type of

feature within management unit layer, which is useful for identifying management units "MU", "county" when counties are part of the unique species x MU layer for a year, "subunit" for units within a MU, etc.; this field may not be ideal for a unique default feature polygon label - use "FeatureLabelShort" or "FeatureLabelLong" (or if need the year in the label, then use "FeatureLabelShortWithYear" or "FeatureLabelLongWithYear"). This field identifies first if the feature is "official" or another source like "county-polygon" (which would be included as this species regulations for this year refers to this specific county polygon, and a county by name is already defined legally so not have a WCO definition or unit number sometimes), then is followed by if unit is "MU regular/county-sized" or "MU multi-county" (which can mean overlapping feature with one or more other features in layer), or "special mgmt unit" which may be county or zone, etc.

(5.1.6.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.6.4) Attribute_Domain_Values:

(5.1.6.4.1) Enumerated_Domain:

- (5.1.6.4.1.1) Enumerated_Domain_Value: "multi-county-sized MU".
- (5.1.6.4.1.2) Enumerated_Domain_Value_Definition: The clause "multi-county
 - sized MU" means this management unit is larger than multiple counties, may be composed of parts of multiple counties, but may not have boundary along multiple county lines; it is larger than those units identified as "regular/countysized MU" (see Section 5.1.6.4.2.1). Frequently these larger units are over top of other smaller county-sized units, and are management tools made to specifically group or cover larger areas than county-sized units, and to therefore allow setting quotas or flexible opportunities for hunters helping manage this specie's population.
- (5.1.6.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;
 - see Sections 1.9 and 6.1 for source.
- (5.1.6.4.2.1) Enumerated_Domain_Value: "regular/county-sized MU".
- (5.1.6.4.2.2) Enumerated_Domain_Value_Definition: The clause "regular/county-

sized MU" means this management unit is smaller than any identified as "multicounty-sized MU" (see Section 5.1.6.4.1.1), and may be spanning only one county or smaller part of one county, it may span multiple counties but still be approximately county sized according to Michigan's counties (without Great Lakes water. For example Michigan counties measure without Great Lakes water (yet those counties on the shore of a Great Lake, extend out into the lake to the State line) range from 1868.590483 (Marguette county in square miles) to 337.991228 (Leelanau county, no islands), with a majority of the counties ranging from 508.234444 (Cass county) to 776.16305 (Dickinson county) and with an average of about 600 sq. miles as the majority of counties are about 24 x 24 square miles or 24 x 30 square miles and almost all are in the lower peninsula (upper peninsula counties are larger). This scale of management matches the scale of data collection, where typically county-sized areas are the backbone basis of DNR species population estimates and management (see the online annual harvest reports for this species, for such information). This sized unit is larger than "multi-county-sized MU" which is multiple counties, may be composed of parts of multiple counties, but may not have boundary along multiple county lines; see Section 5.1.6.4.1.2 for details on this sized unit.

(5.1.6.4.2.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.6.4.3.1) Enumerated_Domain_Value: "regulations-related area, not MU".

(5.1.6.4.3.2) Enumerated_Domain_Value_Definition: This unit description is to

identify those which are neither of the earlier described types, and are defined either in WCO chapter 12 or earlier in WCO regulations, and typically are specific to special regulations for the species like special monitoring, special population management or hunting details, or even disease related management (nbote just because one of these exist, does not mean disease is present, etc. – see DNR regulations online at <u>http:///www.michigan.gov/dnrlaws</u>). (5.1.6.4.2) Range_Domain:

(5.1.6.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.6.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.6.4.3) Codeset_Domain:

(5.1.6.4.2.1) Codeset_Name: (not applicable).

(5.1.6.4.2.2) Codeset_Source: (not applicable).

(5.1.6.4.4) Unrepresentable_Domain: (not applicable).

(5.1.6.5) Attribute_Units_of_Measure: (not applicable).

(5.1.6.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.6.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.6.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.6.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.6.10) Attribute_Measurement_Frequency: none planned.

(5.1.7) *Attribute:*

(5.1.7.1) Attribute_Label: FeatureLabelShort.

(5.1.7.2) Attribute_Definition: Data field type is "text", length 100 characters; Field is feature label text short-version; meant to be useful as default short label field (if not need "year" in label; if do need the year in the short label, use the field "FeatureLabelShortWithYear").

(5.1.7.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.7.4.1) Enumerated Domain:

(5.1.7.4.1.1) Enumerated_Domain_Value: (See Section 5.1.7.2).

(5.1.7.4.1.2) Enumerated_Domain_Value_Definition: (See Section 5.1.7.2).

(5.1.7.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.6.4.2) Range_Domain:

(5.1.6.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.6.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.6.4.3) Codeset_Domain:

(5.1.6.4.2.1) Codeset_Name: (not applicable).

(5.1.6.4.2.2) Codeset_Source: (not applicable).

(5.1.6.4.4) Unrepresentable_Domain: (not applicable).

(5.1.7.5) Attribute_Units_of_Measure: (not applicable)

(5.1.7.6) Attribute_Measurement_Resolution: (not applicable) (5.1.7.7)

Beginning_Date_of_Attribute_Values: publication date (5.1.7.8)

Ending_Date_of_Attribute_Values: last update of the dataset

(5.1.7.9) Attribute_Value_Accuracy_Information: (see Sec. 2.3 Completeness_Report)

(5.1.7.10) Attribute_Measurement_Frequency: none planned.

(5.1.8) Attribute:

(5.1.8.1) Attribute_Label: FeatureLabelLong .

(5.1.8.2) Attribute_Definition: Data field type is "text", length 256 characters; Field is feature label text long-version; can be used as long label field without "year" in label; may be better used with summary statistic tables, etc. (if not need "year" in label; if do need the year in the short label, use the field "FeatureLabelLongWithYear").

(5.1.8.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.8.4) Attribute_Domain_Values:

(5.1.8.4.1) Enumerated_Domain:

(5.1.8.4.1.1) Enumerated_Domain_Value: (See Section 5.1.8.2).

(5.1.8.4.1.2) Enumerated_Domain_Value_Definition: (See Section 5.1.8.2).

(5.1.8.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.8.4.2) Range_Domain:
(5.1.8.4.2.1) Range_Domain_Minimum: (not applicable).
(5.1.8.4.2.2) Range_Domain_Maximum: (not applicable).
(5.1.8.4.3) Codeset Domain:

(5.1.8.4.2.1) Codeset_Name: (not applicable).

(5.1.8.4.2.2) Codeset_Source: (not applicable).

(5.1.8.4.4) Unrepresentable_Domain: (not applicable).

(5.1.8.5) Attribute_Units_of_Measure: meters.

(5.1.8.6) Attribute_Measurement_Resolution: (not applicable)

(5.1.8.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.8.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.8.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.8.10) Attribute_Measurement_Frequency: none planned.

(5.1.9) Attribute:

(5.1.9.1) Attribute_Label: FeatureLabelShortWithYear .

(5.1.9.2) Attribute_Definition: Data field type is "text", length 100 characters; Field is feature label text short-version with 4 digit year; can be used as short label field with "year" in label.

(5.1.9.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.9.4) Attribute_Domain_Values:

(5.1.9.4.1) Enumerated_Domain:

(5.1.9.4.1.1) Enumerated_Domain_Value: (See Section 5.1.9.2).

(5.1.9.4.1.2) Enumerated_Domain_Value_Definition: (See Section 5.1.9.2).

(5.1.9.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.9.4.2) Range_Domain:

(5.1.9.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.9.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.9.4.3) Codeset_Domain:

(5.1.9.4.2.1) Codeset_Name: (not applicable).

(5.1.9.4.2.2) Codeset_Source: (not applicable).

(5.1.9.4.4) Unrepresentable_Domain: (not applicable).

(5.1.9.5) Attribute_Units_of_Measure: (not applicable).

(5.1.9.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.9.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.9.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.9.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.9.10) Attribute_Measurement_Frequency: none planned.

(5.1.10) Attribute:

(5.1.10.1) Attribute_Label: FeatureLabelLongWithYear .

(5.1.10.2) Attribute_Definition: Data field type is "text", length 256 characters; Field is feature label text long-version with added (concatenated) 4 digit year (as in field "Year"); this field can be used as long label field with "year" in label; and may be better used when creating summary statistic tables, etc.

(5.1.10.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.10.4) Attribute Domain Values:

(5.1.10.4.1) Enumerated Domain:

(5.1.10.4.1.1) Enumerated_Domain_Value: (See Section 5.1.10.2).

(5.1.10.4.1.2) Enumerated_Domain_Value_Definition: (See Section 5.1.10.2).

(5.1.10.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.10.4.2) Range_Domain:

(5.1.10.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.10.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.10.4.3) Codeset_Domain:

(5.1.10.4.2.1) Codeset_Name: (not applicable).

(5.1.10.4.2.2) Codeset_Source: (not applicable).

(5.1.10.4.4) Unrepresentable_Domain: (not applicable).

(5.1.10.5) Attribute_Units_of_Measure: (not applicable).

(5.1.10.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.10.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.10.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.10.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.10.10) Attribute_Measurement_Frequency: none planned.

(5.1.11) Attribute:

- (5.1.11.1) Attribute_Label: SpeciesCommonName .
- (5.1.11.2) Attribute_Definition: Data field type is "text", length 75 characters; Field is text for common name, allows multiples if needed (like "white-tailed deer, or deer (in Michigan DNR digests)"); note this layer uses standardized data fields for DNR wildlife management units, and some layers have multiple species in one layer, so this field particularly needed for those situations and may not be as needed when in a single species management unit layer. The common name of the managed species, target for these management units, and as described in detail online off State of Michigan, Department of Natural Resources website page at "http://www.michigan.gov/wildlife ", where white-tailed deer common name are scientific species name "Odocoileus virginianus".

(5.1.11.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.11.4) Attribute_Domain_Values:

(5.1.11.4.1) Enumerated_Domain:

(5.1.11.4.1.1) Enumerated_Domain_Value: "white-tailed deer".

(5.1.11.4.1.2) Enumerated_Domain_Value_Definition: The common name of the managed species, target for these management units, and as described in detail online off State of Michigan, Department of Natural Resources website page at "<u>http://www.michigan.gov/wildlife</u>", where white-tailed deer common name are scientific species name "Odocoileus virginianus".

(5.1.11.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.11.4.2) Range_Domain:

(5.1.11.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.11.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.11.4.3) Codeset_Domain:

(5.1.11.4.2.1) Codeset_Name: (not applicable).

(5.1.11.4.2.2) Codeset_Source: (not applicable).

(5.1.11.4.4) Unrepresentable_Domain: (not applicable).

(5.1.11.5) Attribute_Units_of_Measure: (not applicable).

(5.1.11.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.11.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.11.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.11.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.11.10) Attribute_Measurement_Frequency: none planned.

(5.1.12) *Attribute*:

(5.1.12.1) Attribute_Label: SpeciesScientificName .

(5.1.12.2) Attribute Definition: Data field type is "text", length 150 characters; Field is

text for official species name; note this layer uses standardized data fields for DNR wildlife management units, and some layers have multiple species in one layer, so this field particularly needed for those situations and may not be as needed when in a single species management unit layer. The common name of the managed species, target for these management units, and as described in detail online off State of Michigan, Department of Natural Resources website page at "<u>http://www.michigan.gov/wildlife</u> ", where white-tailed deer common name are scientific species name "Odocoileus virginianus".

(5.1.12.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.12.4) Attribute_Domain_Values:

(5.1.12.4.1) Enumerated_Domain:

(5.1.12.4.1.1) Enumerated_Domain_Value: "Odocoileus virginianus".

(5.1.12.4.1.2) Enumerated_Domain_Value_Definition: The common name of the managed species, target for these management units, and as described in detail online off State of Michigan, Department of Natural Resources website

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page at "<u>http://www.michigan.gov/wildlife</u>", where white-tailed deer common name are scientific species name "Odocoileus virginianus".

(5.1.12.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.12.4.2) Range_Domain:

(5.1.12.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.12.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.12.4.3) Codeset_Domain:

(5.1.12.4.2.1) Codeset_Name: (not applicable).

(5.1.12.4.2.2) Codeset_Source: (not applicable).

(5.1.12.4.4) Unrepresentable_Domain: (not applicable).

(5.1.12.5) Attribute_Units_of_Measure: (not applicable).

(5.1.12.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.12.7) *Beginning_Date_of_Attribute_Values:* publication date.

(5.1.12.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.12.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.12.10) Attribute_Measurement_Frequency: none planned.

(5.1.13) *Attribute:*

(5.1.13.1) Attribute_Label: ManagementUnitAsText.

(5.1.13.2) Attribute Definition: Data field type is "text", length 25 characters; Field is deer management unit as text and typical DMUs defined in the Michigan Wildlife Conservation order (WCO) are 3 digits, does allow non-numeric text names for some unit names in regulations/official-defining-source; note that this field can be used as join item or relate item with another table of DMUs where unit-name is text (allowing match re requirement of field types being the same either text or number). For example, as per Sec.5.1.41, for the feature polygon over Alcona County geographic area, as defined in Section 5.1.41.4.1.1 for the Enumerated Domain Value which describes the WCO official and legal definition text for DMU-001, the management unit as text is "001" (and the management unit as number is 001 but the system removes the leading zeros so it reads as 1). This field "ManagementUnitAsText" and ManagementUnitAsNumbert" (see Sec.5.1.13) are important utility fields to allow connecting (using ESRI software "join" or "relate" command functions) the GIS feature fields specified or corresponding to the specific unit "name" (DMU identifier) and alternate tabular data used internally, where the DMU identifier may be in an attribute field formatted as a number format or as a text format; in many situations the field format types between the specific features and the alternate source tabular data *must* be in the exact same format (meaning text label must match text label as same formatted "text field" data in the alternate source tabular data file, or similarly as the same number / integer format).

(5.1.13.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.13.4) Attribute_Domain_Values:

(5.1.13.4.1) Enumerated_Domain:

(5.1.13.4.1.1) Enumerated Domain Value: (as per Section 5.1.13.2).

(5.1.13.4.1.2) Enumerated Domain Value Definition: (as per Section 5.1.13.2).

(5.1.13.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.13.4.2) Range_Domain:

(5.1.13.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.13.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.13.4.3) Codeset_Domain:

(5.1.13.4.2.1) Codeset_Name: (not applicable).

(5.1.13.4.2.2) Codeset_Source: (not applicable).

(5.1.13.4.4) Unrepresentable_Domain: (not applicable).

(5.1.13.5) Attribute_Units_of_Measure: (not applicable).

(5.1.13.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.13.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.13.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.13.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.13.10) Attribute_Measurement_Frequency: none planned. (5.1.14) Attribute:

(5.1.14.1) Attribute_Label: ManagementUnitAsNumber .

(5.1.14.2) Attribute_Definition: Data field type is "short integer"; Files is management

unit (MU) as an interger number - typically deer management units are 3-digit numbers, but if a text name then this field is zero (as there is no DMU-0, or more correctly as DMUs labelled with numbers are 3 digit values, so there is no DMU-000 either) which is used as a flag to check the field "ManagementUnitAsText"; note that this field can be used as join item or relate item with another table of DMUs where unit-name is number (allowing match re requirement of field types being the same either text or number). ... and as per Section 5.1.13.2. This field "ManagementUnitAsNumber" and ManagementUnitAsText" (see Section 5.1.13) are important utility fields to allow connecting (using ESRI software "join" or "relate" command functions) the GIS feature fields specified or corresponding to the specific unit "name" (DMU identifier) and alternate tabular data used internally, where the DMU identifier may be in an attribute field as a number format or as a text format; in most instances the field types between the specific features and the alternate source tabular data must be the exact same format (meaning text label must match text label field data in the alternate source tabular data file, or a number label must match the number label field data in the alternate source tabular data file).

(5.1.14.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.14.4) Attribute_Domain_Values:

(5.1.14.4.1) Enumerated_Domain:

(5.1.14.4.1.1) Enumerated_Domain_Value: (as per Section 5.1.13.2).

(5.1.14.4.1.2) Enumerated_Domain_Value_Definition: (as per Section 5.1.13.2).

(5.1.14.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.14.4.2) Range_Domain:

(5.1.14.4.2.1) Range_Domain_Minimum: (not applicable, even if field values appear as a number it's a text value composed of digits).

(5.1.14.4.2.2) Range Domain Maximum: (not applicable).

(5.1.14.4.3) Codeset_Domain:

(5.1.14.4.2.1) Codeset_Name: (not applicable).

(5.1.14.4.2.2) Codeset_Source: (not applicable).

(5.1.14.4.4) Unrepresentable_Domain: (not applicable).

(5.1.14.5) Attribute_Units_of_Measure: (not applicable).

(5.1.14.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.14.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.14.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.14.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.14.10) Attribute_Measurement_Frequency: none planned.

(5.1.15) *Attribute:*

(5.1.15.1) Attribute_Label: Year .

(5.1.15.2) Attribute_Definition: Data field type is "text", length 10 characters; Field is year of the management unit in 4 digit format, and allows for a range of years like "1999 to 2017"; this field is used to group features like within the "current" layer, when grouped in aggregated combination layer like multiple past "current" sets of features when put in the "historical" layer.

(5.1.15.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.15.4) Attribute Domain Values:

(5.1.15.4.1) Enumerated Domain:

(5.1.15.4.1.1) Enumerated_Domain_Value: "2021".

(5.1.15.4.1.2) Enumerated_Domain_Value_Definition: As per Section 5.1.15.2,

the 4 digit year value for this set of features or when (year value) valid; this also serves to identify the DMU set from another with a different "year" value.

(5.1.15.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.15.4.2) Range_Domain:

(5.1.15.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.15.4.2.2) Range_Domain_Maximum: (not applicable).

- (5.1.15.4.3) Codeset_Domain:
 - (5.1.15.4.2.1) Codeset_Name: (not applicable).
 - (5.1.15.4.2.2) Codeset_Source: (not applicable).

(5.1.15.4.4) Unrepresentable_Domain: (not applicable).

- (5.1.15.5) Attribute_Units_of_Measure: (not applicable).
- (5.1.15.6) Attribute_Measurement_Resolution: (not applicable).
- (5.1.15.7) Beginning_Date_of_Attribute_Values: publication date.
- (5.1.15.8) Ending_Date_of_Attribute_Values: last update of the dataset.
- (5.1.15.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.
- (5.1.15.10) Attribute_Measurement_Frequency: none planned.
- (5.1.16) Attribute:
 - (5.1.16.1) Attribute_Label: YearFeatureDeveloped .
 - (5.1.16.2) Attribute_Definition: Data field type is "text", length 25 characters; Field can include just the year (4 digits) or an entire date with year (in 4 digit year then month as text and 2 digital day in month, such as matching the date when the unit finalized as per the History date in the Michigan Wildlife Conservation order (WCO) or other defining source), or could also be a range of dates / years if development spans that long a period. For majority of features the year feature developed is the same year as the "effective" date at the end of the corresponding feature's official legal WCO text definition block in Section 5.1.41.

(5.1.16.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.16.4) Attribute Domain Values:

- (5.1.16.4.1) Enumerated Domain:
 - (5.1.16.4.1.1) Enumerated_Domain_Value: (as per Section 5.1.16.2, field values are dates from the end of the corresponding Definition text in Section 5.1.41). ... range from "2001 June 01" to "2021 Feb 12".
 - (5.1.16.4.1.2) Enumerated_Domain_Value_Definition: As per Section 5.1.16.2, the 4 digit year plus month as abbreviation then the 2 digit day - for when the feature (in this case polygon) was developed or defined, as per the official legal text (WCO; see Section 5.1.41). range from "2001 June 01" to "2021 Feb 12".
 - (5.1.16.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.16.4.2) Range_Domain:

(5.1.16.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.16.4.2.2) Range_Domain_Maximum: (not applicable).

- (5.1.16.4.3) Codeset_Domain:
 - (5.1.16.4.2.1) Codeset_Name: (not applicable).

(5.1.16.4.2.2) Codeset_Source: (not applicable).

- (5.1.16.4.4) Unrepresentable_Domain: (not applicable).
- (5.1.16.5) Attribute_Units_of_Measure: (not applicable).
- (5.1.16.6) Attribute_Measurement_Resolution: (not applicable).
- (5.1.16.7) Beginning_Date_of_Attribute_Values: publication date.
- (5.1.16.8) Ending_Date_of_Attribute_Values: last update of the dataset.
- (5.1.16.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.
- (5.1.16.10) Attribute_Measurement_Frequency: none planned.

(5.1.17) Attribute:

- (5.1.17.1) Attribute_Label: YearFeatureApplies .
- (5.1.17.2) Attribute_Definition: Data field type is "text", length 256 characters; Field

identifies the year or years the feature applies, and is typically from start or developed (finalized) date to current ... or this field uses the field cell value for "YearFeatureDeveloped" (in Section 5.1.16) with an understanding of and statement about the applicability of this feature to current date (which specifically would be the data field "Year" value).

(5.1.17.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.17.4) Attribute_Domain_Values:

(5.1.17.4.1) Enumerated_Domain:

(5.1.17.4.1.1) Enumerated_Domain_Value: (as per Section 5.1.17.2).

(5.1.17.4.1.2) Enumerated_Domain_Value_Definition: (as per Section 5.1.17.2).

(5.1.17.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.17.4.2) Range_Domain:

(5.1.17.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.17.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.17.4.3) Codeset_Domain:

(5.1.17.4.2.1) Codeset_Name: (not applicable).

(5.1.17.4.2.2) Codeset_Source: (not applicable).

(5.1.17.4.4) Unrepresentable_Domain: (not applicable).

(5.1.17.5) Attribute_Units_of_Measure: (not applicable).

(5.1.17.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.17.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.17.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.17.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.17.10) Attribute_Measurement_Frequency: none planned.

(5.1.18) *Attribute:*

(5.1.18.1) Attribute_Label: ManagementUnitType.

(5.1.18.2) Attribute_Definition: Data field type is "text", length 50 characters; Field is the management unit (MU) as text (even if can be a number, see description of field "ManagementUnitAsNumber") - identifying if official unit (meaning defined legally in the Michigan Wildlife Conservation Order, etc.), etc. plus if land with great-lakes (GL) water or not, etc.

(5.1.18.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.18.4) Attribute_Domain_Values:

(5.1.18.4.1) Enumerated_Domain:

(5.1.18.4.1.1) Enumerated_Domain_Value: "official multi-county-sized

(land, no GL water)".

(5.1.18.4.1.2) Enumerated_Domain_Value_Definition: Similar to attribute field content in Section 5.1.6.4.1.1 through Section 5.1.6.4.3.3, this attribute field and features match Section 5.1.6.4.1.1 to 5.1.6.4.1.3.

(5.1.18.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

- (5.1.18.4.2.1) Enumerated_Domain_Value: "official regular/county-sized (land, no GL water)".
- (5.1.18.4.2.2) Enumerated_Domain_Value_Definition: Similar to attribute field content in Section 5.1.6.4.1.1 through Section 5.1.6.4.3.3, this attribute field and features match Section 5.1.6.4.2.1 to 5.1.6.4.2.3.

(5.1.18.4.2.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

- (5.1.18.4.3.1) Enumerated_Domain_Value: "official special mgmt unit (land, no GL water)".
- (5.1.18.4.3.2) Enumerated_Domain_Value_Definition: Similar to attribute field content in Section 5.1.6.4.1.1 through Section 5.1.6.4.3.3, this attribute field and features match Section 5.1.6.4.3.1 to 5.1.6.4.3.3.

(5.1.18.4.3.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.18.4.2) Range_Domain:

(5.1.18.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.18.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.18.4.3) Codeset_Domain:

(5.1.18.4.2.1) Codeset_Name: (not applicable).

(5.1.18.4.2.2) Codeset_Source: (not applicable).

(5.1.18.4.4) Unrepresentable_Domain: (not applicable).

(5.1.18.5) Attribute_Units_of_Measure: (not applicable).

(5.1.18.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.18.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.18.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.18.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.18.10) Attribute_Measurement_Frequency: none planned.

(5.1.19) *Attribute:*

(5.1.19.1) Attribute_Label: ManagementUnitName.

(5.1.19.2) Attribute_Definition: Data field type is "text", length 256 characters; Field is unit name as text (not the DMU number label, alone) with year (then space) DMU-??? (where ??? is the 3digit number or name in WCO) followed by the text name used in the corresponding WCO official legal definition text block, plus may have parenthetical clarifications if critically important/ relevant extra info needed, depending on circumstances). All values can be see in the corresponding WCO legal official text definition block in matching field as per Section 5.1.41, so is not repeated here (or in 5.1.19.1).

(5.1.19.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.19.4) Attribute Domain Values:

(5.1.19.4.1) Enumerated Domain:

(5.1.19.4.1.1) Enumerated_Domain_Value: (as per Section 5.1.19.2).

(5.1.19.4.1.2) Enumerated Domain Value Definition: (as per Section 5.1.19.2).

(5.1.19.4.1.3) Enumerated Domain Value Definition Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.19.4.2) Range_Domain:

(5.1.19.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.19.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.19.4.3) Codeset_Domain:

(5.1.19.4.2.1) Codeset_Name: (not applicable).

(5.1.19.4.2.2) Codeset_Source: (not applicable).

(5.1.19.4.4) Unrepresentable_Domain: (not applicable).

(5.1.19.5) Attribute_Units_of_Measure: (not applicable).

(5.1.19.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.19.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.19.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.19.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.19.10) Attribute_Measurement_Frequency: none planned.

(5.1.20) Attribute:

(5.1.20.1) Attribute_Label: MUSubunitType .

(5.1.20.2) Attribute_Definition: Data field type is "text", length 50 characters; Field

identifies subunit of the larger unit or MU ... may not be applicable to all spp-year-mu combinations / layers (an example is the "north Baldwin unit" of bear MUs, where the north portion subunit is defined by a split in the Baldwin unit, and has different dates for hunt period). This attribute field is not used at this time, not valid values currently, but the data field is part of the standard set of fields used by DNR-WLD, and has been needed before.

(5.1.20.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.20.4) Attribute_Domain_Values:

(5.1.20.4.1) Enumerated_Domain:

(5.1.20.4.1.1) Enumerated_Domain_Value: (not used at this time, no valid values).

(5.1.20.4.1.2) Enumerated_Domain_Value_Definition: (not used at this time,

no valid values).

(5.1.20.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.20.4.2) Range_Domain:

(5.1.20.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.20.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.20.4.3) Codeset_Domain:

(5.1.20.4.2.1) Codeset_Name: (not applicable).

(5.1.20.4.2.2) Codeset_Source: (not applicable).

(5.1.20.4.4) Unrepresentable_Domain: (not applicable).

(5.1.20.5) Attribute_Units_of_Measure: (not applicable).

(5.1.20.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.20.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.20.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.20.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.20.10) Attribute_Measurement_Frequency: none planned.

(5.1.21) *Attribute:*

(5.1.21.1) Attribute_Label: MUSubunitName .

(5.1.21.2) Attribute_Definition: Data field type is "text", length 256 characters; Field identifies subunit of the larger unit or MU ... may not be applicable to all spp-year-mu combinations / layers (an example is the "north Baldwin unit" of bear MUs, where the north portion subunit is defined by a split in the Baldwin unit, and has different dates for hunt period). This attribute field is not used at this time, not valid values currently, but the data field is part of the standard set of fields used by DNR-WLD, and has been needed before.

(5.1.21.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.21.4) Attribute_Domain_Values:

(5.1.21.4.1) Enumerated_Domain:

(5.1.21.4.1.1) Enumerated_Domain_Value: (not used at this time, no valid 2021 values).

(5.1.21.4.1.2) Enumerated_Domain_Value_Definition: (not used at this time,

no valid values).

(5.1.21.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.21.4.2) Range_Domain:

(5.1.21.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.21.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.21.4.3) Codeset_Domain:

(5.1.21.4.2.1) Codeset_Name: (not applicable).

(5.1.21.4.2.2) Codeset_Source: (not applicable).

(5.1.21.4.4) Unrepresentable_Domain: (not applicable).

(5.1.21.5) Attribute_Units_of_Measure: (not applicable).

(5.1.21.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.21.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.21.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.21.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.21.10) Attribute_Measurement_Frequency: none planned.

(5.1.22) *Attribute:*

(5.1.22.1) Attribute_Label: MUIncludesCountiesOf.

(5.1.22.2) Attribute_Definition: Data field type is "text", length 256 characters; Field Identifies, in text, which of Michigan's 83 counties are included in the feature or MU, in organized county-related description, in alphabetical order or order of largest portion of

unit. Information comes from the corresponding WCO official legal text definition block, in Section 5.1.41, and is not repeated here for brevity of this metadata daocument.

(5.1.22.3) Attribute Definition Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.22.4) Attribute_Domain_Values:

(5.1.22.4.1) Enumerated_Domain:

(5.1.22.4.1.1) Enumerated_Domain_Value: (see Section 5.1.22.2).

(5.1.22.4.1.2) Enumerated_Domain_Value_Definition: (see Section 5.1.22.2).

(5.1.22.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.22.4.2) Range_Domain:

(5.1.22.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.22.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.22.4.3) Codeset_Domain:

(5.1.22.4.2.1) Codeset_Name: (not applicable).

(5.1.22.4.2.2) Codeset_Source: (not applicable).

(5.1.22.4.4) Unrepresentable_Domain: (not applicable).

(5.1.22.5) Attribute_Units_of_Measure: (not applicable).

(5.1.22.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.22.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.22.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.22.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.22.10) Attribute_Measurement_Frequency: none planned.

(5.1.23) *Attribute:*

(5.1.23.1) Attribute_Label: MUPurposeComment

(5.1.23.2) Attribute_Definition: Data field type is "text", length 150 characters; Field is used for brief comment on why feature exists in layer, intended for both internal and external users, when questions of why feature in the layer.

(5.1.23.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.23.4) Attribute_Domain_Values:

(5.1.23.4.1) Enumerated_Domain:

(5.1.23.4.1.1) *Enumerated_Domain_Value:* "represent regulations (WCO or other) names area for convivence; not official representation (the text is)".

(5.1.23.4.1.2) Enumerated_Domain_Value_Definition: This feature represents regulations (WCO or other) spatially with names for area for convivence; not official representation (the text is).

(5.1.23.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.23.4.2) Range_Domain:

(5.1.23.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.23.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.23.4.3) Codeset_Domain:

(5.1.23.4.2.1) Codeset_Name: (not applicable).

(5.1.23.4.2.2) Codeset_Source: (not applicable).

(5.1.23.4.4) Unrepresentable_Domain: (not applicable).

(5.1.23.5) Attribute_Units_of_Measure: (not applicable).

(5.1.23.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.23.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.23.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.23.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.23.10) Attribute_Measurement_Frequency: none planned.

(5.1.24) *Attribute:*

(5.1.24.1) Attribute_Label: MURegulationsRefURL

(5.1.24.2) Attribute_Definition: Data field type is "text", length 256 characters; Field provides a hyperlink text (URL text) for the primary DNR online content page for this species regulations. ... for a majority if not all of these features, it is the WCO as cited in detail in Section 5.1.41.

(5.1.24.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.24.4) Attribute_Domain_Values:

(5.1.24.4.1) Enumerated_Domain:

(5.1.24.4.1.1) Enumerated_Domain_Value: "http://www.michigan.gov/dnrdigests".

(5.1.24.4.1.2) Enumerated_Domain_Value_Definition: See Section 5.1.24.2.

(5.1.24.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.24.4.2) Range_Domain:

(5.1.24.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.24.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.24.4.3) Codeset_Domain:

(5.1.24.4.2.1) Codeset_Name: (not applicable).

(5.1.24.4.2.2) Codeset_Source: (not applicable).

(5.1.24.4.4) Unrepresentable_Domain: (not applicable).

(5.1.24.5) Attribute_Units_of_Measure: (not applicable).

(5.1.24.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.24.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.24.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.24.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.24.10) Attribute_Measurement_Frequency: none planned.

(5.1.25) Attribute:

(5.1.25.1) Attribute_Label: UseDataSyncToPublic .

(5.1.25.2) Attribute_Definition: Data field type is "text", length 3 characters; a check-field for sorting data for use before public-facing vs draft, in-DNR internal feature being developed, etc.; Values are "yes" or "no".

(5.1.25.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.25.4) Attribute_Domain_Values:

(5.1.25.4.1) Enumerated_Domain:

(5.1.25.4.1.1) Enumerated_Domain_Value: "yes".

(5.1.25.4.1.2) Enumerated_Domain_Value: "no".

(5.1.25.4.1.3) Enumerated_Domain_Value_Definition: See details in Sec.5.1.25.2.

(5.1.25.4.1.4) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.25.4.2) Range_Domain:

(5.1.25.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.25.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.25.4.3) Codeset_Domain:

(5.1.25.4.2.1) Codeset_Name: (not applicable).

(5.1.25.4.2.2) Codeset_Source: (not applicable).

(5.1.25.4.4) Unrepresentable_Domain: (not applicable).

(5.1.25.5) Attribute_Units_of_Measure: (not applicable).

(5.1.25.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.25.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.25.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.25.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.25.10) Attribute_Measurement_Frequency: none planned.

(5.1.26) Attribute:

(5.1.26.1) Attribute_Label: UseDataInViewerTool .

(5.1.26.2) Attribute_Definition: Data field type is "text", length 3 characters; a check-field for sorting data for use within a viewer tool, webmap, etc. (assumes if before publicfacing then field "UseDataForSyncToPublic" should be = "yes") or in-DNR internal features tool allowing see data being developed, etc.; Values are: "yes" for identifying features which should be used together in a viewer tool for current DMUs; "no" for identifying features which should NOT be used together in a viewer tool for current DMUs these may be draft or in-development polygons); "mbe" (maybe) for identifying features which maybe should be used together in a viewer tool for current DMUs these may be draft or in-development polygons); "mbe" (maybe) for identifying features which maybe should be used together in a viewer tool for current DMUs these may be special features like just county outlines which relate to other special regulations for deer hunting, etc.).

(5.1.26.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.26.4) Attribute_Domain_Values:

(5.1.26.4.1) Enumerated_Domain:

(5.1.27.4.1.1) Enumerated_Domain_Value: "yes".

(5.1.27.4.1.2) Enumerated_Domain_Value: "no".

(5.1.27.4.1.3) Enumerated_Domain_Value: "mbe".

(5.1.27.4.1.4) Enumerated_Domain_Value_Definition: See details in Sec.5.1.26.2.

(5.1.27.4.1.5) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.26.4.2) Range_Domain:

(5.1.26.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.26.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.26.4.3) Codeset Domain:

(5.1.26.4.2.1) Codeset_Name: (not applicable).

(5.1.26.4.2.2) Codeset Source: (not applicable).

(5.1.26.4.4) Unrepresentable Domain: (not applicable).

(5.1.26.5) Attribute_Units_of_Measure: (not applicable).

(5.1.26.6) Attribute Measurement Resolution: (not applicable).

(5.1.26.7) Beginning Date of Attribute Values: publication date.

(5.1.26.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.26.9) Attribute Value Accuracy Information: see Sec. 2.3 Completeness Report.

(5.1.26.10) Attribute_Measurement_Frequency: none planned.

(5.1.27) *Attribute:*

(5.1.27.1) Attribute Label: UseFeatureAsUrgentFlagPolygon

(5.1.27.2) Attribute Definition: Data field type is "text", length 3 characters; a check-field for identifying critically important urgent features which might be needed for a specific external or internal tool (one example could be CWD positive units for deer DMUs in a given year, where flagged polygons "cwd" are shown in the deer-check-station webmap/viewer tool); Values are "yes" or "no".

(5.1.27.3) Attribute Definition Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.27.4) Attribute Domain Values:

(5.1.27.4.1) Enumerated Domain:

(5.1.27.4.1.1) Enumerated_Domain_Value: "yes". (5.1.27.4.1.2) Enumerated Domain Value: "no".

(5.1.27.4.1.3) Enumerated Domain Value Definition: See details in Sec.5.1.27.2.

(5.1.27.4.1.4) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.27.4.2) Range Domain:

(5.1.27.4.2.1) Range Domain Minimum: (not applicable).

(5.1.27.4.2.2) Range Domain Maximum: (not applicable).

(5.1.27.4.3) Codeset Domain:

(5.1.27.4.2.1) Codeset_Name: (not applicable).

(5.1.27.4.2.2) Codeset_Source: (not applicable).

(5.1.27.4.4) Unrepresentable Domain: (not applicable).

(5.1.27.5) Attribute Units of Measure: (not applicable).

(5.1.27.6) Attribute Measurement Resolution: (not applicable).

(5.1.27.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.27.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.27.9) Attribute Value Accuracy Information: see Sec. 2.3 Completeness Report.

(5.1.27.10) Attribute Measurement Frequency: none planned.

(5.1.28) Attribute:

(5.1.28.1) Attribute_Label: SpeciesReferenceURL .

(5.1.28.2) Attribute_Definition: Data field type is "text", length 256 characters; Field provides a hyperlink text (URL text) for the primary DNR online content page.

(5.1.28.3) Attribute Definition Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.28.4) Attribute_Domain_Values:

(5.1.28.4.1) Enumerated Domain:

(5.1.28.4.1.1) Enumerated_Domain_Value: http://www.michigan.gov/wildlife .

(5.1.28.4.1.2) Enumerated Domain Value Definition: See Section 5.1.28.2,

This is a first species URL like to information online, using DNR webpages about wildlife species as an accessible resource. Note this may be the same attribute field details in Section 5.1.30.1 as Attribute Label: SpeciesDNRReferenceURL "; however, there are situations when there may be two DNR source URL links to important species information, and if so then that attribute field (Section 5.1.30.1) will contain the first DNR URL, and this field contain the second one.

(5.1.28.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.28.4.2) Range Domain:

(5.1.28.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.28.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.28.4.3) Codeset_Domain:

(5.1.28.4.2.1) Codeset_Name: (not applicable).

(5.1.28.4.2.2) Codeset_Source: (not applicable).

(5.1.28.4.4) Unrepresentable_Domain: (not applicable).

(5.1.28.5) Attribute_Units_of_Measure: (not applicable).

(5.1.28.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.28.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.28.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.28.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.28.10) Attribute_Measurement_Frequency: none planned.

(5.1.29) *Attribute:*

(5.1.29.1) Attribute_Label: SpeciesReference2URL .

(5.1.29.2) Attribute_Definition: Data field type is "text", length 256 characters; Field provides a hyperlink text (URL text) for secondary online content re the species.

(5.1.29.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.29.4) Attribute_Domain_Values:

(5.1.29.4.1) Enumerated_Domain:

(5.1.29.4.1.1) Enumerated_Domain_Value:

"https://en.wikipedia.org/wiki/White-tailed_deer ".

(5.1.29.4.1.2) Enumerated_Domain_Value_Definition: See Section 5.1.29.2. This is a second species URL like to information online, using Wikipedia

(for now) as a common accessible resource.

(5.1.29.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.29.4.2) Range_Domain:

(5.1.29.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.29.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.29.4.3) Codeset_Domain:

(5.1.29.4.2.1) Codeset_Name: (not applicable).

(5.1.29.4.2.2) Codeset_Source: (not applicable).

(5.1.29.4.4) Unrepresentable_Domain: (not applicable).

(5.1.29.5) Attribute_Units_of_Measure: (not applicable).

(5.1.29.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.29.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.29.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.29.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.29.10) Attribute_Measurement_Frequency: none planned.

(5.1.30) Attribute:

(5.1.30.1) Attribute_Label: SpeciesDNRReferenceURL .

(5.1.30.2) Attribute_Definition: Data field type is "text", length 256 characters; Field provides a hyperlink text (URL text) for a second DNR online content page as frequently for huntable species there are pages for the species hunt information, that species regulations, and that species as a wildlife species (regardless of hunting designation).

(5.1.30.3) Attribute Definition Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.30.4) Attribute Domain Values:

(5.1.30.4.1) Enumerated_Domain:

(5.1.30.4.1.1) Enumerated_Domain_Value: "http://www.michigan.gov/wildlife".

(5.1.30.4.1.2) Enumerated_Domain_Value_Definition: See Section 5.1.30.2,

This is a first species URL like to information online, using DNR webpages about wildlife species as an accessible resource. Also see Section 5.1.28.4.1.2.

(5.1.30.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.30.4.2) Range_Domain:

(5.1.30.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.30.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.30.4.3) Codeset_Domain:

(5.1.30.4.2.1) Codeset_Name: (not applicable).

(5.1.30.4.2.2) Codeset_Source: (not applicable).

(5.1.30.4.4) Unrepresentable_Domain: (not applicable).

(5.1.30.5) Attribute_Units_of_Measure: (not applicable).

(5.1.30.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.30.7) *Beginning_Date_of_Attribute_Values:* publication date.

(5.1.30.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.30.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.30.10) Attribute_Measurement_Frequency: none planned.

(5.1.31) Attribute:

(5.1.31.1) Attribute_Label: DataMetadataReferenceURL .

(5.1.31.2) Attribute_Definition: Data field type is "text", length 256 characters; Field provides a hyperlink text (URL text) to detailed metadata file for this specific layer; all users are urged to read the metadata before using the data for any purposes. The link should be the same content as you are reading right now.

(5.1.31.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.31.4) Attribute Domain Values:

(5.1.31.4.1) Enumerated Domain:

(5.1.31.4.1.1) Enumerated_Domain_Value: "

https://www2.dnr.state.mi.us/publications/pdfs/huntingwildlifehabitat/WLDmetadata/DNR-

WLD wildlife management units deer current polyon gislayermetadata.pdf ".

(5.1.31.4.1.2) Enumerated_Domain_Value_Definition: See Section 5.1.31.2.

(5.1.31.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.31.4.2) Range_Domain:

(5.1.31.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.31.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.31.4.3) Codeset_Domain:

(5.1.31.4.2.1) Codeset_Name: (not applicable).

(5.1.31.4.2.2) Codeset_Source: (not applicable).

(5.1.31.4.4) Unrepresentable_Domain: (not applicable).

(5.1.31.5) Attribute_Units_of_Measure: (not applicable).

(5.1.31.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.31.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.31.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.31.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.31.10) Attribute_Measurement_Frequency: none planned.

(5.1.32) *Attribute*:

(5.1.32.1) Attribute_Label: DataSourceCitation .

(5.1.32.2) Attribute_Definition: Data field type is "text", length 256 characters; Field provides a citation (JWS format) for this data set, when citing it within publications, etc.

(5.1.32.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.32.4) Attribute_Domain_Values:

(5.1.32.4.1) Enumerated_Domain:

(5.1.32.4.1.1) Enumerated_Domain_Value: "2021. State of Michigan - Department of Natural Resources (DNR). 2021 White-Tailed Deer Management Unit polygons for geographic information systems ESRI format, by DNR Wildlife Division from Michigan Wildlife Conservation Order & regulations text (as-is)".

(5.1.32.4.1.2) Enumerated_Domain_Value_Definition: See Section 5.1.32.2.

(5.1.32.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.32.4.2) Range_Domain:

(5.1.32.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.32.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.32.4.3) Codeset_Domain:

(5.1.32.4.2.1) Codeset_Name: (not applicable).

(5.1.32.4.2.2) Codeset_Source: (not applicable).

(5.1.32.4.4) Unrepresentable_Domain: (not applicable).

(5.1.32.5) Attribute_Units_of_Measure: (not applicable).

(5.1.32.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.32.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.32.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.32.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.32.10) Attribute_Measurement_Frequency: none planned.

(5.1.33) *Attribute:*

(5.1.33.1) Attribute_Label: DataWarningInfo.

(5.1.33.2) Attribute_Definition: Data field type is "text", length 50 characters; Field provides a data warning comment, which typically may be reminder or direct users to "All users should read the provided metadata at URL".

(5.1.33.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.33.4) Attribute_Domain_Values: (5.1.33.4.1) Enumerated Domain:

(5.1.33.4.1.1) *Enumerated_Domain_Value:* (this section under development, up to deer hunting seasons this field is subject to change as needed to use polygon).

(5.1.33.4.1.2) Enumerated_Domain_Value_Definition: See Section 5.1.33.2.

(5.1.33.4.1.3) Enumerated Domain Value Definition Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.33.4.2) Range_Domain:

(5.1.33.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.33.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.33.4.3) Codeset_Domain:

(5.1.33.4.2.1) Codeset_Name: (not applicable).

(5.1.33.4.2.2) Codeset_Source: (not applicable).

(5.1.33.4.4) Unrepresentable_Domain: (not applicable).

(5.1.33.5) Attribute_Units_of_Measure: (not applicable).

(5.1.33.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.33.7) *Beginning_Date_of_Attribute_Values:* publication date.

(5.1.33.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.33.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.33.10) Attribute_Measurement_Frequency: none planned.

(5.1.34) Attribute:

(5.1.34.1) Attribute_Label: DataInternalCheckTempValue

(5.1.34.2) Attribute_Definition: Data field type is "text", length 12 characters; Field is used for internal purposes of various cartographic uses if not supported by another field in layer.

(5.1.34.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.34.4) Attribute_Domain_Values:

(5.1.34.4.1) Enumerated_Domain:

(5.1.34.4.1.1) Enumerated_Domain_Value: (this section under development and content is temporary as for internal uses only, such as cartographic symbology setting, etc. for internal maps, etc. if needed).

(5.1.34.4.1.2) Enumerated_Domain_Value_Definition: See Section 5.1.34.2.

(5.1.34.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.34.4.2) Range_Domain:

(5.1.34.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.34.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.34.4.3) Codeset_Domain:

(5.1.34.4.2.1) Codeset_Name: (not applicable).

(5.1.34.4.2.2) Codeset_Source: (not applicable).

(5.1.34.4.4) Unrepresentable_Domain: (not applicable).

(5.1.34.5) Attribute_Units_of_Measure: (not applicable).

(5.1.34.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.34.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.34.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.34.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.34.10) Attribute_Measurement_Frequency: none planned.

(5.1.35) *Attribute:*

(5.1.35.1) Attribute_Label: DataLastUpdatedDate

(5.1.35.2) Attribute_Definition: Data field type is "text", length 12 characters; Field is internal-use and identifies the last internal updated date of the specific feature (polygon) which could be edited for shape or attribute fields after date in field "Year" or "YearOrDateFeatureDeveloped".

(5.1.35.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.35.4) Attribute_Domain_Values:

(5.1.35.4.1) Enumerated_Domain:

(5.1.35.4.1.1) Enumerated_Domain_Value: (See Section 5.1.33.2).

(5.1.35.4.1.2) Enumerated_Domain_Value_Definition: See Section 5.1.35.2.

(5.1.35.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.35.4.2) Range_Domain:

(5.1.35.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.35.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.35.4.3) Codeset_Domain:

(5.1.35.4.2.1) Codeset_Name: (not applicable).

(5.1.35.4.2.2) Codeset_Source: (not applicable).

(5.1.35.4.4) Unrepresentable_Domain: (not applicable).

(5.1.35.5) Attribute_Units_of_Measure: (not applicable).

(5.1.35.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.35.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.35.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.35.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.35.10) Attribute_Measurement_Frequency: none planned.

(5.1.36) *Attribute*:

(5.1.36.1) Attribute_Label: DataLastUpdatedByWhoUserid

(5.1.36.2) Attribute_Definition: Data field type is "text", length 25 characters; Field is

internal-use and identifies who did the last update or edit to the feature (see field "DataInternalLastUpdatedDate") typically use internal userid text string of lastname plus first initial and maybe a number, etc. as per State of Michigan user-id standards and practices; if not user-id then may be abbreviated name as text string, such as if cooperative data set done with external partner, etc.

(5.1.36.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.36.4) Attribute_Domain_Values:

(5.1.36.4.1) Enumerated_Domain:

(5.1.36.4.1.1) Enumerated_Domain_Value: (See Section 5.1.36.2).

(5.1.36.4.1.2) Enumerated Domain Value Definition: See Section 5.1.36.2.

(5.1.36.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.36.4.2) Range_Domain:

(5.1.36.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.36.4.2.2) Range Domain Maximum: (not applicable).

(5.1.36.4.3) Codeset_Domain:

(5.1.36.4.2.1) Codeset_Name: (not applicable).

(5.1.36.4.2.2) Codeset_Source: (not applicable).

(5.1.36.4.4) Unrepresentable_Domain: (not applicable).

(5.1.36.5) Attribute_Units_of_Measure: (not applicable).

(5.1.36.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.36.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.36.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.36.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.36.10) Attribute_Measurement_Frequency: none planned.

(5.1.37) *Attribute:*

(5.1.37.1) Attribute_Label: DataLastUpdateComment

(5.1.37.2) Attribute_Definition: Data field type is "text", length 256 characters; Field is internal-use and used for internal comment on the feature, as needed by data developer(s), etc. Note: The only official representation of point, line or boundary and extent or polygon data is the provided legal text in the Michigan Wildlife Conservation Order at http://www.michigan.gov/dnrlaws; anything else like these GIS data are for convivence.

(5.1.37.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.37.4) Attribute_Domain_Values:

(5.1.37.4.1) Enumerated_Domain:

(5.1.37.4.1.1) Enumerated_Domain_Value: (See Section 5.1.37.2; could vary depending on last feature editor or last edit).

(5.1.37.4.1.2) Enumerated_Domain_Value_Definition: See Section 5.1.37.2.

(5.1.37.4.1.3) Enumerated Domain Value Definition Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.37.4.2) Range_Domain:

(5.1.37.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.37.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.37.4.3) Codeset_Domain:

(5.1.37.4.2.1) Codeset_Name: (not applicable).

(5.1.37.4.2.2) Codeset_Source: (not applicable).

(5.1.37.4.4) Unrepresentable_Domain: (not applicable).

(5.1.37.5) Attribute_Units_of_Measure: (not applicable).

(5.1.37.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.37.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.37.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.37.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.37.10) Attribute_Measurement_Frequency: none planned.

(5.1.38) Attribute:

(5.1.38.1) Attribute_Label: UnitUrgentWarningComment

(5.1.38.2) Attribute_Definition: Data field type is "text", length 150 characters; field is used for a urgent warning comment for the unit or to explain why flagged in field "UseDataAsUrgentFlagPolygon"; ... may not be applicable to all spp-year-mu combinations / layers.

(5.1.38.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.38.4) Attribute_Domain_Values:

(5.1.38.4.1) Enumerated_Domain:

(5.1.38.4.1.1) Enumerated_Domain_Value: (See Section 5.1.38.2).

(5.1.38.4.1.2) Enumerated Domain Value Definition: See Section 5.1.38.2.

(5.1.38.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.38.4.2) Range_Domain:

(5.1.38.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.38.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.38.4.3) Codeset_Domain:

(5.1.38.4.2.1) Codeset_Name: (not applicable).

(5.1.38.4.2.2) Codeset_Source: (not applicable).

(5.1.38.4.4) Unrepresentable_Domain: (not applicable).

(5.1.38.5) Attribute_Units_of_Measure: (not applicable).

(5.1.38.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.38.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.38.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.38.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.38.10) Attribute_Measurement_Frequency: none planned.

(5.1.39) *Attribute:*

(5.1.39.1) Attribute_Label: UseDataAsAuthoritativeData

(5.1.39.2) Attribute_Definition: Data field type is "text", length 3 characters; a check-field for identifying if the feature is valid use as authoritative and thereby the correct authoritative data/layer for both external or internal uses or in views/tool/etc.; Values are "yes" or "no".

(5.1.40.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.40.4) Attribute_Domain_Values:

(5.1.40.4.1) Enumerated_Domain:

(5.1.40.4.1.1) Enumerated_Domain_Value: "yes".

(5.1.40.4.1.2) Enumerated_Domain_Value_Definition: (See Section 5.1.40.2).

(5.1.40.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.40.4.1.1) Enumerated_Domain_Value: "no".

(5.1.40.4.1.2) Enumerated_Domain_Value_Definition: (See Section 5.1.40.2).

(5.1.40.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.40.4.2) Range_Domain:

(5.1.40.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.40.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.40.4.3) Codeset_Domain:

(5.1.40.4.2.1) Codeset_Name: (not applicable).

(5.1.40.4.2.2) Codeset_Source: (not applicable).

(5.1.40.4.4) Unrepresentable_Domain: (not applicable).

(5.1.40.5) Attribute_Units_of_Measure: (not applicable).

(5.1.40.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.40.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.40.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.40.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.40.10) Attribute_Measurement_Frequency: none planned.

(5.1.40) *Attribute:*

(5.1.40.1) Attribute_Label: DataAuthoritativeComment

(5.1.40.2) Attribute_Definition: Data field type is "text", length 256 characters; Field is text comments re if feature is valid use as authoritative and thereby the correct authoritative data/layer for both external or internal uses or in views/tool/etc.

(5.1.40.3) Attribute_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source. (5.1.40.4) Attribute Domain Values:

(5.1.40.4.1) Enumerated Domain:

(5.1.40.4.1.1) Enumerated_Domain_Value: (See Section 5.1.40.2).

(5.1.40.4.1.2) Enumerated Domain Value Definition: See Section 5.1.40.2.

(5.1.40.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD;

see Sections 1.9 and 6.1 for source.

(5.1.40.4.2) Range_Domain:

(5.1.40.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.40.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.40.4.3) Codeset_Domain:

(5.1.40.4.2.1) Codeset_Name: (not applicable).

(5.1.40.4.2.2) Codeset_Source: (not applicable).

(5.1.40.4.4) Unrepresentable_Domain: (not applicable).

(5.1.40.5) Attribute_Units_of_Measure: (not applicable).

(5.1.40.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.40.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.40.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.40.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.40.10) Attribute_Measurement_Frequency: none planned.

(5.1.41) Attribute:

(5.1.41.1) Attribute_Label: FeatureMUDefinedText

(5.1.41.2) Attribute_Definition: Data field type is "text", length 4000 characters (why?:

Using this as standard size because as per current WCO official and legal definitions, checked and found examples of longest text blocks which would need to be in this attribute data field from 2021 WCO: deer management unit 022 = 3719 characters; wolf unit b = 3188; elk unit h = 3784 ; elk unit m = 3518 characters - - and all will fit within 4000 character text field); This field is the official legal definition text for the unit like the Wildlife Conservation Order (WCO; cited in detail in Section 5.1.41.3) or other regulations related text used to define an area for deer management, and in this layer as a feature. The details in this Section 5.1.41 are being completed before complete the filling of the actual attribute cells per feature corresponding to the appropriate matching WCO defined and official legal text block as listed in Section 5.1.41.4.1. Enumerated_Domain. Note that this attribute field "FeatureMUDefinedText" is being or has been populated with the appropriate WCO text blocks (below) added to the data existing layer within this attribute field, matching the defined deer management layer (DMU) feature as per earlier attribute fields; If text not found in this attribute field then this update step is not done yet but will be as soon as technical glitches during layer mgmt. are completed (the layer keeps being corrupted, unspecific polygons just disappear, incl. those not being edited, and other problems with inserts).

The information in the attribute field cells is the official legal definition text blocks for deer units in this layer (per feature), like the official and legal text definitions from the Wildlife Conservation Order (WCO; see "Section 5.1.40.3 Attribute Definition Source(s)") or other regulations-related text used to define an area for deer management, and is specific to the individual features in this layer (matching the cell in this attribute field for the feature). First is the WCO excerpt text, which (if applicable) will be followed by other cited regulation text blocks, in this Supplemental Information to the metadata file for layer named "WildlifeManagementUnitsWhitetailedDeerCURRENTpolygons" – or after 2021, then this data set will be incorporated into the "combination layer" of older legacy layers, named "WildlifeManagementUnitsWhitetailedDeerHISTORICALpolygons", etc. (as discussed in the introductory information earlier in this file.

Note that in the subsections 5.1.41.4.1.1 to 5.1.41.4.1.15, below or following, the subsection number (as indicated by "?" in "Sec.5.1.41.4.1.?") does not match the DMU number (i.e. Section 5.1.41.4.1.13 is not detailing DMU-013).

At the end of this metadata document is provided supplemental information, where "Supplemental Information 3" is provided for understanding the completed ness of deer unit information. The complete excerpt text is provided in those supplements, and is the complete set of relevant unit definitions, to help understand the exact extent of polygons, completed ness, and are the exact official legal text served in the official legal source of: Michigan Wildlife Conservation Order (WCO), Chapter XII, Management Areas Defined, excerpt of WCO sections 12.1 to 12.499, and sections 12.900 to 12.903, re: all deer management units (DMUs) defined within these sections of regulations.

(5.1.41.3) Attribute Definition Source: Source Citation:

2021. State of Michigan – Department of Natural Resources (DNR). Michigan Wildlife Conservation Order (WCO), Chapter XII, Management Areas Defined, excerpt of WCO sections 12.1 to 12.499, and sections 12.900 to 12.903, related to all white-tailed deer management units (DMUs) defined, Online source is DNR regulations WCO at "<u>https://www.michigan.gov/dnr/-/media/Project/Websites/dnr/Documents/Orders/Wildlife-Conservation-Order/WCO.pdf</u> " (2022 Aug 19).

(5.1.41.4) Attribute_Domain_Values:

(5.1.41.4.1.) Enumerated Domain:

(5.1.41.4.1.1) Enumerated_Domain_Value: "12.1 "Deer management unit 001 (Alcona county)" defined. Sec. 12.1 "Deer management unit 001 (Alcona county)" means all of Alcona county, excluding that part defined in section 12.452 as deer management unit 452. History: Am. 3, 1992, Eff. Sep 1, 1992; Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001."

(5.1.41.4.1.2) Enumerated_Domain_Value: (not applicable; was DMU 002). (5.1.41.4.1.3) Enumerated_Domain_Value: "12.3 "Deer management unit 003 (Allegan county)" defined. Sec. 12.3 "Deer management unit 003 (Allegan county)" means all of Allegan county. History: Eff. Sep 1, 1995; Am. 8, 2001, Eff. Jun 1, 2001." (5.1.41.4.1.4) Enumerated_Domain_Value: "12.4 "Deer management unit 004 (Alpena county)"defined. Sec. 12.4 "Deer management unit 004 (Alpena county)" means all of Alpena county, excluding that part defined in section 12.452 as deer management unit 452. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001.

(5.1.41.4.1.5) Enumerated_Domain_Value: "12.5 "Deer management unit 005 (Antrim county)" defined. Sec. 12.5 "Deer management unit 005 (Antrim county)" means all of Antrim county. History: Am. 8, 2001, Eff. Jun 1, 2001. "

(5.1.41.4.1.6) Enumerated_Domain_Value: "12.6 "Deer management unit 006 (Arenac county)" defined. Sec. 12.6 "Deer management unit 006 (Arenac county)" means all of Arenac county. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001.

(5.1.41.4.1.7) Enumerated Domain Value: "12.7 "Deer management unit 007 (Big Bay unit)"defined. Sec. 12.7 "Deer management unit 007 (Big Bay unit)" means that area of Alger, Marquette, and Baraga counties bounded by a line beginning at the mouth of the Anna river (section 2, T46N R19W) near the city of Munising in Alger county, then upstream along the Anna river to highway M-28 (section 11, T46N R19W), southerly on highway M-28 to highway M-94 (section 11, T46N R19W), westerly on highway M94 to the junction of highway M-94 and highway M-67 near the city of Chatham, southerly on highway M67 to county road H-01 (Eben-Trenary road), northerly on county road H-01 to county road H-44 (Traunik Kiva road), westerly on county road H-44 to King road, northwesterly on King road to highway US-41, northwesterly on highway US-41 into Marquette county to county road 456, westerly on county road 456 to highway M-35, westerly on highway M-35 to the middle branch of the Escanaba river, northwesterly along the middle branch of the Escanaba river to county road 478, westerly on county road 478 to county road 601, southwesterly on county road 601 to highway M-95, northerly on highway M-95 to highway US41/M-28, westerly on highway US-41/M-28 into Baraga county to highway US-141/M-28 (section 6, T48N R33W), northerly on highway US-41 to highway M-38 in the city of Baraga, due east into the center of Keweenaw bay, easterly across Keweenaw bay, northerly and easterly along the Lake Superior shoreline of Baraga, Marquette, and Alger counties, including Grand island and offshore islands between eastern Keweenaw bay and Grand island, to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001; Am. 8, 2002, Eff. Jun 8, 2002. "

(5.1.41.4.1.8) Enumerated_Domain_Value: "12.8 "Deer management unit 008 (Barry county)" defined. Sec. 12.8 "Deer management unit 008 (Barry county)" means all of Barry county. History: Am. 8, 2001, Eff. Jun 1, 2001. "

(5.1.41.4.1.10) Enumerated_Domain_Value: "12.9 "Deer management unit 009 (Bay county)" means all of Bay county. History: Am. 4, 1990, Eff. Sep 1, 1990; Am. 3, 1992, Eff. Sep 1, 1992; Am. 6, 1995, Eff. Sep 1, 1995; Am. 8, 2001, Eff. Jun 1, 2001. "

(5.1.41.4.1.11) Enumerated_Domain_Value: "12.10 "Deer management unit 010 (Benzie county)"defined. Sec. 12.10 "Deer management unit 010 (Benzie county)" means all of Benzie county. History: Am. 4, 1990, Eff. Sep 1, 1990; Am. 6, 1999, Eff. Sep 1, 1999; Am. 8, 2001, Eff. Jun 1, 2001. "

(5.1.41.4.1.12) Enumerated_Domain_Value: "12.11 "Deer management unit 011 (Berrien county)" defined. Sec. 12.11 "Deer management unit 011 (Berrien county)" means all of Berrien county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 6, 1991, Eff. Sep 1, 1991; Am. 6, 1999, Eff. Sep 1, 1999; Am. 7, 2000, Eff. Sep 1, 2000; Am. 8, 2001, Eff. Jun 1, 2001. "

(5.1.41.4.1.13) Enumerated_Domain_Value: "12.11a "Deer management unit 311 (Keeler Unit; Berrien - Cass - Van Buren)" defined. Sec. 12.11a "Deer management unit 311 (Keeler Unit; Berrien - Cass - Van Buren)" means all of Berrien, Cass, and Van Buren counties. History: Am. 8, 2013, Eff. June 14, 2013. "

(5.1.41.4.1.14) Enumerated_Domain_Value: "12.12 "Deer management unit 012 (Branch county)"defined. Sec. 12.12 "Deer management unit 012 (Branch county)" means all of Branch county. History: Am. 4, 1990, Eff. Sep 1, 1990; Am. 6, 1995, Eff. Sep 1, 1995; Am. 7, 2000, Eff. Sep 1, 2000; Am. 8, 2001, Eff. Jun 1, 2001. "

(5.1.41.4.1.15) Enumerated_Domain_Value: "12.12a "Deer management unit 312 (Sherwood Unit; Branch - Kalamazoo - St. Joseph)" defined. Sec. 12.12a "Deer management unit 312 (Sherwood Unit; Branch - Kalamazoo - St. Joseph)" means all of Branch, Kalamazoo, and St. Joseph counties. History: Am. 6, 2014, Eff. June 13, 2014.

(5.1.41.4.1.16) Enumerated_Domain_Value: "12.13 "Deer management unit 013 (Calhoun county)"defined. Sec. 12.13 "Deer management unit 013 (Calhoun county)" means all of Calhoun county. History: Eff. Sep 1, 1995; Am. 6, 1999, Eff. Sep 1, 1999; Am. 8, 2001, Eff. Jun 1, 2001. "

(5.1.41.4.1.17) Enumerated_Domain_Value: "12.14 "Deer management unit 014 (Cass county)" defined. Sec. 12.14 "Deer management unit 014 (Cass county)" means all of Cass county. History: Am. 7, 2000, Eff. Sep 1, 2000; Am. 8, 2001, Eff. Jun 1, 2001. "

(5.1.41.4.1.18) Enumerated_Domain_Value: "12.15 "Deer management unit 015 (Charlevoix county)" defined. Sec. 12.15 "Deer management unit 015 (Charlevoix county)" means all of Charlevoix county, excluding that part defined in section 12.15a as deer management unit 115. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989, Am. 4, 1993, Eff. Sep 1, 1993; Am. 4, 1994, Eff. Sep 1, 1994; Am. 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001. "

(5.1.41.4.1.18) Enumerated_Domain_Value: "12.15a "Deer management unit 115 (Beaver Island unit)" defined. Sec. 12.15a "Deer management unit 115 (Beaver Island unit)" means Beaver island and Garden island in Lake Michigan, Charlevoix county. History: Am. 8, 2001, Eff. Jun 1, 2001. "

(5.1.41.4.1.19) Enumerated_Domain_Value: "12.16 "Deer management unit 016 (Cheboygan county)" defined. Sec. 12.16 "Deer management unit 016 (Cheboygan county)" means all of Cheboygan county. History: Am. 8, 2001, Eff. Jun 1, 2001. "

(5.1.41.4.1.20) Enumerated Domain_Value: "12.17 "Deer management unit 017 (Sault Ste. Marie unit)" defined. Sec. 12.17 "Deer management unit 017 (Sault Ste. Marie unit)" means that area of Chippewa and Mackinac counties bounded by a line beginning at the Lake Huron shoreline at the mouth of the Pine river (section 10, T42N R03W), then northerly upstream along the Pine River to highway M-134, westerly on highway M-134 to highway I-75, northerly on highway I-75 to highway M-48, easterly on highway M-48 to where it combines with Mackinac trail, northerly on highway M-48/Mackinac trail towards the city of Rudyard to Tilson road (no turn, road name change), northerly on Tilson road to highway M-28, easterly on highway M-28 to highway M- 221, northerly on highway M-221 through the city of Brimley to Lakeshore drive, easterly on Lakeshore drive to the Waiska river, northerly downstream along the Waiska river to Lake Superior due north to the international boundary, southeasterly along the international boundary to the De Tour passage waterway, southerly through the De Tour passage waterway and westerly along the Lake Huron shoreline, including Sugar island, Neebish island, and the Les Cheneaux islands, to the point of beginning, excluding that part defined in section 12.17a as deer management unit 117 and that part defined in section 12.49a as deer management unit 149. History: Am. 8, 2001, Eff. Jun 1, 2001. "

(5.1.41.4.1.21) Enumerated_Domain_Value: "12.17a Deer management unit 117 (Drummond island unit)" defined. Sec. 12.17a "Deer management unit 117 (Drummond island unit)" means that area of Chippewa county east of the De Tour passage waterway, identified as the Drummond island group (areas east of R04E, which includes Drummond island, islands in Potagannissing bay including those eastward of Little Cass island, and islands east and south of Drummond island) in Lake Huron, bounded by the international boundary on the north and east. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001. "

(5.1.41.4.1.22) Enumerated_Domain_Value: "12.18 "Deer management unit 018 (Clare county)" defined. Sec. 12.18 "Deer management unit 018 (Clare county)" means all of Clare county. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001; Am. 5, 2004, Eff. May 8, 2004. "

(5.1.41.4.1.23) Enumerated_Domain_Value: "12.19 "Deer management unit 019 (Clinton county)" defined. Sec. 12.19 "Deer management unit 019 (Clinton county)" means all of Clinton county except those lands defined in section 12.33a. History: Am. 9, 2013, Eff. June 14, 2013; Am. 9, 2015, Eff. Aug. 14, 2015; Am. 7, 2016, Eff. May 13, 2016. "

(5.1.41.4.1.24) Enumerated_Domain_Value: "12.19b "Deer Management unit 419 (CWD Management Zone)" defined. Sec. 12.19b "Deer management unit 419 (CWD Management Zone)" means all of Clinton, Eaton Ingham, Ionia, and Shiawassee counties except those lands defined in section 12.33a. History: Am. 7, 2016, Eff. May 13, 2016. "

(5.1.41.4.1.25) Enumerated_Domain_Value: "12.20 "Deer management unit 020

(Crawford county)" defined. Sec. 12.20 "Deer management unit 020 (Crawford county)" means all of Crawford county. History: Am. 8, 2001, Eff. Jun 1, 2001. "

Enumerated_Domain_Value: "12.21 "Deer management unit 021 (5.1.41.4.1.26) (Manistique unit)"defined. Sec. 12.21 "Deer management unit 021 (Manistique unit)" means that area of Delta, Alger, and Schoolcraft counties bounded by a line beginning at the mouth of the Rapid river near the city of Rapid River in Delta county, then northerly upstream to highway US-2, westerly towards Rapid River on highway US-2 to highway US-41, northerly on highway US-41 into Alger county to highway US-41 and highway M67 at the city of Trenary, northerly on highway M-67 to highway M-94 near the city of Chatham, easterly on highway M-94 to highway M-28 located south of the city of Munising in Alger county, easterly on highway M-28 past the city of Shingleton into Schoolcraft county to highway M-28 and highway M-77 at the city of Seney, southerly on highway M-77 to highway US-2, southwesterly on highway US-2 to county road 432 near the city of Gulliver, southeasterly on county road 432 to county road 431, southerly on county road 431 to the Lake Michigan shoreline at Seul Choix point, westerly along the Lake Michigan shoreline, including Summer and Little Summer islands, Poverty and St. Martin's islands, to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 5, 2003, Eff. May 10, 2003. "

(5.1.41.4.1.27) Enumerated_Domain_Value: "12.21a "Deer management unit 121 (Bay de Noc)" defined. Sec. 12.21a "Deer management unit 121 (Bay de Noc)" means that area of Delta and Schoolcraft counties bounded by a line beginning at the mouth of the Rapid river near the city of Rapid River in Delta county, then northerly upstream along the Rapid river to highway US-2, easterly on highway US-2 into Schoolcraft county to Thompson creek in the city of Thompson, southeasterly downstream along Thompson creek to the Lake Michigan shoreline, westerly along the Lake Michigan shoreline, including Summer and Little Summer islands, Poverty and St. Martin's islands, to the point of beginning. History: Am. 5, 2003, Eff. May 10, 2003."

(5.1.41.4.1.28) Enumerated Domain Value: "12.22 "Deer management unit 022 (Crystal Falls unit)" defined. Sec. 12.22 "Deer management unit 022 (Crystal Falls unit)" means that area of Iron and Dickinson counties bounded by a line beginning in Iron county at the junction of the Michigan-Wisconsin state line (about 51/2 miles northwest of the end of the Brule river, near center of section 33, T43N R37W) and USFS highway 16 (section 33, T43N R37W, also known as Iron county road 436 or federal forest highway 16), then northerly, crossing highway US-2, to USFS road 3270 (also known as USFS road 149, section 14, T44N R37W), easterly on USFS road 3270 to county road 657 (section 8, T44N R35W, also known as Gibbs city road when near Gibbs city), southeasterly on county road 657 through Gibbs city to Ponozzo road (also known as USFS road 137), northerly on Ponozzo road to the Paint river (just north of Gibbs city, in northwest corner of section 9, T44N R35W), easterly/downstream along the center of the Paint river to the confluence of the Hemlock river (section 8, T44N R34W), easterly/downstream along the center of the Hemlock river to the Chicago, Milwaukee, St. Paul, and Pacific railroad line in the center of the village of Amasa, southeasterly on said railroad line into Dickinson county to highway M-95 near the city of Channing (west side of section 8, T43N R30W), southerly on highway M-95 to county road 426 (also known as the Turner truck trail, in section 8, T43N R30W), easterly on county road 426 past the city of Ralph to the city of Alfred (junction of county road 426 and Northland truck trail, in section 35, T43N R27W), southwesterly on Northland truck trail (through section 26, T42N R27W, also known as Camp 3 road) to Swan Peterson road (section 32, T42N R27W), southerly on Swan Peterson road to highway M69 (west side of section 8, T41N R27W), westerly on highway M-69 into the city of Foster city to county road 569 (also known as Waucedah road, in Foster city, or county road G-69, east side section 12, T41N R28W), southerly on county road 569 to highway US-2 at the city of Waucedah (south side of section 15, T39N R28W), westerly on highway US-2 to county road 573 near the city of Loretto (section 18, T39N R28W), northwesterly on county road 573 to Pine creek (section 3, T39N R29W), northwesterly along Pine creek to the Wisconsin electric highline (northeast quarter of section 13, T40N R30W), northerly along the Wisconsin electric highline to Carney lake road (east side of section 32, T41N R29W), westerly on Carney lake road to Merriman truck trail (east side of section 25, T41N R30W), westerly on Merriman truck trail to highway M-95 (section 27, T41N R30W), northerly on highway M-95 to Johnson road (north side of section 22, T41N R30W), westerly on Johnson road to county road 607 (near southeast corner of section 16, T41N R30W), northwesterly on county road 607 to Peavy falls road (section 16, T41N R30W), westerly on Peavy falls road in Dickinson county to Michigamme falls road in Iron county (west side of section 7, T41N R30W, no turn, road name change only), westerly and southerly on Michigamme falls road to the Menominee river (northwest T41N corner of section16. R31W), westerly/upstream and northwesterly/upstream along the Menominee river to the confluence of the Menominee and Brule rivers (section 16, T41N R31W), northwesterly/upstream along the Brule river (state line) into Iron county to the Michigan-Wisconsin state line in section 18, T42N R36W, northwesterly on the Michigan-Wisconsin state line to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 12, 2001, Eff. Sep 1, 2001; Am. 5, 2003, Eff. May 10, 2003; Am. 7, 2004, Eff. Jun 5, 2004; Am. 19, 2005, Eff. Feb 10, 2006."

"12.22a "Deer management unit 122 (5.1.41.4.1.29) Enumerated Domain Value: (Norway unit)" defined. Sec. 12.22a "Deer management unit 122 (Norway unit)" means that area of Menominee, Dickinson, and Iron counties bounded by a line beginning in Menominee county at the junction of highway US-2 and the Soo Line railroad (southeast quarter of section 2, T38N R27W), then southwesterly to the Menominee river (northeast quarter of section 20, T38N R28W), upstream northwesterly along the Menominee river near the Dickinson county line into Iron county to the confluence of the Menominee and Brule rivers (section 16, T41N R31W), northwesterly and westerly on Michigamme Falls road in Iron county to Peavy Falls road in Dickinson county (west side of section 7, T41N R30W, no turn, road name change only), easterly on Peavy Falls road to county road 607 (section 16, T41N R30W), southeasterly on county road 607 to Johnson road (near southeast corner of section 16, T41N R30W), westerly on Johnson road to highway M-95 (north side of section 22, T41N R30W), southerly on highway M-95 to Merriman truck trail (section 27, T41N R30W), easterly on Merriman truck trail to Carney Lake road (east side of section 25, T41N R30W), southeasterly on Carney Lake road to the Wisconsin Electric highline (east side of section 32, T41N R29W), southerly on the Wisconsin Electric highline to Pine creek (northeast quarter of section 13, T40N R30W), southeasterly along Pine creek to county road 573 (section 3, T39N R29W), southeasterly on county road 573 to highway US-2 near the city of Loretto (section 18, T39N R28W), easterly on highway US-2 through the city of Waucedah (south side of section 15, T39N R28W) continuing easterly on highway US-2 to Beaver Pete's road (northeast corner of section 22, T39N R28W, which runs on the north edge of sections 23 and 24, T39N R28W), easterly on Beaver Pete's road into Menominee county to the R3 road (also known as Johnson road, the north-south road in center of section 19, T39N R27W), southerly on R3 road to highway US- 2 (center of north edge of section 30, T39N R27W), easterly on highway US-2 to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 7, 2004, Eff. Jun 5, 2004."

(5.1.41.4.1.30) Enumerated_Domain_Value: "12.23 "Deer management unit 023 (Eaton county)" defined. Sec. 12.23 "Deer management unit 023 (Eaton county)" means all of Eaton county except those lands defined in section 12.33a. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 7, 2016, Eff. May 13, 2016."

(5.1.41.4.1.31) Enumerated_Domain_Value: "12.24 "Deer management unit 024 (Emmet county)" defined. Sec. 12.24 "Deer management unit 024 (Emmet county)" means all of Emmet county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.32) Enumerated_Domain_Value: "12.25 "Deer management unit 025 (Genesee county)" defined. Sec. 12.25 "Deer management unit 025 (Genesee county)" means all of Genesee county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.33) Enumerated_Domain_Value: "12.26 "Deer management unit 026 (Gladwin county)" defined. Sec. 12.26 "Deer management unit 026 (Gladwin county)" means all of Gladwin county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.34) Enumerated_Domain_Value: "12.27 "Deer management unit 027 (Watersmeet unit)" defined. Sec. 12.27 "Deer management unit 027 (Watersmeet unit)" means that area of Iron, Baraga, Houghton, Ontonagon, and Gogebic counties bounded by a line beginning in Iron county at the junction of the Michigan- Wisconsin state line (about 5½ miles northwest of the end of the Brule river, near center of section 33, T43N R37W) and USFS highway 16 (section 33, T43N R37W, also known as Iron county road 436 or federal forest highway 16), then northerly, crossing highway US-2, to USFS road 3270 (also known as USFS road 149, section 14, T44N R37W), easterly on USFS

road 3270 to county road 657 (section 8, T44N R35W, also known as Gibbs city road when near Gibbs city), southeasterly on county road 657 through Gibbs city to Ponozzo road (center western side of section 9, T44N R35W, also known as USFS 2130, or the stretch of USFS road 137 to USFS road 144 to USFS road 145), northerly on Ponozzo road to the Perch river (section 23, T46N R35W), northerly along the Perch river into Baraga county to highway M-28 (section 34, T48N R35W), westerly on highway M-28 through Houghton county into Ontonagon county to highway M-64 (near Merriweather, section 11, T48N R43W), southerly on highway M-64 past the western shore of lake Gogebic into Gogebic county to highway US-2, westerly on highway US-2 into the city of Wakefield to the Sunday lake street (section 16, T47N R45W), southerly on Sunday lake street to county road 519 (also known as Chaney lake road south of Wakefield, section 28, T47N R45W), southerly on county road 519 to the Michigan-Wisconsin state line (Sec 15, T45N R45W, Gogebic county), southeasterly along the Michigan-Wisconsin state line into Iron county to the point of beginning. History: Am. 5, 2003, Eff. May 10, 2003; Am. 19, 2005, Eff. Feb 10, 2006."

(5.1.41.4.1.35) Enumerated_Domain_Value: "12.27a "Deer management unit 127 (Ironwood unit)" defined. Sec. 12.27a "Deer management unit 127 (Ironwood unit)" means that area of Gogebic county bounded by a line beginning at the junction of the Michigan-Wisconsin state line (county line) and county road 519 (also known as Chaney lake road, section 15, T45N R45W), then northerly along county road 519 to Sunday lake street (south of the city of Wakefield, section 28, T47N R45W), northerly along Sunday lake street to highway M-28 in Wakefield, northeasterly on highway M-28 to county road 519, northerly on county road 519 to south boundary road near the Lake Superior shoreline, easterly on south boundary road to the Presque Isle river, northerly/downstream along the center of the Presque Isle river to its mouth on the Lake Superior shoreline, northwesterly into Lake Superior to the county/state line (Michigan/Wisconsin), southwesterly then southeasterly along the county/state line to the point of beginning. History: Am. 19, 2005, Eff. Feb 10, 2006."

(5.1.41.4.1.36) Enumerated_Domain_Value: "12.28 "Deer management unit 028 (Grand Traverse county)" defined. Sec. 12.28 "Deer management unit 028 (Grand Traverse county)" means all of Grand Traverse county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.37) Enumerated_Domain_Value: "12.29 "Deer management Unit 029 (Gratiot county)" defined. Sec. 12.29 "Deer management unit 029 (Gratiot county)" means all of Gratiot county. History: Am. 8, 2001, Eff. Jun. 1, 2001."

(5.1.41.4.1.38) Enumerated_Domain_Value: "12.30 "Deer management unit 030 (Hillsdale county)"defined. Sec. 12.30 "Deer management unit 030 (Hillsdale county)" means all of Hillsdale county. History: Am. 8, 2001, Eff. Jun 1, 2001."

"12.31 "Deer management unit 031 (5.1.41.4.1.39) Enumerated Domain Value: (Nissula unit)" defined. Sec. 12.31 "Deer management unit 131 (Nissula unit)" means that area of Ontonagon, Houghton, and Baraga counties bounded by a line beginning in Baraga county in the center of L'Anse bay (southern Keweenaw bay of Lake Superior), due west to the junction of highway US-41 and highway M-38 in the city of Baraga, south on US-41 to highway US-141/M-28 (section 6, T48N R33W), southwesterly and westerly on US-141/M-28 into Houghton county to highway M-45 in Ontonagon county near the city of Bruce Crossing, northerly on M-45 to highway M-26, northeasterly on M-26 to highway M-38, southeasterly and easterly on M-38 into Houghton county to Pike lake road in the village of Nisula, north on Pike lake road to the west branch of the Otter river (Sec 19, T51N R36W, Houghton county), easterly/downstream along the west branch of the Otter river to the confluence of the west branch and the north branch of the Otter river (section 1, T51N R35W), northeasterly/upstream on the north branch of the Otter river to Tapiola road (section 16, T53N R34W, may be signed as Otter lake road on the curve), north on Tapiola road to Chassell-Painesdale road (section 33, T54N R34W), north then west on Chassell-Painesdale road to highway M-26 near village of Painesdale, northeasterly on M-26 into city of Houghton to the Portage canal (at the Houghton-Hancock lift bridge), easterly then southerly along the center of the Portage canal into center of Portage lake, southerly down center of Portage lake to the Portage river, southeasterly/downstream along the center of Portage river to Lake Superior, southerly along the Lake Superior shoreline into Baraga county to the Keweenaw bay, southerly along the center of Keweenaw bay into L'Anse bay (southern Keweenaw bay), including all offshore islands along the Lake Superior, Keweenaw bay and L'Anse bay shorelines, to the point of beginning. History: Am. 19, 2005, Eff. Feb 10, 2006."

(5.1.41.4.1.40) Enumerated Domain Value: "12.31a "Deer management unit 131 (Twin lakes unit)" defined. Sec. 12.31a "Deer management unit 131 (Twin lakes unit)" means that area of Ontonagon and Houghton counties bounded by a line beginning in Ontonagon county at the mouth of the Ontonagon river in the city of Ontonagon, then southeasterly/upstream along the center of the Ontonagon river to highway M-64 in city of Ontonagon, northeasterly on M-64 to highway M-38 in city of Ontonagon, southeasterly then easterly on M-38 into Houghton county to Pike lake road in the village of Nisula, north on Pike lake road to the west branch of the Otter river (Sec 19, T51N R36W, Houghton county), easterly/downstream along the west branch of the Otter river to the confluence of the west branch and the north branch of the Otter river (section 1, T51N R35W), northeasterly/upstream on the north branch of the Otter river to Tapiola road (section 16, T53N R34W, may be signed as Otter lake road on the curve), north on Tapiola road to Chassell-Painesdale road (section 33, T54N R34W), north then west on Chassell- Painesdale road to highway M-26 near village of Painesdale, northeasterly on M-26 into city of Houghton to the Portage canal (at the Houghton-Hancock lift bridge), westerly then northerly along center of Portage canal to outlet into Lake Superior, southwesterly along the Lake Superior shoreline, including all offshore islands along the Lake Superior shoreline, into Ontonagon county to the point of beginning. History: Am. 19, 2005, Eff. Feb 10, 2006."

(5.1.41.4.1.41) Enumerated_Domain_Value: "12.32 "Deer management unit 032 (Huron county)"defined. Sec. 12.32 "Deer management unit 032 (Huron county)" means all of Huron county. History: Eff. Mar 31, 1989; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.42) Enumerated_Domain_Value: "12.32a "Deer management unit 332 (Greenleaf Unit; Huron - Sanilac - Tuscola)" defined. Sec. 12.32a "Deer management unit 332 (Greenleaf Unit; Huron - Sanilac - Tuscola)" means all of Huron, Sanilac and Tuscola counties. History: Am. 8, 2013, Eff. June 14, 2013."

(5.1.41.4.1.43) Enumerated_Domain_Value: "12.33 "Deer management unit 033 (Ingham county)" defined. Sec. 12.33 "Deer management unit 033 (Ingham county)" means all of Ingham county except those lands defined in section 12.33a. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 3 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001; Am. Interim Order 1, 2015, Eff. May 26, 2015; Am. 9, 2015, Eff. Aug. 14, 2015; Am. 7, 2016, Eff. May 13, 2016."

(5.1.41.4.1.44) Enumerated Domain_Value: "12.33a "Deer management unit 333 (Core CWD area)" defined. Sec. 12.33a "Deer management unit 333 (Core CWD area)" means those portions of Clinton, Eaton, Ingham, Ionia, and Shiawassee counties included in all of: Bath, Dewitt, Eagle, Olive, Riley, Watertown, Westphalia, and Victor townships in Clinton county; Delta, Oneida, and Roxand townships in Eaton county; Alaiedon, Delhi, Lansing, Meridian, Wheatfield and Williamstown townships in Ingham county; Danby and Portland townships in Ionia county; and Woodhull township in Shiawassee county. History: Am. Interim Order 1, 2015, Eff. May 26, 2015; Am. 9, 2015, Eff. Aug. 14, 2015; Am. 7, 2016, Eff. May 13, 2016; Am. 4, 2017, Eff. June 9, 2017."

(5.1.41.4.1.45) Enumerated_Domain_Value: "12.34 "Deer management unit 034 (Ionia county)" defined. Sec. 12.34 "Deer management unit 034 (Ionia county)" means all area of Ionia county except those lands defined in section 12.33a. History: Am. 8 Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001."

(5.1.41.4.1.46) Enumerated_Domain_Value: "12.35 "Deer management unit 035 (losco county)" defined. Sec. 12.35 "Deer management unit 035 (losco county)" means all of losco county. History: Am. 8 Eff. June 1, 2001: Am. 14, 2001, Eff. Sept. 15, 2001; Am. 4, 2017, Eff. June 9, 2017."

(5.1.41.4.1.47) Enumerated_Domain_Value: "12.36 "Deer management unit 036 (Amasa-Michigamme unit)" defined. Sec. 12.36 "Deer management unit 036 (Amasa-Michigamme unit)" means that area of Iron, Baraga, Marquette, and Dickinson counties bounded by a line beginning in Iron county in the village of Amasa, at the intersection of the Hemlock river to the Chicago, Milwaukee, St. Paul, and Pacific railroad line, southwesterly/upstream then westerly/upstream along the center of the Hemlock river to the Paint river (section 8, T44N R34W), westerly/upstream along the center of the Paint river to Ponozzo road (center western side of section 9, T44N R35W,

also known as USFS 2130, or the stretch of USFS road 137 to USFS road 144 to USFS road 145), northerly on Ponozzo road to the Perch river (section 23, T46N R35W), northerly along the Perch river into Baraga county to highway M-28 (section 34, T48N R35W), easterly on highway M-28 to highway US-41 (section 6, T48N R33W), easterly on highway US-41/M-28 into Marquette county to highway M-95 near the city of Champion (section 3, T47N R29W), southerly on highway M-95 into Dickinson county to Floodwood road (section 1, T44N R30W, near the Marquette-Dickinson county line), easterly on Floodwood road to Schwartz creek road (also known as McGregor creek road, section 31, T45N R28W, just over the Marquette-Dickinson county line into Marquette county), southeasterly on Schwartz creek road to Cleveland Homestead road (also known as Aimone road, section 10, T44N R28W), easterly on Cleveland Homestead road to county road 581 (section 25, T44N R27W), easterly on county road 581 to county road 438 in Marguette county, easterly on county road 438 to Ross grade road (section 28, T44N R26W), southerly on Ross grade road to county road SH near the city of Ross, southwesterly on county road SH to county road SG, southerly on county road SG to county road 426 near the city of Northland, westerly on county road 426 into Dickinson county past the city of Ralph to highway M-95 near the city of Channing, northerly on highway M-95 to the Chicago, Milwaukee, St. Paul, and Pacific railroad line (section 8, T43N R30W), easterly on said railroad line into the village of Amasa to the point of beginning. History: Am. 8 Eff. Jun 1, 2001; Am. 8, 2002, Eff. Jun 8, 2002; Am. 5, 2003, Eff. May 10, 2003; Am. 19, 2005, Eff. Feb 10, 2006."

(5.1.41.4.1.48) Enumerated_Domain_Value: "12.37 "Deer management unit 037 (Isabella county)"defined. Sec. 12.37 "Deer management unit 037 (Isabella county)" means all of Isabella county. History: Am. 8 Eff. Jun 1, 2001."

(5.1.41.4.1.49) Enumerated_Domain_Value: "12.38 "Deer management unit 038 (Jackson county)"defined. Sec. 12.38 "Deer management unit 038 (Jackson county)" means all of Jackson county. History: Am. 8 Eff. Jun 1, 2001."

(5.1.41.4.1.50) Enumerated_Domain_Value: "12.39 "Deer management unit 039 (Kalamazoo county)" defined. Sec. 12.39 "Deer management unit 039 (Kalamazoo county)" means all of Kalamazoo county. History: Am. 8 Eff. Jun 1, 2001."

(5.1.41.4.1.51) Enumerated_Domain_Value: "12.40 "Deer management unit 040 (Kalkaska county)" defined. Sec. 12.40 "Deer management unit 040 (Kalkaska county)" means all of Kalkaska county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.52) Enumerated_Domain_Value: "12.41 "Deer management unit 041 (Kent county)" defined. Sec. 12.41 "Deer management unit 041 (Kent county)" means all of Kent county. History: Am. 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001; Am. Interim Order 2, 2008, Eff. Aug 29, 2008; Am. Interim Order 5, 2008, Eff. Sep 15, 2008." (5.1.41.4.1.53) Enumerated_Domain_Value: "12.41a "Deer management unit 341 (Sparta Unit; Kent - Muskegon south - Ottawa)" defined. Sec. 12.41a "Deer management unit 341 (Sparta Unit; Kent - Muskegon south - Ottawa)" means all of Kent and Ottawa counties, and those portions of Muskegon county within Zone 3 (south of the Zone 2-3 divider line, defined in Section 1.4). History: Am. 8, 2013, Eff. June 14, 2013."

(5.1.41.4.1.54) Enumerated_Domain_Value: "12.42 "Deer management unit 042 (Keweenaw unit)" defined. Sec. 12.42 "Deer management unit 042 (Keweenaw unit)" means that area of Houghton and Keweenaw counties (known as the Keweenaw peninsula) that lies north and east of the Keweenaw waterway, also known as the Portage Canal, in northern Houghton county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.55) Enumerated_Domain_Value: "12.43 "Deer management unit 043 (Lake county)" defined. Sec. 12.43 "Deer management unit 043 (Lake county)" means all of Lake county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.56) Enumerated_Domain_Value: "12.44 "Deer management unit 044 (Lapeer county)"defined. Sec. 12.44 "Deer management unit 044 (Lapeer county)" means all of Lapeer county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.57) Enumerated_Domain_Value: "12.45 "Deer management unit 045 (Leelanau county)" defined. Sec. 12.45 "Deer management unit 045 (Leelanau county)" means all of Leelanau county, excluding that part defined in section 12.45a as deer management unit 145 and section 12.45b as deer management unit 245 in Lake

Michigan. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.58) Enumerated_Domain_Value: "12.45a "Deer management unit 145 (north Manitou island unit)" defined. Sec. 12.45a "Deer management unit 145 (north Manitou island unit)" means all of north Manitou island in Lake Michigan, Leelanau county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.59) Enumerated_Domain_Value: "12.45b "Deer management unit 245 (south Fox island unit)" defined. Sec. 12.45b "Deer management unit 245 (south Fox island unit)" means all of south Fox island in Lake Michigan, Leelanau county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.60) Enumerated_Domain_Value: "12.46 "Deer management unit 046 (Lenawee county)" defined. Sec. 12.46 "Deer management unit 046 (Lenawee county)" means all of Lenawee county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.61) Enumerated_Domain_Value: "12.47 "Deer management unit 047 (Livingston county)" defined. Sec. 12.47 "Deer management unit 047 (Livingston county)" means all of Livingston county. History: Am. 8, 2001, Eff. Jun 1, 2001."

Enumerated Domain Value: "12.48 "Deer management unit 048 (5.1.41.4.1.62) (Newberry unit)"defined. Sec. 12.48 "Deer management unit 048 (Newberry unit)" means that area of Chippewa, Luce, Schoolcraft, and Alger counties bounded by a line beginning at the international boundary due north of the mouth of the Waiska river in Lake Superior, near the city of Brimley in Chippewa county, then southerly upstream along the Waiska river to Lakeshore drive, westerly on Lakeshore drive to highway M221, southerly on highway M-221 to highway M-28, westerly on highway M-28 into Luce county and passing south of the city of Newberry to highway M-117, southerly on highway M-117 into Mackinac county to Sandtown road, westerly on Sandtown road to Curtis road in the city of Curtis, westerly on Curtis road (also known as H-42) into Schoolcraft county, westerly on county road 436 (no turn, road name change) to highway M-77, northerly on highway M-77 to highway M-28, westerly on M- 28 into Alger county to the Anna river (section 11, T46N R19W) in the city of Munising, northerly downstream along the Anna river into Lake Superior, northeasterly to the international boundary, easterly to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 5, 2003, Eff. May 10, 2003."

"12.49 "Deer management unit 349 (5.1.41.4.1.62) Enumerated Domain Value: (Engadine unit)" defined. Sec. 12.49 "Deer management unit 349 (Engadine unit)" means that area of Schoolcraft, Luce, Chippewa, and Mackinac counties bounded by a line beginning in Lake Michigan due south of the Lake Michigan shoreline at Seul Choix point in Schoolcraft county, then northerly from said shoreline to county road 431, northerly on county road 431 to county road 432, northwesterly on county road 432 to highway US-2 near the city of Gulliver, northeasterly on highway US-2 to highway M-77, northerly on highway M77 to county road 436 (also known as H-42 or Curtis road), easterly on county road 436 into Mackinac county, easterly on Curtis road to Sandtown road in the town of Curtis, easterly on Sandtown road to highway M-117, northerly on M-117 to highway M-28, easterly on M-28 through Luce county to Borgstrom road, southerly on Borgstrom road into Mackinac county and passing the west side of town of Garnet, continuing southerly on Borgstrom road to highway US-2, continue due south from intersection of Borgstrom road and US-2 to the lakeshore of Lake Michigan (short distance along the east-side line of section 29, T43N R8W), due south into Lake Michigan then running along the Lake Michigan shoreline including all offshore islands in those counties to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 5, 2003, Eff. May 10, 2003; Am. 6, 2009, Eff. May 7, 2009."

(5.1.41.4.1.63) Enumerated_Domain_Value: "12.49a "Deer management unit 149 (Bois Blanc unit)" defined. Sec. 12.49a "Deer management unit 149 (Bois Blanc unit)" means all of Bois Blanc island and Round island in Lake Huron, Mackinac county. History: Am. 8, 2001, Eff. Jun 1, 2001. 12.49b "Deer management unit 249 (Trout lake unit)" defined. Sec. 12.49b "Deer management unit 249 (Trout lake unit)" means that area of Luce, Chippewa, and Mackinac counties bounded by a line beginning in Lake Michigan due south from intersection of Borgstrom road and US-2 just north of the Lake Michigan shoreline, then due north (short distance along the east-side line of section 29, T43N R8W) to said intersection northerly along Borgstrom road to highway M-28 in Luce county, easterly on M- 28 into Chippewa county to Tilson road (east side of section 19, T46N R02W) located southwest of town of Brimley, southerly on Tilson road to the

combined highway M-48/Mackinac trail (no turn, road name change) at the town of Rudyard, southerly on highway M48/Mackinac trail to the split of highway M-48 and Mackinac trail, easterly on highway M-48 to highway I75, southerly on I-75 into Mackinac county to highway M-134, easterly on M-134 to the Pine river, downstream along the center of the Pine river to its mouth in Lake Huron (section 10, T42N R03W), due south into Lake Huron then southerly in Lake Huron along the shore, including any offshore islands in those counties south of the defined shoreline, to the center of the straits of Mackinac into Lake Michigan, then northerly and easterly along the shore, including any offshore islands south of the defined shoreline, to the point of beginning while excluding those portions defined in section 12.49a as deer management unit 149. History: Am. 6, 2009, Eff. May 7, 2009."

(5.1.41.4.1.64) Enumerated_Domain_Value: "12.50 "Deer management unit 050 (Macomb county)" defined. Sec. 12.50 "Deer management unit 050 (Macomb county)" means all of Macomb county. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001."

(5.1.41.4.1.65) Enumerated_Domain_Value: "12.51 "Deer management unit 051 (Manistee county)" defined. Sec. 12.51 "Deer management unit 051 (Manistee county)" means all of Manistee county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.66) Enumerated_Domain_Value: "12.52a "Deer management unit 152 (Gwinn unit)" defined. Sec. 12.52a "Deer management unit 152 (Gwinn unit)" means that area of Marquette and Dickinson counties bounded by a line beginning at the junction of county road 426 and county road SI in Watson (Marguette county), then northeasterly on county road SI to the northwest corner of section 6, T42N R24W, easterly on the north section lines of sections 6 and 5, T42N R24W, to the Escanaba river, northwesterly along the Escanaba river to the middle branch of the Escanaba river, northwesterly along the middle branch of the Escanaba river to county road 478. westerly on county road 478 to county road 601, southwesterly on county road 601 through the city of Republic to highway M-95, southerly on highway M-95 into Dickinson county to Floodwood road, easterly on Floodwood road to McGregor creek road (section 10, T44N R28W), southeasterly on McGregor creek road to Cleveland homestead road (section 25, T44N R28W), easterly on Cleveland homestead road to county road 581, northerly and easterly on county road 581 to county road 438 in Marguette county, easterly on county road 438 to Ross grade road, southerly on Ross grade road to county road SH, southwesterly on county road SH to county road SG, southerly on county road SG to county road 426, southeasterly on county road 426 to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 8, 2002, Eff. Jun 8, 2002."

(5.1.41.4.1.67) Enumerated Domain Value: "12.52b "Deer management unit 252 (Rock unit)" defined. Sec. 12.52b "Deer management unit 252 (Rock unit)" means that area of Marquette, Delta, and Alger counties bounded by a line beginning at the junction of highway US-41 and county road 432, then southwesterly on county road 432 to county road 529, westerly on county road 529 to county road H-59, westerly on county road H-59 to county road DA in Marquette county, westerly on county road DA to the north line of section 5, T42N R24W, to the Escanaba river, northerly along the Escanaba river to highway US-41, southeasterly on highway US-41 to King road, southeasterly on King road to county road H-44 (Traunik Kiva road), easterly on county road H-01 to highway M-67, westerly on highway M-67 to highway US-41, southerly on highway US-41, southerly on highway US-41 to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.68) Enumerated_Domain_Value: "12.53 "Deer management unit 053 (Mason county)" defined. Sec. 12.53 "Deer management unit 053 (Mason county)" means all of Mason county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.69) Enumerated_Domain_Value: "12.54 "Deer management unit 054 (Mecosta county)" defined. Sec. 12.54 "Deer management unit 054 (Mecosta county)" means all of Mecosta county. History: Eff. Mar 31, 1989; Am. 4, 1990, Eff. Sep 1, 1990; Am. 6, 1998, Eff. May 15, 1998; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.70) Enumerated_Domain_Value: "12.54a "Deer management unit 354 (Lakeview unit; Mecosta - Montcalm)" defined. Sec. 12.54a "Deer management unit 354 (Lakeview unit; Mecosta - Montcalm)" means all of Mecosta and Montcalm counties except those lands defined in section 12.54b. History: Am. 8, 2013, Eff. June 14, 2013;

Am. 4, 2017, Eff. June 9, 2017."

(5.1.41.4.1.71) Enumerated_Domain_Value: "12.54b "Deer management unit 359 (Core CWD area)" defined. Sec. 12.54b "Core CWD Area" means those portions of Mecosta and Montcalm counties included in all of: Austin, Aetna, Deerfield, Hinton, Mecosta, and Morton townships in Mecosta county and Cato, Reynolds, and Winfield townships in Montcalm county. History: Am. 4, 2017, Eff. June 9, 2017."

Enumerated_Domain_Value: "12.55 "Deer management unit 055 (5.1.41.4.1.72) (Menominee unit)"defined. Sec. 12.55 "Deer management unit 055 (Menominee unit)" means that area of Menominee and Delta counties bounded by a line beginning near the city of Faithorn in Menominee county on the Michigan/Wisconsin state line at the junction of the Menominee river and the Wisconsin Central LTD railroad (previously known as the Soo Line railroad, in section 20, T38N R28W), easterly on the railroad past highway US-2 near the city of Hermansville into Delta county to county road 535 (northeast corner of section 30, T39N R24W) near the city of Schaffer, northerly on county road 535 to county road 414 in the city of Schaffer, northerly and easterly on county road 414 to county road 525, northerly on county road 525 to county road 416 in the city of Flatrock (northeast corner of section 31, T40N R23W, no direction change), northerly on county road 416 to county road 426 near the city of Cornell, southeasterly on county road 426 to highway US-2/US-41, northerly on highway US-2/US-41 to the Escanaba river, southeasterly along the Escanaba river to the Little Bay de Noc shoreline, southerly along the Little Bay de Noc shoreline which becomes the Green bay shoreline of Lake Michigan, southwesterly along the Green bay shoreline to the mouth of the Menominee river south of the city of Menominee, including any islands adjacent to the shoreline between the Escanaba and Menominee rivers, upstream along the Menominee river, which constitutes the Michigan-Wisconsin state line, to the point of beginning. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989, Am. 12, 1996, Eff. Sep 1, 1996; Am. 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001; Am. 12, 2001, Eff. Sep 1, 2001; Am. 8, 2002, Eff. Jun 8, 2002; Am. 5, 2003, Eff. May 10, 2003." (5.1.41.4.1.73) Enumerated_Domain_Value: "12.55a "Deer management unit 155 (Gladstone unit)" defined. Sec. 12.55a "Deer management unit 155 (Gladstone unit)" means that area of Delta and Marguette counties bounded by a line beginning at the mouth of the Rapid river near the city of Rapid River in Delta county, then northerly upstream to highway US-2, westerly on highway US-2 toward the city of Rapid River to highway US-41, northerly on highway US-41 to county road 432, westerly on county road 432 to county road 529 at the city of Rock, westerly on county road 529 (H-59) into Marguette county to west Maple Ridge road (also known as county road DA), westerly on west Maple Ridge road to the north section line of sections 5 and 6. T42N R24W. westerly on the north section line of sections 5 and 6, T42N R24W, to county road SI, southwesterly on county road SI to county road 426, southeasterly on county road 426 into Delta county to highway US-2/US-41, northerly on highway US-2/US-41 to the Escanaba river, southeasterly down the center of the Escanaba river into Lake Michigan, northeasterly along the Lake Michigan shoreline, including any Delta county islands between the Escanaba and Rapid river mouths, to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 8, 2002, Eff. Jun 8, 2002." (5.1.41.4.1.74) Enumerated_Domain_Value: "12.55b "Deer management unit 255

(5.1.41.4.1.74) Enumerated_Domain_Value: "12.55b "Deer management unit 255 (LaBranche unit)" defined. Sec. 12.55b "Deer management unit 255 (LaBranche unit)" means that area of Menominee, Delta, Marquette, and Dickinson counties bounded by a line beginning near the city of Hermansville in Menominee county at the junction of highway US-2 and the Wisconsin Central LTD railroad (previously known as the Soo Line railroad), then easterly along the railroad into Delta county to county road 535 (northeast corner of section 30, T39N R24W) near the city of Schaffer, northerly on county road 535 to county road 414 in the city of Schaffer, northerly and easterly on county road 414 to county road 525, northerly on county road 525 to county road 416 in the city of Flatrock (northeast corner of section 31, T40N R23W, no direction change), northerly on county road 416 to county road 426 near the city of Cornell, northwesterly on county road 426 into Marquette county through the city of Arnold, continue westerly on county road 426 into Dickinson county to Northland truck trail in the city of Alfred (section 35, T43N R27W), southwesterly on Northland truck trail (through section 28, T42N R27W, also known as Camp 3 road) to Swan Peterson road (section 32, T42N R27W), southerly on Swan Peterson road to highway M-69, westerly on highway M-69

into the city of Foster city to county road 569 (also known as Waucedah road, in Foster city, or county road G-69), southerly on county road 569 to Beaver Pete's road which runs on the north edge of sections 23 and 24, T39N R28W, easterly on Beaver Pete's road into Menominee county to the north-south road in section 19, T39N R27W, southerly on that road to highway US-2, southeasterly on highway US-2 to the point of beginning. History: Am. 5, 2003, Eff. May 10, 2003."

(5.1.41.4.1.75) Enumerated_Domain_Value: "12.56 "Deer management unit 056 (Midland county)" defined. Sec. 12.56 "Deer management unit 056 (Midland county)" means all of Midland county. History: Eff. Mar 31, 1989; Am. 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.76) Enumerated_Domain_Value: "12.57 "Deer management unit 057 (Missaukee county)"defined. Sec. 12.57 "Deer management unit 057 (Missaukee county)" means all of Missaukee county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 3, 1992, Eff. Sep 1, 1992; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.77) Enumerated_Domain_Value: "12.58 "Deer management unit 058 (Monroe county)"defined. Sec. 12.58 "Deer management unit 058 (Monroe county)" means all of Monroe county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.78) Enumerated_Domain_Value: "12.59 "Deer management unit 059 (Montcalm county)" defined. Sec. 12.59 "Deer management unit 059 (Montcalm county)" means all of Montcalm county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 6, 1991, Eff. Sep 1, 1991; Am. 3, 1992, Eff. Sep 1, 1992; Am. 4, 1993, Eff. Sep 1, 1993; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.79) Enumerated_Domain_Value: "12.60 "Deer management unit 060 (Montmorency county)" defined. Sec. 12.60 "Deer management unit 060 (Montmorency county)" means all of Montmorency county, excluding that part defined in section 12.452 as deer management unit 452. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 6, 1991, Eff. Sep 1, 1991; Am. 3, 1992, Eff. Sep 1, 1992; Am. 4, 1993, Eff. Sep 1, 1993; Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001."

(5.1.41.4.1.80) Enumerated_Domain_Value: "12.61 "Deer management unit 061 (Muskegon county)" defined. Sec. 12.61 "Deer management unit 061 (Muskegon county)" means all of Muskegon county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 4, 1993, Eff. Sep 1, 1993; Am. 12, 1996, Eff. Sep 1, 1996; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.81) Enumerated_Domain_Value: "12.61a "Deer management unit 361 (Fremont Unit; Muskegon north - Newaygo - Oceana)" defined. Sec. 12.61a "Deer management unit 361 (Fremont Unit; Muskegon north - Newaygo - Oceana)" means all of Oceana and Newaygo counties, and those portions of Muskegon county within Zone 2 (north of the Zone 2-3 divider line, defined in Section 1.4). History: Am. 8, 2013, Eff. Jun 14, 2013."

(5.1.41.4.1.82) Enumerated_Domain_Value: "12.62 "Deer management unit 162 (south Newaygo county)" defined. Sec. 12.62 "Deer management unit 162 (south Newaygo county)" means all of Newaygo county south of highway M-20. History: Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001; Am. 6, 2009, Eff. May 7, 2009."

(5.1.41.4.1.83) Enumerated_Domain_Value: "12.62a "Deer management unit 262 (north Newaygo county)" defined. Sec. 12.62a "Deer management unit 262 (north Newaygo county)" means all of Newaygo county north of highway M-20. History: Am. 6, 2009, Eff. May 7, 2009."

(5.1.41.4.1.84) Enumerated_Domain_Value: "12.62b "Deer management unit 062 (Newaygo county)" defined. Sec. 12.62b. "Deer management unit 062 (Newaygo county)" means all of Newaygo county. History: Am. 9, 2018, Eff. June 15, 2018."

(5.1.41.4.1.85) Enumerated_Domain_Value: "12.63 "Deer management unit 063 (Oakland county)" defined. Sec. 12.63 "Deer management unit 063 (Oakland county)" means all of Oakland county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989, Am. 12, 1996, Eff. Sep 1, 1996; Am, 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.86) Enumerated_Domain_Value: "12.64 "Deer management unit 064 (Oceana county)" defined. Sec. 12.64 "Deer management unit 064 (Oceana county)" means all of Oceana county. History: Eff. Mar 31, 1989; Am. 4, 1990, Eff. Sep 1, 1990; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.87) Enumerated_Domain_Value: "12.65 "Deer management unit 065 (Ogemaw county)"defined. Sec. 12.65 "Deer management unit 065 (Ogemaw county)" means all of Ogemaw county. History: Am. 8, 2001, Eff. Jun 1, 2001."

Enumerated Domain Value: "12.66 "Deer management unit 066 (5.1.41.4.1.88) (Ontonagon unit)" defined. Sec. 12.66 "Deer management unit 066 (Ontonagon unit)" means that area of Ontonagon and Gogebic counties bounded by a line beginning in Ontonagon county at the mouth of the Ontonagon river in the city of Ontonagon, then southeasterly/ upstream along the center of the Ontonagon river to highway M-64 in city of Ontonagon, northeasterly on M-64 to highway M-38 in city of Ontonagon, southeasterly on M-38 to highway M-26 near village of Greenland, southwesterly on M-26 to highway M-45, southerly on highway M-45 to highway M-28 near the city of Bruce Crossing, westerly on highway M-28 to highway M-64 (near Merriweather, section 11, T48N R43W), southerly on highway M-64 into Gogebic county past the western shore of lake Gogebic to highway US-2, westerly on highway US-2 into city of Wakefield to county road 519, northerly on county road 519 to South boundary road near the Lake Superior shoreline, easterly on South boundary road to the Presque Isle river, northerly/downstream along the center of the Presque Isle river to its mouth on the Lake Superior shoreline, northeasterly along the Lake Superior shoreline, including all offshore islands along the Lake Superior shoreline, into Ontonagon county to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 19, 2005, Eff. Feb 10, 2006."

(5.1.41.4.1.89) Enumerated_Domain_Value: "12.67 "Deer management unit 067 (Osceola county)"defined. Sec. 12.67 "Deer management unit 067 (Osceola county)" means all of Osceola county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.90) Enumerated_Domain_Value: "12.68 "Deer management unit 068 (Oscoda county)" defined. Sec. 12.68 "Deer management unit 068 (Oscoda county)" means all of Oscoda county, excluding that part defined in section 12.452 as deer management unit 452. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001."

(5.1.41.4.1.91) Enumerated_Domain_Value: "12.69 "Deer management unit 069 (Otsego county)"defined. Sec. 12.69 "Deer management unit 069 (Otsego county)" means all of Otsego county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.92) Enumerated_Domain_Value: "12.70 "Deer management unit 070 (Ottawa county)" defined. Sec. 12.70 "Deer management unit 070 (Ottawa county)" means all of Ottawa county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.93) Enumerated_Domain_Value: "12.71 "Deer management unit 071 (Presque Isle county)" defined. Sec. 12.71 "Deer management unit 071 (Presque Isle county)" means all of Presque county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.94) Enumerated_Domain_Value: "12.72 "Deer management unit 072 (Roscommon county)" defined. Sec. 12.72 "Deer management unit 072 (Roscommon county)" means all of Roscommon county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.95) Enumerated_Domain_Value: "12.73 "Deer management unit 073 (Saginaw county)" defined. Sec. 12.73 "Deer management unit 073 (Saginaw county)" means all of Saginaw county, excluding that part defined in section 12.73b as deer management unit 273. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 8, 2013, Eff. Jun 14, 2013."

(5.1.41.4.1.96) Enumerated_Domain_Value: "12.73b "Deer management unit 273 (Shiawassee deer management)" defined. Sec. 12.73b "Deer management unit 273 (Shiawassee deer management)" means the posted lands of the Shiawassee river state game area and the Shiawassee national wildlife refuge. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.97) Enumerated_Domain_Value: "12.74 "Deer management unit 074 (St. Clair county)" defined. Sec. 12.74 "Deer management unit 074 (St. Clair county)" means all of St. Clair county bounded by a line beginning at the split of the north and south channels of the St. Clair river, then south-southwesterly along the south channel of the St. Clair river to Lake St. Clair, northwesterly to the end of the middle channel of the St. Clair river, northwesterly to the southwest end of Strawberry island, north-northeasterly along the far west points of Strawberry, Middle, and North islands to the north channel of the St. Clair river, easterly along the north channel of the St. Clair river to the point of beginning, excluding that part defined in section 12.74a as deer management unit 174. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.98) Enumerated_Domain_Value: "12.74a "Deer management unit 174 (St. Clair flats)" defined. Sec. 12.74a "Deer management unit 174 (St. Clair flats)" means that area of St Clair county bounded by a line beginning at the split of the north and south channels of the St. Clair river, then south-southwesterly along the south channel of the St. Clair river to Lake St. Clair, northwesterly to the end of the middle channel of the St. Clair river, northwesterly to the southwest end of Strawberry island, north-northeasterly along the far west points of Strawberry, Middle, and North islands to the north channel of the St. Clair river, easterly along the north channel of the St. Clair river to the southwest end of Strawberry islands to the north channel of the St. Clair river, easterly along the north channel of the St. Clair river to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.99) Enumerated_Domain_Value: "12.75 "Deer management unit 075 (St. Joseph county)" defined. Sec. 12.75 "Deer management unit 075 (St. Joseph county)" means all of St. Joseph county. History: Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.100) Enumerated_Domain_Value: "12.76 "Deer management unit 076(Sanilac county)" defined. Sec. 12.76 "Deer management unit 076 (Sanilac county)" means all of Sanilac county. History: Eff. Mar 31, 1989; Am. 4, 1993, Eff. Sep 1, 1993; Am. 6, 1998, Eff. May 15, 1998; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.101) Enumerated_Domain_Value: "12.78 "Deer management unit 078 (Shiawassee county)" defined. Sec. 12.78 "Deer management unit 078 (Shiawassee county)" means all of Shiawassee county except those lands defined in section 12.33a. History: Eff. Mar 31, 1989; Am. 8, 2001, Eff. Jun 1, 2001; Am. Interim Order 1, 2015, Eff. May 26, 2015, Am. 9, 2015, Eff. Aug. 14, 2015; Am. 7, 2016, Eff. May 13, 2016."

(5.1.41.4.1.102) Enumerated_Domain_Value: "12.79 "Deer management unit 079 (Tuscola county)"defined. Sec. 12.79 "Deer management unit 079 (Tuscola county)" means all of Tuscola county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.103) Enumerated_Domain_Value: "12.80 "Deer management unit 080 (Van Buren county)" defined. Sec. 12.80 "Deer management unit 080 (Van Buren county)" means all of Van Buren county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.104) Enumerated_Domain_Value: "12.81 "Deer management unit 081 (Washtenaw county)" defined. Sec. 12.81 "Deer management unit 081 (Washtenaw county)" means all of Washtenaw county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.105) Enumerated_Domain_Value: "12.82 "Deer management unit 082 (Wayne county)"defined. Sec. 12.82 "Deer management unit 082 (Wayne county)" means all of Wayne county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.106) Enumerated_Domain_Value: "12.83 "Deer management unit 083 (Wexford county)" defined. Sec. 12.83 "Deer management unit 083 (Wexford county)" means all of Wexford county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001."

(5.1.41.4.1.107) Enumerated Domain Value: "12.452 "Deer management unit 452 (TB core area)" defined. Sec. 12.452 "Deer management unit 452 (TB core area)" means all of Montmorency, Alpena, Alcona, and Oscoda counties bounded by a line beginning at the junction of highway M-32 and highway M-33 in eastern Montmorency county, then easterly on highway M-32 past the city of Hillman and crossing the Montmorency-Alpena county line to King Settlement road near the city of Paxton, southerly on King Settlement road to Henry road, continue southerly on King Settlement road to Werth road, easterly on Werth road to Hubbard Lake road, southerly on Hubbard Lake road to Hubbert road at the Alpena-Alcona county line, easterly on Hubbert road to the continuation of Hubbard Lake road (also known as Scout road), southerly on Hubbard Lake road to Spruce road, continue southerly on Hubbard Lake road to highway M-72, westerly on highway M-72 past the city of Curran and crossing the Alcona-Oscoda county line to highway M-72 and highway M-33 near the city of Fairview, northerly on highway M-33 crossing the Oscoda-Montmorency county line to the point of beginning. History: Am. 12, 1996, Eff. Sep 1, 1996; Am. 3, 1997, Eff. Jun 1, 1997; Am. 6, 1998, Eff. May 15, 1998; Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001; Am. 7, 2016, Eff. May 13, 2016."

(5.1.41.4.1.108) Enumerated_Domain_Value: "12.483 "Deer management unit 351 (Mideast Upper Peninsula)" defined. Sec. 12.483 "Deer management unit 351 (Mideast

Upper Peninsula) means all of the following: deer management unit 021 as defined in section 12.21, deer management unit 349 as defined in section 12.49, deer management unit 249 as defined in section 12.49b, deer management unit 149 as defined in section 12.49a, deer management unit 017 as defined in section 12.17, and deer management unit 117 as defined in section 12.17a. History: Am. 8, 2020; Eff. Feb. 12, 2021."

(5.1.41.4.1.109) Enumerated_Domain_Value: "12.484 Deer management unit 352 (Midwest Upper Peninsula)" defined. Sec. 12.484 "Deer management unit 352 (Midwest Upper Peninsula) means all of the following: deer management unit 027 as defined in section 12.27, deer management unit 036 as defined in section 12.36, deer management unit 152 as defined in section 12.52a, and deer management unit 252 as defined in section 12.52b. History: Am. 8, 2020; Eff. Feb. 12, 2021."

(5.1.41.4.1.110) Enumerated_Domain_Value: "12.486 "Deer management unit 486 (southern Lower Peninsula multi-county)" defined. Sec. 12.486 "Deer management unit 486 (southern Lower Peninsula multi-county)" means all of Allegan, Barry, Bay, Berrien, Branch, Calhoun, Cass, Clinton, Eaton, Genesee, Gratiot, Hillsdale, Huron, Ingham, Ionia, Isabella, Jackson, Kalamazoo, Kent, Lapeer, Lenawee, Livingston, Mecosta, Midland, Montcalm, Muskegon, Oakland, Ottawa, Saginaw, St. Joseph, Sanilac, Shiawassee, Tuscola, Van Buren, and Washtenaw counties, plus deer management unit 162 (south Newaygo county). History: Am. 6, 2009, Eff. May 7, 2009; Am. 7, 2011, Eff. Jun 10, 2011."

(5.1.41.4.1.111) Enumerated_Domain_Value: "12.487 "Deer management unit 487 (northeast Lower Peninsula multi-county)" defined. Sec. 12.487 "Deer management unit 487 (northeast Lower Peninsula multi-county) means all of Alcona, Alpena, Iosco, Montmorency, Oscoda, and Presque Isle counties. History: Am. 6, 2009, Eff. May 7, 2009."

(5.1.41.4.1.112) Enumerated_Domain_Value: "Sec. 12.498 "Core CWD Area" means the following: (1) All of Ionia, Kent, Mecosta, Montcalm, and Newaygo counties. History: Am. 4, 2017, Eff. June 9, 2017; Am. Interim Order 1 of 2017, Eff. Oct. 4, 2017; Am. 12, 2018, Eff. Aug. 10, 2018."

(5.1.41.4.1.113) Enumerated_Domain_Value: "12.499 "Urban deer management zone (Macomb, Oakland, and Wayne counties)" defined. Sec. 12.499 "Urban deer management zone" means all of Macomb, Oakland, and Wayne counties. History: Am. 4, 2017, Eff. June 9, 2017."

(5.1.41.4.1.114) Enumerated_Domain_Value: "12.901 "CWD management zone"

defined. Sec. 12.901 "CWD management zone" means all of Barry, Calhoun, Clinton, Eaton, Gratiot, Hillsdale, Ingham, Ionia, Isabella, Jackson, Kent, Lenawee, Mecosta, Midland, Montcalm, Muskegon, Newaygo, Ottawa, and Shiawassee counties. History: Am. Interim Order 1, 2015, Eff. May 26, 2015, Am. 9, 2015, Eff. Aug. 14, 2015; Am. 7, 2016, Eff. May 13, 2016; Am. 12, 2018, Eff. Aug. 10, 2018; Am. 7, 2019, Eff. July 12, 2019."

(5.1.41.4.1.115) Enumerated_Domain_Value: "12.902 "Core CWD Surveillance

Area" defined. Sec. 12.902 "Core CWD Surveillance Area" means that area of Delta, Dickinson, and Menominee counties bounded by a line beginning in Dickinson county at the junction of the centerline of highway US-141 and highway US-2 (shared road segment) with the centerline of the Menominee river (a coincident line with the county boundary and the state boundary with Wisconsin) located northwest of the city of Iron Mountain, then westerly (about 1 mile) along the centerline on US-141/US-2 to the intersection with state highway M-95, northerly on M-95 to highway M-69 near the town of Randville, southeasterly on M-69 into Delta county to highway US-41 and highway US-2 (shared road segment) located west of the town of Bark River, southwesterly and westerly on US-41/US-2 into Menominee county where US-41 and US-2 diverge (US-41 heads southerly and US-2 heads westerly) near the town of Powers, continue on US-41 southerly into the town of Carney to county road G-18, westerly on G-18 to the junction of G-18 with the centerline of the Menominee river and the county/state boundary, northerly and northwesterly upstream along the Menominee river and county/state boundary, into Dickinson county along that river-centerline/county/state boundary to the point of beginning. History: Am. 7, 2019, Eff. July 12, 2019."

(5.1.41.4.1.2) Enumerated_Domain_Value_Definition: WCO official legal definition text block, as per Section 5.1.41.2.

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(5.1.41.4.1.3) Enumerated_Domain_Value_Definition_Source: MDNR-WLD; see Sections 1.9 and 6.1 for source.

(5.1.41.4.2) Range_Domain:

(5.1.41.4.2.1) Range_Domain_Minimum: (not applicable).

(5.1.41.4.2.2) Range_Domain_Maximum: (not applicable).

(5.1.41.4.3) Codeset_Domain:

(5.1.41.4.2.1) Codeset_Name: (not applicable).

(5.1.41.4.2.2) Codeset_Source: (not applicable).

(5.1.41.4.4) Unrepresentable_Domain: (not applicable).

(5.1.41.5) Attribute_Units_of_Measure: (not applicable).

(5.1.41.6) Attribute_Measurement_Resolution: (not applicable).

(5.1.41.7) Beginning_Date_of_Attribute_Values: publication date.

(5.1.41.8) Ending_Date_of_Attribute_Values: last update of the dataset.

(5.1.41.9) Attribute_Value_Accuracy_Information: see Sec. 2.3 Completeness_Report.

(5.1.41.10) Attribute_Measurement_Frequency: none planned.

(5.2) Overview_Description:

(5.2.1) Entity_and_Attribute_Overview: (this section under development).

(5.2.2) Entity_and_Attribute_Detail_Citation: (this section under development).

Section 6 - Distribution Information"

(6.) Distribution_Information:

(6.1) Distributor:

(6.1.1) Contact_Person_Primary:

(6.1.1.1) Contact_Person: Mapping and Geotechnology Program Specialist,

currently filled by M.Strong ; however, it's recommended check the contact position and contact organization, listed below in Sec. 6.1.3, in case details are different.

(6.1.1.2) Contact_Organization: State of Michigan, Department of Natural

Resources (MDNR), Wildlife Division (WLD).

(6.1.2) Contact_Organization_Primary: State of Michigan, Department of Natural Resources (MDNR), Wildlife Division (WLD).

- (6.1.3) Contact_Position: Mapping and Geotechnology Program Specialist (currently M. Strong).
- (6.1.4) Contact_Address:

(6.1.4.1) Address_Type: mailing address.

(6.1.4.2) Address: PO Box 30444 .

- (6.1.4.3) City: Lansing .
- (6.1.4.4) State_or_Province: MI.
- (6.1.4.5) Postal_Code: 48909-7944.
- (6.1.4.6) Country: United States of America.

(6.1.5) Contact_Voice_Telephone: 1-517-284-WILD (1-517-284-9453).

(6.1.5b) Contact_Voice_Telephone (direct line): 1-517-256-5397 . (6.1.6)

Contact_TDD/TTY_Telephone: 711 (Michigan Relay Center).

- (6.1.7) Contact_Facsimile_Telephone: 1-517-241-0015.
- *(6.1.8)* Contact_Electronic_Mail_Address: <u>DNR-Wildlife@michigan.gov</u>; Those interested can also see the MDNR website online at <u>http://www.michigan.gov/dnr</u> for more information and to contact Division using additional, current electronic methods.
- (6.1.8b) Contact_Electronic_Mail_Address (person direct): strongm@michigan,gov .
- (6.1.9) Contact_Hours_of_Service: recommended: GMT 12:00 noon to 8:00 pm, or United

States of America's Eastern Standard Time 9:00 am to 5:00 pm.

- (6.1.10) Contact_Instructions: No significant instructions, other than:
 - (i.) please have patience as may take a couple days to reply back to questions, depending on those methods used (email, etc.) to contact our organization;
 - (ii.) please refer to this data set by its proper title if you can (see "Section 1" information) or a complete description, along with any other relevant details like publication date, etc., in any sent message or with questions you send.
- (6.2) Resource_Description: (use the information from "Section 1", in Sec. 1.1.4 to identify these data).
- (6.3) Distribution_Liability: The user is responsible for reading and comprehending all portions of these

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metadata before using any of the companion data. Any use of these data signifies a user's: (a.) understanding of all stated warnings, disclaimers, and notices; and (b.) agreement to comply with all stated constraints in these metadata/data. The Michigan Department of Natural Resources (MDNR) provides these metadata and companion data without any express or implied warranties, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose. The State of Michigan, the MDNR nor any employees shall not be held liable for improper or incorrect use of these data, and these data are not intended for legal use. The MDNR reserves all rights, copyrights, as appropriate as the steward for these data for the public trust; these data may not be repackaged or sold. The information contained in these data may have changed since the dataset was last updated. Newer versions of these data may be available on an irregular schedule and the dataset may be updated without notice; however that statement does not mean these metadata or data will ever be changed again (rather that the possibility is always reserved). For more information, communicate with the contact person listed in this metadata file for these data. Do not pass these data to other users; instead, direct other users seeking these metadata or companion data to the contact person listed in this metadata file for these data.

There are other warnings, disclaimers and notifications prepared for possible end users of these metadata and companion data – make sure you read all the provided information, to avoid causing yourself problems related to these data. Some statements may be repeated, as they are appropriate content for blocks in a specific metadata format being used to document the project information and the companion data set. Metadata formats help create similar notice blocks for communicating information to potential end users, and these metadata have been written for both those inexperienced with technical documentation and those familiar with the standard format used for these metadata or data packaging. Make sure you read Section 1.7 Access Constraints and Section 1.8 Use Constraints for directly relevant details impacting users.

(6.4) Standard_Order_Process:

- (6.4.1) Non-Digital_Form: (not applicable, this data set is only available as digital data set).
- (6.4.2) Digital_Form:
 - (6.4.2.1) Digital_Transfer_Information:
 - (6.4.2.1.1) Format_Name: ZIP or compatible Windows ZIP file format, used before and detailed in this section but details are under flux, but before used ZIP (WinZIP) file format yet now planning for a DNR OpenDataPortal (ESRI format), off website URL at "<u>http://www.michigan.gov/dnrmaps</u>" and will be detailed later in an update of this Section 6.4.2.1, etc. Alternately, 7Zip may be used.
 - (6.4.2.1.2) Format_Version_Number: 10.0 (10.0.6685) or later / newer.
 - (6.4.2.1.3) Format_Version_Date: 2005 to 2021+.
 - (6.4.2.1.4) Format_Specification: Details on the format and WinZIP utility are online at the manufacturer's website on the internet at http://www.winzip.com, email support@winzip.com, WinZIP International LLC, at postal address PO Box 540, Mansfield, CT 06268 USA. Every effort is made to use a common and quality data packing product; in this case, WinZIP and the ZIP file format are very common and should be able to be unpacked or decompressed by several possible utilities including free software available online. WinZIP International LLC also provides a for free, evaluation copy of the latest software (newer than the version used to back these data), which installs on a wide variety of computers and operating systems.
 - (6.4.2.1.5) Format_Information_Content: various project files in standard formats, and explained in a "readme" text file compressed with those files.
 - (6.4.2.1.6) Format_File_Decompression_Technique: Use WinZIP or compatible software utility. See the comments under "Section 6.4.2.1.4 Format Specifications" for more information and lead to the WinZIP company.
 - (6.4.2.1.7) *Transfer_Size:* Unknown as of 8/31/2022 (by M.Strong) but estimated zip file size of 3287 kilobytes but that is without the filled field of "FeatureMUDefinedText"; after this field is filled with appropriate WCO or regulations text, it is expected the the layer zip file size will increase. However if the file is converted or exported for a special request, the file size can change; expect it to be "small" compared to the average GIS data layer size.

(6.4.2.2) Digital_Transfer_Option: (6.4.2.2.1) Online_Option: (6.4.2.2.1.1) Computer_Contact_Information:

(6.4.2.2.1.1.1) Network Address: Data layer can be requested, however, plans are for this layer to be moved to and accessible via the Michigan DNR Open Data Portal (an ESRI compatible data server http://www.michigan.gov/dnrmaps svstem) at http://gis/midnr/opendata.argis.com, then look for the layer in the provided data, it may be listed under "hunting" or "wildlife" related data. Also the layer should be available internally to staff, via the DNR (Arc) Portal, first... If the layer is completed review steps and now served to staff via the DNR Portal and/or served on the public-facing DNR OpenDataPortal content. If the layer is not yet seen in DNR OpenDataPortal content offerings, then it has not yet finished data review, curation, and processing steps to be setup as an OpenDataPortal item; however, it will be coming, planned for served there on network, ultimately.

(6.4.2.2.1.1.1.1) Network Resource Name: <internal name: (this section under development/pos. change ... currently named: WildlifeManagementUnitsWhitetailedDeerCURRENTpolygons. Network Resource Instructions: Plans are for the data to be moved to and accessible via the Michigan DNR Open Data Portal (an ESRI compatible data server system) at http://www.michigan.gov/dnrmaps or http://gis/midnr/opendata.argis.com, then look for the layer in the provided data, it may be listed under "hunting" or "wildlife" related data. Using an internet browser to connect to location, access as read-only data via the online computer options discussed above, then click on file or listing for the layer (which may provide a shapefile as .shp, or other file formats), then download it when asked; otherwise right-click on the file and say download. The DNR Open Data Portal also has a listing for a help contact, if needed. Also the layer should be available internally to staff, via the DNR (Arc) Portal, first ... If the layer is completed review steps and now served to staff via the DNR Portal and/or served on the public-facing DNR OpenDataPortal content. If the layer is not yet seen in DNR OpenDataPortal content offerings, then it has not yet finished data review, curation, and processing steps to be setup as an OpenDataPortal item; however, it will be coming, planned for served there on network, ultimately.

(6.4.2.2.1.1.2) *Dial-up_Instructions:* not applicable; no dial-up.

(6.4.2.2.1.2) Access_Instructions: Use own internet browser to connect as read-only to the online computer options discussed above.

(6.4.2.2.1.3) Online_Computer_and_Operating_System: Computer details will not be provided here for network security concerns; however, those details should not be needed because the online system is a dedicated internet server which is maintained for backward compatibility with HTTP communication protocols, and should be flexible to both older and newer connection versions plus various browser software and various operating systems.

(6.4.2.2.2) Offline_Option: Offline options are limited and will have to be discussed as a custom order process (see Section 6.5) with contacts.

- (6.4.3) Fees: see Custom Order Process in Section 6.5.
- (6.4.4) Ordering_Instructions: see Custom Order Process in Section 6.5.
- (6.4.5) Turnaround: no set timeframe has been established or can be anticipated;
 Please have patience as may take a couple days to reply back to questions, depending on those methods used (email, etc.) to contact our organization.
- (6.5) Custom_Order_Porcess: Custom order options are very limited. Anyone interested in such should first try using the online method. After that, if online method is not possible, contact the following

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Contact Person and discuss possible offline request options. Note that there may be a fee or requestor may be required to provide media for any offline option.

(6.5.1) Contact_Person_Primary:

(6.5.1.1) Contact_Person: Mapping and Geotechnology Program Specialist, currently Marshall Strong (M.Strong; however, recommend use the contact position and contact organization, in Sec.6.5.3).

(6.5.1.2) Contact_Organization: State of Michigan, Department of Natural Resources (MDNR), Wildlife Division (WLD).

- (6.5.2) Contact_Organization_Primary: State of Michigan, Department of Natural Resources (MDNR), Wildlife Division (WLD).
- (6.5.3) Contact_Position: MDNR Wildlife Division's Mapping and Geotechnology Program Specialist, currently filled by Marshall Strong (or M.Strong).
- (6.5.4) Contact_Address:
 - (6.5.4.1) Address_Type: mailing address.
 - (6.5.4.2) Address: PO Box 30444 .
 - (6.5.4.3) City: Lansing .
 - (6.5.4.4) State_or_Province: MI.
 - (6.5.4.5) Postal_Code: 48909-7944.
 - (6.5.4.6) Country: United State of America .
- (6.5.5) Contact_Voice_Telephone: 1-517-284-WILD (9453) .
- (6.5.5b) Contact_Voice_Telephone (direct line): 1-517-256-5397.
- (6.5.6) Contact_TDD/TTY_Telephone: 711 (Michigan Relay Center).
- (6.5.7) Contact_Facsimile_Telephone: 1-517-241-0015.
- (6.5.8) Contact_Electronic_Mail_Address: DNR-Wildlife@michigan,gov ; Those interested can also see the MDNR website online at <u>http://www.michigan.gov/dnr</u> for more information and to contact Division using additional, current electronic methods.
- (6.5.8b) Contact_Electronic_Mail_Address (person direct): strongm@michigan,gov
- (6.5.9) Contact_Hours_of_Service: recommended: GMT 12:00 noon to 8:00 pm, or United
 - States of America's Eastern Standard Time Zone 9:00 am to 5:00 pm.
- (6.5.10) Contact_Instructions: No significant instructions, other than:
 - (i.) please have patience as may take a couple days to reply back to questions, depending on those methods used (email, etc.) to contact our organization;
 - (ii.) please refer to this data set by its proper title or by more complete description of the data set along with any other relevant details (like publication date), in any message or with questions.
- (6.6) Technical_Prerequisites: Technical prerequisites are multifold, as this is a complex data set with several resources. The packaged data includes both tabular and GIS data (however, user/requestor may not be able to reach each separately, etc. without ESRI compatible software (as detailed in Sections 1.1.6 Geospatial_Presentation_Form and 1.13 Native_Data_Set_Environment). A prepared user should have the available software as discussed below, and should have enough skill and experience to use the software and compatible data packaged and described within this documentation/metadata.

As per Sections 1.1.6 Geospatial Presentation Form and 1.13 Native Data Set Environment, the final data set developed on and compatible with (i.) IBM-format compatible computer; (ii.) operating system for Microsoft Windows version XP Professional and version 2000 for servers (from 1993-2006; see company details on the internet at http://www.microsoft.com for more information) and Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 3; Esri ArcGIS 10.1.0.3035; (iii.) database management software Microsoft Windows Office 2003 Access program, build 11.8321.8341, service pack 3 (from 1992-2003; see company details on the internet at http://www.microsoft.com for more information) and should be compatible with newer database management software Microsoft Windows Office 2010 Access program; (iv.) geographic information system software ESRI ArcGIS9.3.1 service pack 2b and ESRI ArcGIS10.1 (see company details on the internet at http://www.esri.com for more information); (v.) documentation was done using software Microsoft Windows Office 2003 Access program, build 11.8321.8341, service pack 3 (from 1992-2003; see company details on the internet at http://www.microsoft.com for more information) and the documentation was converted to be compatible with Adobe PDF format (see company details on the internet at http://www.adobe.com for more information); with

(vi.) any other provided files with the compiled data set being compatible with plain ASCII text viewer formats or internet browser formats (i.e. txt, HTML, JPG image formats). Note that Adobe Reader for Adobe PDF files is a for-free software tool which loads on almost every computer type and operating current at time of this documentation, and is downloadable off the company details on the internet at <u>http://www.adobe.com</u>; version numbers change as software developed over time but software company Adobe has long history of backward compatibility with their own older software's data formats.

(6.7) Available_Time_Period: publication date.

Section 7 - Metadata Reference Information:

- (7.) Metadata_Reference_Information
 - ... Metadata_Reference_Information_Comment:

Additional information about metadata standards used can be found online at the Michigan Department of Technology, Management and Budget (DTMB) Center for Shared Solutions Geographic Information Standards web page at http://www.michigan.gov/cgi/ under the "Geographic Metadata" link or at the new DTMB State-wide site

http://www.michigan.gov/maps .

This metadata file should be found online at "

https://www2.dnr.state.mi.us/publications/pdfs/huntingwildlifehabitat/WLDmetadata/DNR-WLD wildlife management units deer current polyon gislayermetadata.pdf ".

- (7.1) Metadata_Date: 2022 August 31; full final date pending; this date is for durable draft document.
- (7.2) Metadata_Review_Date: none scheduled; metadata file will be reviewed if the data is updated, possibly annually and updated as needed as the data set (~annual data set, as represented by the attribute field "Year" detailed in Section 5.1.15) or other detail change, including details only in this metadata file need updating (i.e. data services, connection options, server or layer names in new DNR GIS architecture open data portal, etc.).
- (7.3) *Metadata_Future_Review_Date:* none scheduled.
- (7.4) *Metadata_Contact:* (Use the contact position and contact organization, in Sec. 1.9 and 6.1.3).
- (7.5) Metadate_Standard_Name: FGDC Content Standard for Digital Geospatial Metadata as per online website details <u>http:///www.fgdc.gov</u>, soon to be upgraded to the newer ISO FGDB standard with National Biological Information Initiative (NBII) Part 1 Biological Data Profile (when applicable).
- (7.6) Metada ta_Standard_Version: FGDC-STD-001-1998, Version 2.0. NBII Part 1 Biological Data Profile, FGDC-STD-001.1-1999 and updated compatible content versions except ISO.
- (7.7) *Metadata_Time_Convention:* recommended: Greenwich Mean Time (GMT), or United States' Eastern Standard Time.
- (7.8) Metadata_Access_Constraints: see Section 1.7 Access Constraints.
- (7.9) *Metadata_Use_Constraints:* see Section 1.8 Use Constraints.
- (7.10) Metadata_Security_Information: None or not applicable; Not applicable as there are no access, use, or handling restrictions imposed on the metadata because of national security, privacy, or other concerns appropriate to limit metadata access/use, or to define in this portion of the metadata.
- (7.11) Metadata_Extensions: (not applicable).

Supplemental Information:

The end of this file previously included two important reference blocks of text which data users may need, and were served at the end of this document while data layer and data servers/services are under flux. However those two information resources, Supplement 1 the list of subject-specific attribute fields in this layer, and Supplement 2 the attribute field content blocks for the attribute

"FeatureMUDefinedText" which is to contain the appropriate WCO or regulations text, have been moved into the metadata template into the end of Section 5 for Entity and Attribute Information.

Supplement 3: A complete excerpt of the white-tailed deer related definition blocks from the Wildlife Conservation Order (WCO) or other regulations sources (if any).

The information below lists the official legal definition text blocks for deer units in this layer, like the Wildlife Conservation Order (WCO) or other regulations-related text used to define an area for deer management, and is individual features in this layer. First is the WCO excerpt text, which (if applicable) will be followed by other cited MI-DNR-WLD geospatial metadata file (FGDC) for "Wildlife Management Units White-tailed Deer 'historical'/2021 polygons" v2022aug31- Page 59 of 17

regulation text blocks, in this Supplemental Information to the metadata file for layer named "WildlifeManagementUnitsWhitetailedDeerCURRENTpolygons" – or the older legacy layer named "WildlifeManagementUnitsWhitetailedDeerHISTORICALpolygons", etc. (as discussed earlier in this file).

This supplemental information (#3) is provided for understanding the completed ness of deer unit information. The complete excerpt text is provided below is the complete set of relevant unit definitions, to help understand the exact extent of polygons, completed ness, and are the exact official legal text served in the official legal source of: Michigan Wildlife Conservation Order (WCO), Chapter XII, Management Areas Defined, excerpt of WCO sections 12.1 to 12.499, and sections 12.900 to 12.903, re: all deer management units (DMUs) defined within these sections or repealed blocks. Excerpts of WCO official/legal text language blocks as cited (see this file metadata Section 5.1.41.3, "WCO Chapter 12 Management Units Defined, for deer which are in WCO section 12.1 to 12.499, are provided below. There are more definition blocks below than units defined in the layer as individual features as the list below includes "repealed" lines/blocks too from the latest appropriate WCO online official and legal text content. There are editorial notes, unofficial text but provided to assist readers, and included in the excerpt which are contained in brackets "[and "]"; some of these editorial notes are to explain gaps in section definitions see by missing section numbering, and these editorial notes are not appropriate to include in attribute fields for units (as per this file, section 5.1.5 to 5.1.40, earlier). Only the applicable text blocks from WCO deer unit definitions are included in data field "" (see Section 5, under 5.1.40) where appropriate unit definition blocks of text are included earlier in this document Sections 5.1.40.4.1.1 to 5.1.40.4.1.115 in "Enumerated Domain Value" blocks.

Source Citation: 2022. State of Michigan – Department of Natural Resources (DNR). Michigan Wildlife Conservation Order (WCO), Chapter XII, Management Areas Defined [except of WCO sections 12.1 to 12.499, and sections 12.900 to 12.903, re: all deer management units (DMUs) defined) follows, in all text between double-dashed lines: (source = online DNR regulations WCO : "<u>https://www.michigan.gov/dnr/-/media/Project/Websites/dnr/Documents/Orders/Wildlife-Conservation-Order/WCO.pdf</u> " on 2022 Aug 19). What follows next is bulleted list of "WCO Chapter XII, Management Areas Defined" sections from 12.1 to 12.499 and 12900 to 12.903 (Note: skip WCO sections 12.500 to 12.899 as these sections are not applicable to white-tailed deer):

*** The information below contains the excerpts of WCO official/legal text language blocks, as cited (above):

- 12.1 "Deer management unit 001 (Alcona county)" defined. Sec. 12.1 "Deer management unit 001 (Alcona county)" means all of Alcona county, excluding that part defined in section 12.452 as deer management unit 452. History: Am. 3, 1992, Eff. Sep 1, 1992; Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001.
- 12.2 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 002.
- 12.3 "Deer management unit 003 (Allegan county)"defined. Sec. 12.3 "Deer management unit 003 (Allegan county)" means all of Allegan county. History: Eff. Sep 1, 1995; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.4 "Deer management unit 004 (Alpena county)" defined. Sec. 12.4 "Deer management unit 004 (Alpena county)" means all of Alpena county, excluding that part defined in section 12.452 as deer management unit 452. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001.
- 12.5 "Deer management unit 005 (Antrim county)"defined. Sec. 12.5 "Deer management unit 005 (Antrim county)" means all of Antrim county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.6 "Deer management unit 006 (Arenac county)" defined. Sec. 12.6 "Deer management unit 006 (Arenac county)" means all of Arenac county. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001.
- 12.7 "Deer management unit 007 (Big Bay unit)"defined. Sec. 12.7 "Deer management unit 007 (Big Bay unit)" means that area of Alger, Marguette, and Baraga counties bounded by a line beginning at the mouth of the Anna river (section 2, T46N R19W) near the city of Munising in Alger county, then upstream along the Anna river to highway M-28 (section 11, T46N R19W), southerly on highway M-28 to highway M-94 (section 11, T46N R19W), westerly on highway M94 to the junction of highway M-94 and highway M-67 near the city of Chatham, southerly on highway M67 to county road H-01 (Eben-Trenary road), northerly on county road H-01 to county road H-44 (Traunik Kiva road), westerly on county road H-44 to King road, northwesterly on King road to highway US-41, northwesterly on highway US-41 into Marguette county to county road 456, westerly on county road 456 to highway M-35, westerly on highway M-35 to the middle branch of the Escanaba river, northwesterly along the middle branch of the Escanaba river to county road 478, westerly on county road 478 to county road 601, southwesterly on county road 601 to highway M-95, northerly on highway M-95 to highway US41/M-28, westerly on highway US-41/M-28 into Baraga county to highway US-141/M-28 (section 6, T48N R33W), northerly on highway US-41 to highway M-38 in the city of Baraga, due east into the center of Keweenaw bay, easterly across Keweenaw bay, northerly and easterly along the Lake Superior shoreline of Baraga, Marquette, and Alger counties, including Grand island and offshore islands between eastern Keweenaw bay and Grand island, to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001; Am. 8, 2002, Eff. Jun 8, 2002.
- 12.8 "Deer management unit 008 (Barry county)"defined. Sec. 12.8 "Deer management unit 008 (Barry county)"

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means all of Barry county. History: Am. 8, 2001, Eff. Jun 1, 2001.

- 12.8a Repealed. Am. 7, 2016. Eff. May 12, 2016. Publishers note: The repealed section pertained to "Deer management unit 308 (Bellevue Unit; Barry Calhoun Eaton)" defined. 12.9 "Deer management unit 009 (Bay county)" defined. Sec.
- 12.9 "Deer management unit 009 (Bay county)" means all of Bay county. History: Am. 4, 1990, Eff. Sep 1, 1990; Am. 3, 1992, Eff. Sep 1, 1992; Am. 6, 1995, Eff. Sep 1, 1995; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.10 "Deer management unit 010 (Benzie county)"defined. Sec. 12.10 "Deer management unit 010 (Benzie county)" means all of Benzie county. History: Am. 4, 1990, Eff. Sep 1, 1990; Am. 6, 1999, Eff. Sep 1, 1999; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.11 "Deer management unit 011 (Berrien county)"defined. Sec. 12.11 "Deer management unit 011 (Berrien county)" means all of Berrien county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 6, 1991, Eff. Sep 1, 1991; Am. 6, 1999, Eff. Sep 1, 1999; Am. 7, 2000, Eff. Sep 1, 2000; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.11a "Deer management unit 311 (Keeler Unit; Berrien Cass Van Buren)" defined. Sec. 12.11a "Deer management unit 311 (Keeler Unit; Berrien Cass Van Buren)" means all of Berrien, Cass, and Van Buren counties. History: Am. 8, 2013, Eff. June 14, 2013.
- 12.12 "Deer management unit 012 (Branch county)"defined. Sec. 12.12 "Deer management unit 012 (Branch county)" means all of Branch county. History: Am. 4, 1990, Eff. Sep 1, 1990; Am. 6, 1995, Eff. Sep 1, 1995; Am. 7, 2000, Eff. Sep 1, 2000; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.12a "Deer management unit 312 (Sherwood Unit; Branch Kalamazoo St. Joseph)" defined. Sec. 12.12a "Deer management unit 312 (Sherwood Unit; Branch Kalamazoo St. Joseph)" means all of Branch, Kalamazoo, and St. Joseph counties. History: Am. 6, 2014, Eff. June 13, 2014.
- 12.13 "Deer management unit 013 (Calhoun county)"defined. Sec. 12.13 "Deer management unit 013 (Calhoun county)" means all of Calhoun county. History: Eff. Sep 1, 1995; Am. 6, 1999, Eff. Sep 1, 1999; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.14 "Deer management unit 014 (Cass county)" defined. Sec. 12.14 "Deer management unit 014 (Cass county)" means all of Cass county. History: Am. 7, 2000, Eff. Sep 1, 2000; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.15 "Deer management unit 015 (Charlevoix county)" defined. Sec. 12.15 "Deer management unit 015 (Charlevoix county)" means all of Charlevoix county, excluding that part defined in section 12.15a as deer management unit 115. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989, Am. 4, 1993, Eff. Sep 1, 1994; Am. 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.15a "Deer management unit 115 (Beaver Island unit)" defined. Sec. 12.15a "Deer management unit 115 (Beaver Island unit)" means Beaver island and Garden island in Lake Michigan, Charlevoix county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.16 "Deer management unit 016 (Cheboygan county)" defined. Sec. 12.16 "Deer management unit 016 (Cheboygan county)" means all of Cheboygan county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.17 "Deer management unit 017 (Sault Ste. Marie unit)" defined. Sec. 12.17 "Deer management unit 017 (Sault Ste. Marie unit)" means that area of Chippewa and Mackinac counties bounded by a line beginning at the Lake Huron shoreline at the mouth of the Pine river (section 10, T42N R03W), then northerly upstream along the Pine River to highway M-134, westerly on highway M-134 to highway I-75, northerly on highway I-75 to highway M-48, easterly on highway M-48 to where it combines with Mackinac trail, northerly on highway M-48/Mackinac trail towards the city of Rudyard to Tilson road (no turn, road name change), northerly on Tilson road to highway M-28, easterly on highway M-28 to highway M- 221, northerly on highway M-221 through the city of Brimley to Lakeshore drive, easterly on Lakeshore drive to the Waiska river, northerly downstream along the Waiska river to Lake Superior due north to the international boundary, southeasterly along the international boundary to the De Tour passage waterway, southerly through the De Tour passage waterway and westerly along the Lake Huron shoreline, including Sugar island, Neebish island, and the Les Cheneaux islands, to the point of beginning, excluding that part defined in section 12.17a as deer management unit 117 and that part defined in section 12.49a as deer management unit 149. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.17a Deer management unit 117 (Drummond island unit)" defined. Sec. 12.17a "Deer management unit 117 (Drummond island unit)" means that area of Chippewa county east of the De Tour passage waterway, identified as the Drummond island group (areas east of R04E, which includes Drummond island, islands in Potagannissing bay including those eastward of Little Cass island, and islands east and south of Drummond island) in Lake Huron, bounded by the international boundary on the north and east. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.18 "Deer management unit 018 (Clare county)"defined. Sec. 12.18 "Deer management unit 018 (Clare county)" means all of Clare county. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001; Am. 5, 2004, Eff. May 8, 2004.
- 12.18a Repealed. Am. 5, 2004, Eff. May 8, 2004 Publisher's note: The repealed section pertained to "Deer management unit 118 (Dover Unit)" defined.

- 12.19 "Deer management unit 019 (Clinton county)" defined. Sec. 12.19 "Deer management unit 019 (Clinton county)" means all of Clinton county except those lands defined in section 12.33a. History: Am. 9, 2013, Eff. June 14, 2013; Am. 9, 2015, Eff. Aug. 14, 2015; Am. 7, 2016, Eff. May 13, 2016.
- 12.19a Repealed. Am. 7, 2016. Eff. May 12, 2016. Publishers note: The repealed section pertained to "Deer management unit 319 (Laingsburg Unit; Clinton Gratiot Ingham Shiawassee)" defined.
- 12.19b "Deer Management unit 419 (CWD Management Zone)" defined. Sec. 12.19b "Deer management unit 419 (CWD Management Zone)" means all of Clinton, Eaton Ingham, Ionia, and Shiawassee counties except those lands defined in section 12.33a. History: Am. 7, 2016, Eff. May 13, 2016.
- 12.20 "Deer management unit 020 (Crawford county)" defined. Sec. 12.20 "Deer management unit 020 (Crawford county)" means all of Crawford county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.21 "Deer management unit 021 (Manistique unit)"defined. Sec. 12.21 "Deer management unit 021 (Manistique unit)" means that area of Delta, Alger, and Schoolcraft counties bounded by a line beginning at the mouth of the Rapid river near the city of Rapid River in Delta county, then northerly upstream to highway US-2, westerly towards Rapid River on highway US-2 to highway US-41, northerly on highway US-41 into Alger county to highway US-41 and highway M67 at the city of Trenary, northerly on highway M-67 to highway M-94 near the city of Chatham, easterly on highway M-94 to highway M-28 located south of the city of Munising in Alger county, easterly on highway M-28 past the city of Schoolcraft county to highway M-28 and highway M-77 at the city of Seney, southerly on highway M-77 to highway US-2, southwesterly on highway US-2 to county road 432 near the city of Gulliver, southeasterly on county road 432 to county road 431, southerly on county road 431 to the Lake Michigan shoreline at Seul Choix point, westerly along the Lake Michigan shoreline, including Summer and Little Summer islands, Poverty and St. Martin's islands, to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 5, 2003, Eff. May 10, 2003.
- 12.21a "Deer management unit 121 (Bay de Noc)" defined. Sec. 12.21a "Deer management unit 121 (Bay de Noc)" means that area of Delta and Schoolcraft counties bounded by a line beginning at the mouth of the Rapid river near the city of Rapid River in Delta county, then northerly upstream along the Rapid river to highway US-2, easterly on highway US-2 into Schoolcraft county to Thompson creek in the city of Thompson, southeasterly downstream along Thompson creek to the Lake Michigan shoreline, westerly along the Lake Michigan shoreline, including Summer and Little Summer islands, Poverty and St. Martin's islands, to the point of beginning. History: Am. 5, 2003, Eff. May 10, 2003.
- 12.22 "Deer management unit 022 (Crystal Falls unit)" defined. Sec. 12.22 "Deer management unit 022 (Crystal Falls unit)" means that area of Iron and Dickinson counties bounded by a line beginning in Iron county at the junction of the Michigan-Wisconsin state line (about 5¹/₂ miles northwest of the end of the Brule river, near center of section 33, T43N R37W) and USFS highway 16 (section 33, T43N R37W, also known as Iron county road 436 or federal forest highway 16), then northerly, crossing highway US-2, to USFS road 3270 (also known as USFS road 149, section 14, T44N R37W), easterly on USFS road 3270 to county road 657 (section 8, T44N R35W, also known as Gibbs city road when near Gibbs city), southeasterly on county road 657 through Gibbs city to Ponozzo road (also known as USFS road 137), northerly on Ponozzo road to the Paint river (just north of Gibbs city, in northwest corner of section 9, T44N R35W), easterly/downstream along the center of the Paint river to the confluence of the Hemlock river (section 8, T44N R34W), easterly/downstream along the center of the Hemlock river to the Chicago, Milwaukee, St. Paul, and Pacific railroad line in the center of the village of Amasa, southeasterly on said railroad line into Dickinson county to highway M-95 near the city of Channing (west side of section 8, T43N R30W), southerly on highway M-95 to county road 426 (also known as the Turner truck trail, in section 8, T43N R30W), easterly on county road 426 past the city of Ralph to the city of Alfred (junction of county road 426 and Northland truck trail, in section 35, T43N R27W), southwesterly on Northland truck trail (through section 26, T42N R27W, also known as Camp 3 road) to Swan Peterson road (section 32, T42N R27W), southerly on Swan Peterson road to highway M69 (west side of section 8, T41N R27W), westerly on highway M-69 into the city of Foster city to county road 569 (also known as Waucedah road, in Foster city, or county road G-69, east side section 12, T41N R28W), southerly on county road 569 to highway US-2 at the city of Waucedah (south side of section 15, T39N R28W), westerly on highway US-2 to county road 573 near the city of Loretto (section 18, T39N R28W), northwesterly on county road 573 to Pine creek (section 3, T39N R29W), northwesterly along Pine creek to the Wisconsin electric highline (northeast quarter of section 13, T40N R30W), northerly along the Wisconsin electric highline to Carney lake road (east side of section 32, T41N R29W), westerly on Carney lake road to Merriman truck trail (east side of section 25, T41N R30W), westerly on Merriman truck trail to highway M-95 (section 27, T41N R30W), northerly on highway M-95 to Johnson road (north side of section 22, T41N R30W), westerly on Johnson road to county road 607 (near southeast corner of section 16, T41N R30W), northwesterly on county road 607 to Peavy falls road (section 16, T41N R30W), westerly on Peavy falls road in Dickinson county to Michigamme falls road in Iron county (west side of section 7, T41N R30W, no turn, road name change only), westerly and southerly on Michigamme falls road to the Menominee river (northwest corner of section16, T41N R31W), westerly/upstream and northwesterly/upstream along the Menominee river to the confluence of the Menominee and Brule rivers (section 16, T41N R31W), northwesterly/upstream along the Brule river (state line) into Iron county to the Michigan-Wisconsin state line in section 18, T42N R36W, northwesterly on the Michigan-Wisconsin state line to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 12, 2001, Eff. Sep 1, 2001; Am. 5, 2003, Eff. May MI-DNR-WLD geospatial metadata file (FGDC) for "Wildlife Management Units Write-tailed Deer 'historical'/2021 polygons" v2022aug31- Page 62 of 17

10, 2003; Am. 7, 2004, Eff. Jun 5, 2004; Am. 19, 2005, Eff. Feb 10, 2006.

- 12.22a "Deer management unit 122 (Norway unit)" defined. Sec. 12.22a "Deer management unit 122 (Norway unit)" means that area of Menominee, Dickinson, and Iron counties bounded by a line beginning in Menominee county at the junction of highway US-2 and the Soo Line railroad (southeast guarter of section 2, T38N R27W), then southwesterly to the Menominee river (northeast quarter of section 20, T38N R28W), upstream northwesterly along the Menominee river near the Dickinson county line into Iron county to the confluence of the Menominee and Brule rivers (section 16, T41N R31W), northwesterly and westerly on Michigamme Falls road in Iron county to Peavy Falls road in Dickinson county (west side of section 7, T41N R30W, no turn, road name change only), easterly on Peavy Falls road to county road 607 (section 16, T41N R30W), southeasterly on county road 607 to Johnson road (near southeast corner of section 16, T41N R30W), westerly on Johnson road to highway M-95 (north side of section 22, T41N R30W), southerly on highway M-95 to Merriman truck trail (section 27, T41N R30W), easterly on Merriman truck trail to Carney Lake road (east side of section 25, T41N R30W), southeasterly on Carney Lake road to the Wisconsin Electric highline (east side of section 32, T41N R29W), southerly on the Wisconsin Electric highline to Pine creek (northeast guarter of section 13, T40N R30W), southeasterly along Pine creek to county road 573 (section 3, T39N R29W), southeasterly on county road 573 to highway US-2 near the city of Loretto (section 18, T39N R28W), easterly on highway US-2 through the city of Waucedah (south side of section 15, T39N R28W) continuing easterly on highway US-2 to Beaver Pete's road (northeast corner of section 22, T39N R28W, which runs on the north edge of sections 23 and 24, T39N R28W), easterly on Beaver Pete's road into Menominee county to the R3 road (also known as Johnson road, the north-south road in center of section 19, T39N R27W), southerly on R3 road to highway US- 2 (center of north edge of section 30, T39N R27W), easterly on highway US-2 to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 7, 2004, Eff. Jun 5, 2004.
- 12.23 "Deer management unit 023 (Eaton county)" defined. Sec. 12.23 "Deer management unit 023 (Eaton county)" means all of Eaton county except those lands defined in section 12.33a. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 7, 2016, Eff. May 13, 2016.
- 12.24 "Deer management unit 024 (Emmet county)"defined. Sec. 12.24 "Deer management unit 024 (Emmet county)" means all of Emmet county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.25 "Deer management unit 025 (Genesee county)"defined. Sec. 12.25 "Deer management unit 025 (Genesee county)" means all of Genesee county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.26 "Deer management unit 026 (Gladwin county)"defined. Sec. 12.26 "Deer management unit 026 (Gladwin county)" means all of Gladwin county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.27 "Deer management unit 027 (Watersmeet unit)" defined. Sec. 12.27 "Deer management unit 027 (Watersmeet unit)" means that area of Iron, Baraga, Houghton, Ontonagon, and Gogebic counties bounded by a line beginning in Iron county at the junction of the Michigan- Wisconsin state line (about 51/2 miles northwest of the end of the Brule river, near center of section 33, T43N R37W) and USFS highway 16 (section 33, T43N R37W, also known as Iron county road 436 or federal forest highway 16), then northerly, crossing highway US-2, to USFS road 3270 (also known as USFS road 149, section 14, T44N R37W), easterly on USFS road 3270 to county road 657 (section 8, T44N R35W, also known as Gibbs city road when near Gibbs city), southeasterly on county road 657 through Gibbs city to Ponozzo road (center western side of section 9, T44N R35W, also known as USFS 2130, or the stretch of USFS road 137 to USFS road 144 to USFS road 145), northerly on Ponozzo road to the Perch river (section 23, T46N R35W), northerly along the Perch river into Baraga county to highway M-28 (section 34, T48N R35W), westerly on highway M-28 through Houghton county into Ontonagon county to highway M-64 (near Merriweather, section 11, T48N R43W), southerly on highway M-64 past the western shore of lake Gogebic into Gogebic county to highway US-2, westerly on highway US-2 into the city of Wakefield to the Sunday lake street (section 16, T47N R45W), southerly on Sunday lake street to county road 519 (also known as Chaney lake road south of Wakefield, section 28, T47N R45W), southerly on county road 519 to the Michigan-Wisconsin state line (Sec 15, T45N R45W, Gogebic county), southeasterly along the Michigan- Wisconsin state line into Iron county to the point of beginning. History: Am. 5, 2003, Eff. May 10, 2003; Am. 19, 2005, Eff. Feb 10, 2006.
- 12.27a "Deer management unit 127 (Ironwood unit)"defined. Sec. 12.27a "Deer management unit 127 (Ironwood unit)" means that area of Gogebic county bounded by a line beginning at the junction of the Michigan-Wisconsin state line (county line) and county road 519 (also known as Chaney lake road, section 15, T45N R45W), then northerly along county road 519 to Sunday lake street (south of the city of Wakefield, section 28, T47N R45W), northerly along Sunday lake street to highway M-28 in Wakefield, northeasterly on highway M-28 to county road 519, northerly on county road 519 to south boundary road near the Lake Superior shoreline, easterly on south boundary road to the Presque Isle river, northerly/downstream along the center of the Presque Isle river to its mouth on the Lake Superior shoreline, northwesterly into Lake Superior to the county/state line (Michigan/Wisconsin), southwesterly then southeasterly along the county/state line to the point of beginning. History: Am. 19, 2005, Eff. Feb 10, 2006.
- 12.28 "Deer management unit 028 (Grand Traverse county)" defined. Sec. 12.28 "Deer management unit 028 (Grand Traverse county)" means all of Grand Traverse county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.29 "Deer management Unit 029 (Gratiot county)" defined. Sec. 12.29 "Deer management unit 029 (Gratiot county)" means all of Gratiot county. History: Am. 8, 2001, Eff. Jun. 1, 2001.

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- 12.29a Repealed. Am. 7, 2016. Eff. May 12, 2016. Publishers note: The repealed section pertained to "Deer management unit 329 (Stanton Unit; Gratiot Mecosta Montcalm)" defined.
- 12.30 "Deer management unit 030 (Hillsdale county)"defined. Sec. 12.30 "Deer management unit 030 (Hillsdale county)" means all of Hillsdale county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.31"Deer management unit 031 (Nissula unit)" defined. Sec. 12.31 "Deer management unit 131 (Nissula unit)" means that area of Ontonagon, Houghton, and Baraga counties bounded by a line beginning in Baraga county in the center of L'Anse bay (southern Keweenaw bay of Lake Superior), due west to the junction of highway US-41 and highway M-38 in the city of Baraga, south on US-41 to highway US-141/M-28 (section 6, T48N R33W), southwesterly and westerly on US-141/M-28 into Houghton county to highway M-45 in Ontonagon county near the city of Bruce Crossing, northerly on M-45 to highway M-26, northeasterly on M-26 to highway M-38, southeasterly and easterly on M-38 into Houghton county to Pike lake road in the village of Nisula, north on Pike lake road to the west branch of the Otter river (Sec 19, T51N R36W, Houghton county), easterly/downstream along the west branch of the Otter river to the confluence of the west branch and the north branch of the Otter river (section 1, T51N R35W), northeasterly/upstream on the north branch of the Otter river to Tapiola road (section 16, T53N R34W, may be signed as Otter lake road on the curve), north on Tapiola road to Chassell-Painesdale road (section 33, T54N R34W), north then west on Chassell-Painesdale road to highway M-26 near village of Painesdale, northeasterly on M-26 into city of Houghton to the Portage canal (at the Houghton-Hancock lift bridge), easterly then southerly along the center of the Portage canal into center of Portage lake, southerly down center of Portage lake to the Portage river, southeasterly/downstream along the center of Portage river to Lake Superior, southerly along the Lake Superior shoreline into Baraga county to the Keweenaw bay, southerly along the center of Keweenaw bay into L'Anse bay (southern Keweenaw bay), including all offshore islands along the Lake Superior, Keweenaw bay and L'Anse bay shorelines, to the point of beginning. History: Am. 19, 2005, Eff. Feb 10, 2006.
- 12.31a "Deer management unit 131 (Twin lakes unit)" defined. Sec. 12.31a "Deer management unit 131 (Twin lakes unit)" means that area of Ontonagon and Houghton counties bounded by a line beginning in Ontonagon county at the mouth of the Ontonagon river in the city of Ontonagon, then southeasterly/upstream along the center of the Ontonagon river to highway M-64 in city of Ontonagon, northeasterly on M-64 to highway M-38 in city of Ontonagon, southeasterly then easterly on M-38 into Houghton county to Pike lake road in the village of Nisula, north on Pike lake road to the west branch of the Otter river (Sec 19, T51N R36W, Houghton county), easterly/downstream along the west branch of the Otter river to the confluence of the west branch and the north branch of the Otter river (section 1, T51N R35W), northeasterly/upstream on the north branch of the Otter river (section 16, T53N R34W, may be signed as Otter lake road on the curve), north on Tapiola road to Chassell-Painesdale road (section 33, T54N R34W), north then west on Chassell-Painesdale road to highway M-26 into city of Houghton to the Portage canal (at the Houghton-Hancock lift bridge), westerly then northerly along center of Portage canal to outlet into Lake Superior, southwesterly along the Lake Superior shoreline, including all offshore islands along the Lake Superior shoreline, into Ontonagon county to the point of beginning. History: Am. 19, 2005, Eff. Feb 10, 2006.
- 12.32 "Deer management unit 032 (Huron county)"defined. Sec. 12.32 "Deer management unit 032 (Huron county)" means all of Huron county. History: Eff. Mar 31, 1989; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.32a "Deer management unit 332 (Greenleaf Unit; Huron Sanilac Tuscola)" defined. Sec. 12.32a "Deer management unit 332 (Greenleaf Unit; Huron Sanilac Tuscola)" means all of Huron, Sanilac and Tuscola counties. History: Am. 8, 2013, Eff. June 14, 2013.
- 12.33 "Deer management unit 033 (Ingham county)" defined. Sec. 12.33 "Deer management unit 033 (Ingham county)" means all of Ingham county except those lands defined in section 12.33a. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 3 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001; Am. Interim Order 1, 2015, Eff. May 26, 2015; Am. 9, 2015, Eff. Aug. 14, 2015; Am. 7, 2016, Eff. May 13, 2016.
- 12.33a "Deer management unit 333 (Core CWD area)" defined. Sec. 12.33a "Deer management unit 333 (Core CWD area)" means those portions of Clinton, Eaton, Ingham, Ionia, and Shiawassee counties included in all of: Bath, Dewitt, Eagle, Olive, Riley, Watertown, Westphalia, and Victor townships in Clinton county; Delta, Oneida, and Roxand townships in Eaton county; Alaiedon, Delhi, Lansing, Meridian, Wheatfield and Williamstown townships in Ingham county; Danby and Portland townships in Ionia county; and Woodhull township in Shiawassee county. History: Am. Interim Order 1, 2015, Eff. May 26, 2015; Am. 9, 2015, Eff. Aug. 14, 2015; Am. 7, 2016, Eff. May 13, 2016; Am. 4, 2017, Eff. June 9, 2017.
- 12.34 "Deer management unit 034 (Ionia county)" defined. Sec. 12.34 "Deer management unit 034 (Ionia county)" means all area of Ionia county except those lands defined in section 12.33a. History: Am. 8 Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001.
- 12.35 "Deer management unit 035 (losco county)" defined. Sec. 12.35 "Deer management unit 035 (losco county)" means all of losco county. History: Am. 8 Eff. June 1, 2001: Am. 14, 2001, Eff. Sept. 15, 2001; Am. 4, 2017, Eff. June 9, 2017.
- 12.35a Repealed; Am. 4, 2017, Eff. June 9, 2017. Publishers note: The repealed section pertained to "deer management unit 135 (Tawas unit) defined."

- 12.36 "Deer management unit 036 (Amasa-Michigamme unit)" defined. Sec. 12.36 "Deer management unit 036 (Amasa-Michigamme unit)" means that area of Iron, Baraga, Marquette, and Dickinson counties bounded by a line beginning in Iron county in the village of Amasa, at the intersection of the Hemlock river to the Chicago, Milwaukee, St. Paul, and Pacific railroad line, southwesterly/upstream then westerly/upstream along the center of the Hemlock river to the confluence of the Paint river (section 8, T44N R34W), westerly/upstream along the center of the Paint river to Ponozzo road (center western side of section 9, T44N R35W, also known as USFS 2130, or the stretch of USFS road 137 to USFS road 144 to USFS road 145), northerly on Ponozzo road to the Perch river (section 23, T46N R35W), northerly along the Perch river into Baraga county to highway M-28 (section 34, T48N R35W), easterly on highway M-28 to highway US-41 (section 6, T48N R33W), easterly on highway US-41/M-28 into Marguette county to highway M-95 near the city of Champion (section 3, T47N R29W), southerly on highway M-95 into Dickinson county to Floodwood road (section 1, T44N R30W, near the Marquette-Dickinson county line), easterly on Floodwood road to Schwartz creek road (also known as McGregor creek road, section 31, T45N R28W, just over the Marquette-Dickinson county line into Marquette county), southeasterly on Schwartz creek road to Cleveland Homestead road (also known as Aimone road, section 10, T44N R28W), easterly on Cleveland Homestead road to county road 581 (section 25, T44N R27W), easterly on county road 581 to county road 438 in Marquette county, easterly on county road 438 to Ross grade road (section 28, T44N R26W), southerly on Ross grade road to county road SH near the city of Ross, southwesterly on county road SH to county road SG, southerly on county road SG to county road 426 near the city of Northland, westerly on county road 426 into Dickinson county past the city of Ralph to highway M-95 near the city of Channing, northerly on highway M-95 to the Chicago, Milwaukee, St. Paul, and Pacific railroad line (section 8, T43N R30W), easterly on said railroad line into the village of Amasa to the point of beginning. History: Am. 8 Eff. Jun 1, 2001; Am. 8, 2002, Eff. Jun 8, 2002; Am. 5, 2003, Eff. May 10, 2003; Am. 19, 2005, Eff. Feb 10, 2006.
- 12.37 "Deer management unit 037 (Isabella county)"defined. Sec. 12.37 "Deer management unit 037 (Isabella county)" means all of Isabella county. History: Am. 8 Eff. Jun 1, 2001.
- 12.38 "Deer management unit 038 (Jackson county)"defined. Sec. 12.38 "Deer management unit 038 (Jackson county)" means all of Jackson county. History: Am. 8 Eff. Jun 1, 2001.
- 12.39 "Deer management unit 039 (Kalamazoo county)" defined. Sec. 12.39 "Deer management unit 039 (Kalamazoo county)" means all of Kalamazoo county. History: Am. 8 Eff. Jun 1, 2001.
- 12.39a Repealed. Am. 6, 2014, Eff. June 13, 2014 History: Am. 9, 2013, Eff. June 14, 2013; Am. 6, 2014, Eff. June 13, 2014. [editorial note: definition pertained to DMU 339?].
- 12.40 "Deer management unit 040 (Kalkaska county)" defined. Sec. 12.40 "Deer management unit 040 (Kalkaska county)" means all of Kalkaska county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001. 12.41 "Deer management unit 041 (Kent county)" defined.
- Sec. 12.41 "Deer management unit 041 (Kent county)" means all of Kent county. History: Am. 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001; Am. Interim Order 2, 2008, Eff. Aug 29, 2008; Am. Interim Order 5, 2008, Eff. Sep 15, 2008.
- 12.41a "Deer management unit 341 (Sparta Unit; Kent Muskegon south Ottawa)" defined. Sec. 12.41a "Deer management unit 341 (Sparta Unit; Kent Muskegon south Ottawa)" means all of Kent and Ottawa counties, and those portions of Muskegon county within Zone 3 (south of the Zone 2-3 divider line, defined in Section 1.4). History: Am. 8, 2013, Eff. June 14, 2013.
- 12.42 "Deer management unit 042 (Keweenaw unit)"defined. Sec. 12.42 "Deer management unit 042 (Keweenaw unit)" means that area of Houghton and Keweenaw counties (known as the Keweenaw peninsula) that lies north and east of the Keweenaw waterway, also known as the Portage Canal, in northern Houghton county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.43 "Deer management unit 043 (Lake county)" defined. Sec. 12.43 "Deer management unit 043 (Lake county)" means all of Lake county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.44 "Deer management unit 044 (Lapeer county)"defined. Sec. 12.44 "Deer management unit 044 (Lapeer county)" means all of Lapeer county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.45 "Deer management unit 045 (Leelanau county)"defined. Sec. 12.45 "Deer management unit 045 (Leelanau county)" means all of Leelanau county, excluding that part defined in section 12.45a as deer management unit 145 and section 12.45b as deer management unit 245 in Lake Michigan. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.45a "Deer management unit 145 (north Manitou island unit)" defined. Sec. 12.45a "Deer management unit 145 (north Manitou island unit)" means all of north Manitou island in Lake Michigan, Leelanau county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.45b "Deer management unit 245 (south Fox island unit)" defined. Sec. 12.45b "Deer management unit 245 (south Fox island unit)" means all of south Fox island in Lake Michigan, Leelanau county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.46 "Deer management unit 046 (Lenawee county)"defined. Sec. 12.46 "Deer management unit 046 (Lenawee county)" means all of Lenawee county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.47 "Deer management unit 047 (Livingston county)" defined. Sec. 12.47 "Deer management unit 047 (Livingston MI-DNR-WLD geospatial metadata file (FGDC) for "Wildlife Management Units While-tailed Deer 'historical'/2021 polygons" v2022aug31- Page 65 of 17

county)" means all of Livingston county. History: Am. 8, 2001, Eff. Jun 1, 2001.

- 12.48 "Deer management unit 048 (Newberry unit)"defined. Sec. 12.48 "Deer management unit 048 (Newberry unit)" means that area of Chippewa, Luce, Schoolcraft, and Alger counties bounded by a line beginning at the international boundary due north of the mouth of the Waiska river in Lake Superior, near the city of Brimley in Chippewa county, then southerly upstream along the Waiska river to Lakeshore drive, westerly on Lakeshore drive to highway M221, southerly on highway M-221 to highway M-28, westerly on highway M-28 into Luce county and passing south of the city of Newberry to highway M-117, southerly on highway M-117 into Mackinac county to Sandtown road, westerly on Sandtown road to Curtis road in the city of Curtis, westerly on Curtis road (also known as H-42) into Schoolcraft county, westerly on county road 436 (no turn, road name change) to highway M-77, northerly on highway M-28, westerly on M- 28 into Alger county to the Anna river (section 11, T46N R19W) in the city of Munising, northerly downstream along the Anna river into Lake Superior, northeasterly to the international boundary, easterly to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 5, 2003, Eff. May 10, 2003.
- 12.49 "Deer management unit 349 (Engadine unit)" defined. Sec. 12.49 "Deer management unit 349 (Engadine unit)" means that area of Schoolcraft, Luce, Chippewa, and Mackinac counties bounded by a line beginning in Lake Michigan due south of the Lake Michigan shoreline at Seul Choix point in Schoolcraft county, then northerly from said shoreline to county road 431, northerly on county road 431 to county road 432, northwesterly on county road 432 to highway US-2 near the city of Gulliver, northeasterly on highway US-2 to highway M-77, northerly on highway M77 to county road 436 (also known as H-42 or Curtis road), easterly on county road 436 into Mackinac county, easterly on Curtis road to Sandtown road in the town of Curtis, easterly on Sandtown road to highway M-117, northerly on M-117 to highway M-28, easterly on M-28 through Luce county to Borgstrom road, southerly on Borgstrom road to highway US-2, continue due south from intersection of Borgstrom road and US-2 to the lakeshore of Lake Michigan (short distance along the east-side line of section 29, T43N R8W), due south into Lake Michigan then running along the Lake Michigan shoreline including all offshore islands in those counties to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 5, 2003, Eff. May 10, 2003; Am. 6, 2009, Eff. May 7, 2009.
- 12.49a "Deer management unit 149 (Bois Blanc unit)" defined. Sec. 12.49a "Deer management unit 149 (Bois Blanc unit)" means all of Bois Blanc island and Round island in Lake Huron, Mackinac county. History: Am. 8, 2001, Eff. Jun 1, 2001. 12.49b "Deer management unit 249 (Trout lake unit)"defined. Sec. 12.49b "Deer management unit 249 (Trout lake unit)" means that area of Luce, Chippewa, and Mackinac counties bounded by a line beginning in Lake Michigan due south from intersection of Borgstrom road and US-2 just north of the Lake Michigan shoreline, then due north (short distance along the east-side line of section 29, T43N R8W) to said intersection northerly along Borgstrom road to highway M-28 in Luce county, easterly on M-28 into Chippewa county to Tilson road (east side of section 19, T46N R02W) located southwest of town of Brimley, southerly on Tilson road to the combined highway M-48/Mackinac trail (no turn, road name change) at the town of Rudyard, southerly on highway M48/Mackinac trail to the split of highway M-48 and Mackinac trail, easterly on highway M-48 to highway I75, southerly on I-75 into Mackinac county to highway M-134, easterly on M-134 to the Pine river, downstream along the center of the Pine river to its mouth in Lake Huron (section 10, T42N R03W), due south into Lake Huron then southerly in Lake Huron along the shore, including any offshore islands in those counties south of the defined shoreline, to the center of the straits of Mackinac into Lake Michigan, then northerly and easterly along the shore, including any offshore islands south of the defined shoreline, to the point of beginning while excluding those portions defined in section 12.49a as deer management unit 149. History: Am. 6, 2009, Eff. May 7, 2009.
- 12.50 "Deer management unit 050 (Macomb county)"defined. Sec. 12.50 "Deer management unit 050 (Macomb county)" means all of Macomb county. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001.
- 12.51 "Deer management unit 051 (Manistee county)"defined. Sec. 12.51 "Deer management unit 051 (Manistee county)" means all of Manistee county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.52 Repealed Am. 8, 2002, Eff. Jun 8, 2002. Publisher's note: The repealed sections pertained to Deer Management Unit 052 (Ishpeming unit).
- 12.52a "Deer management unit 152 (Gwinn unit)" defined. Sec. 12.52a "Deer management unit 152 (Gwinn unit)" means that area of Marquette and Dickinson counties bounded by a line beginning at the junction of county road 426 and county road SI in Watson (Marquette county), then northeasterly on county road SI to the northwest corner of section 6, T42N R24W, easterly on the north section lines of sections 6 and 5, T42N R24W, to the Escanaba river, northwesterly along the Escanaba river to the middle branch of the Escanaba river, northwesterly along the Escanaba river to county road 478, westerly on county road 478 to county road 601, southwesterly on county road 601 through the city of Republic to highway M-95, southerly on highway M-95 into Dickinson county to Floodwood road, easterly on Floodwood road to McGregor creek road (section 10, T44N R28W), southeasterly on McGregor creek road to Cleveland homestead road (section 25, T44N R28W), easterly on Cleveland homestead road to county road 581, northerly and easterly on county road 581 to county road 438 in Marquette county, easterly on county road 438 to Ross grade road, southerly on Ross grade road to county road 581, southwesterly on county road 56 to county road 426, southeasterly on county road 540 to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 8, 2002, Eff.

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- 12.52b "Deer management unit 252 (Rock unit)"defined. Sec. 12.52b "Deer management unit 252 (Rock unit)" means that area of Marquette, Delta, and Alger counties bounded by a line beginning at the junction of highway US-41 and county road 432, then southwesterly on county road 432 to county road 529, westerly on county road 529 to county road H-59, westerly on county road H-59 to county road DA in Marquette county, westerly on county road DA to the north line of section 5, T42N R24W, to the Escanaba river, northerly along the Escanaba river to highway M-35, easterly on highway M-35 to county road 456, easterly on county road 456 to highway US-41, southeasterly on highway US-41 to King road, southeasterly on King road to county road H-44 (Traunik Kiva road), easterly on county road H-44 to county road H-01 (Eben- Trenary road), southerly on county road H-01 to highway M-67, westerly on highway M-67 to highway US-41, southerly on highway US-41 to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.53 "Deer management unit 053 (Mason county)"defined. Sec. 12.53 "Deer management unit 053 (Mason county)" means all of Mason county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.54 "Deer management unit 054 (Mecosta county)"defined. Sec. 12.54 "Deer management unit 054 (Mecosta county)" means all of Mecosta county. History: Eff. Mar 31, 1989; Am. 4, 1990, Eff. Sep 1, 1990; Am. 6, 1998, Eff. May 15, 1998; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.54a "Deer management unit 354 (Lakeview unit; Mecosta Montcalm)" defined. Sec. 12.54a "Deer management unit 354 (Lakeview unit; Mecosta Montcalm)" means all of Mecosta and Montcalm counties except those lands defined in section 12.54b. History: Am. 8, 2013, Eff. June 14, 2013; Am. 4, 2017, Eff. June 9, 2017.
- 12.54b "Deer management unit 359 (Core CWD area)" defined. Sec. 12.54b "Core CWD Area" means those portions of Mecosta and Montcalm counties included in all of: Austin, Aetna, Deerfield, Hinton, Mecosta, and Morton townships in Mecosta county and Cato, Reynolds, and Winfield townships in Montcalm county. History: Am. 4, 2017, Eff. June 9, 2017.
- 12.55 "Deer management unit 055 (Menominee unit)" defined. Sec. 12.55 "Deer management unit 055 (Menominee unit)" means that area of Menominee and Delta counties bounded by a line beginning near the city of Faithorn in Menominee county on the Michigan/Wisconsin state line at the junction of the Menominee river and the Wisconsin Central LTD railroad (previously known as the Soo Line railroad, in section 20, T38N R28W), easterly on the railroad past highway US-2 near the city of Hermansville into Delta county to county road 535 (northeast corner of section 30, T39N R24W) near the city of Schaffer, northerly on county road 535 to county road 414 in the city of Schaffer, northerly and easterly on county road 414 to county road 525, northerly on county road 525 to county road 416 in the city of Flatrock (northeast corner of section 31, T40N R23W, no direction change), northerly on county road 416 to county road 426 near the city of Cornell, southeasterly on county road 426 to highway US-2/US-41, northerly on highway US-2/US-41 to the Escanaba river, southeasterly along the Escanaba river to the Little Bay de Noc shoreline, southerly along the Little Bay de Noc shoreline which becomes the Green bay shoreline of Lake Michigan, southwesterly along the Green bay shoreline to the mouth of the Menominee river south of the city of Menominee, including any islands adjacent to the shoreline between the Escanaba and Menominee rivers, upstream along the Menominee river, which constitutes the Michigan-Wisconsin state line, to the point of beginning. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989, Am. 12, 1996, Eff. Sep 1, 1996; Am. 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001; Am. 12, 2001, Eff. Sep 1, 2001; Am. 8, 2002, Eff. Jun 8, 2002; Am. 5, 2003, Eff. May 10, 2003
- 12.55a "Deer management unit 155 (Gladstone unit)" defined. Sec. 12.55a "Deer management unit 155 (Gladstone unit)" means that area of Delta and Marquette counties bounded by a line beginning at the mouth of the Rapid river near the city of Rapid River in Delta county, then northerly upstream to highway US-2, westerly on highway US-2 toward the city of Rapid River to highway US-41, northerly on highway US-41 to county road 432, westerly on county road 432 to county road 529 at the city of Rock, westerly on county road 529 (H-59) into Marquette county to west Maple Ridge road (also known as county road DA), westerly on west Maple Ridge road to the north section line of sections 5 and 6, T42N R24W, westerly on the north section line of sections 5 and 6, T42N R24W, to county road 426, southeasterly on county road 426 into Delta county to highway US-2/US-41, northerly on highway US-2/US-41 to the Escanaba river, southeasterly down the center of the Escanaba river into Lake Michigan, northeasterly along the Lake Michigan shoreline, including any Delta county islands between the Escanaba and Rapid river mouths, to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 8, 2002, Eff. Jun 8, 2002.
- 12.55b "Deer management unit 255 (LaBranche unit)"defined. Sec. 12.55b "Deer management unit 255 (LaBranche unit)" means that area of Menominee, Delta, Marquette, and Dickinson counties bounded by a line beginning near the city of Hermansville in Menominee county at the junction of highway US-2 and the Wisconsin Central LTD railroad (previously known as the Soo Line railroad), then easterly along the railroad into Delta county to county road 535 (northeast corner of section 30, T39N R24W) near the city of Schaffer, northerly on county road 535 to county road 414 in the city of Schaffer, northerly and easterly on county road 414 to county road 525, northerly on county road 525 to county road 416 in the city of Flatrock (northeast corner of section 31, T40N R23W, no direction change), northerly on county road 416 to county road 426 near the city of Cornell, northwesterly on county road 426 into Marquette county through the city of Arnold, continue westerly on county road 426 into

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Dickinson county to Northland truck trail in the city of Alfred (section 35, T43N R27W), southwesterly on Northland truck trail (through section 28, T42N R27W, also known as Camp 3 road) to Swan Peterson road (section 32, T42N R27W), southerly on Swan Peterson road to highway M-69, westerly on highway M-69 into the city of Foster city to county road 569 (also known as Waucedah road, in Foster city, or county road G-69), southerly on county road 569 to Beaver Pete's road which runs on the north edge of sections 23 and 24, T39N R28W, easterly on Beaver Pete's road into Menominee county to the north-south road in section 19, T39N R27W, southerly on that road to highway US-2, southeasterly on highway US-2 to the point of beginning. History: Am. 5, 2003, Eff. May 10, 2003

- 12.56 "Deer management unit 056 (Midland county)"defined. Sec. 12.56 "Deer management unit 056 (Midland county)" means all of Midland county. History: Eff. Mar 31, 1989; Am. 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.57 "Deer management unit 057 (Missaukee county)"defined. Sec. 12.57 "Deer management unit 057 (Missaukee county)" means all of Missaukee county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 3, 1992, Eff. Sep 1, 1992; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.58 "Deer management unit 058 (Monroe county)"defined. Sec. 12.58 "Deer management unit 058 (Monroe county)" means all of Monroe county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.59 "Deer management unit 059 (Montcalm county)" defined. Sec. 12.59 "Deer management unit 059 (Montcalm county)" means all of Montcalm county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 6, 1991, Eff. Sep 1, 1991; Am. 3, 1992, Eff. Sep 1, 1992; Am. 4, 1993, Eff. Sep 1, 1993; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.60 "Deer management unit 060 (Montmorency county)" defined. Sec. 12.60 "Deer management unit 060 (Montmorency county)" means all of Montmorency county, excluding that part defined in section 12.452 as deer management unit 452. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 6, 1991, Eff. Sep 1, 1991; Am. 3, 1992, Eff. Sep 1, 1992; Am. 4, 1993, Eff. Sep 1, 1993; Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001.
- 12.61 "Deer management unit 061 (Muskegon county)" defined. Sec. 12.61 "Deer management unit 061 (Muskegon county)" means all of Muskegon county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 4, 1993, Eff. Sep 1, 1996; Eff. Sep 1, 1996; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.61a "Deer management unit 361 (Fremont Unit; Muskegon north Newaygo Oceana)" defined. Sec. 12.61a "Deer management unit 361 (Fremont Unit; Muskegon north Newaygo Oceana)" means all of Oceana and Newaygo counties, and those portions of Muskegon county within Zone 2 (north of the Zone 2-3 divider line, defined in Section 1.4). History: Am. 8, 2013, Eff. Jun 14, 2013.
- 12.62 "Deer management unit 162 (south Newaygo county)" defined. Sec. 12.62 "Deer management unit 162 (south Newaygo county)" means all of Newaygo county south of highway M-20. History: Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001; Am. 6, 2009, Eff. May 7, 2009.
- 12.62a "Deer management unit 262 (north Newaygo county)" defined. Sec. 12.62a "Deer management unit 262 (north Newaygo county)" means all of Newaygo county north of highway M-20. History: Am. 6, 2009, Eff. May 7, 2009.
- 12.62b "Deer management unit 062 (Newaygo county)" defined. Sec. 12.62b. "Deer management unit 062 (Newaygo county)" means all of Newaygo county. History: Am. 9, 2018, Eff. June 15, 2018.
- 12.63 "Deer management unit 063 (Oakland county)"defined. Sec. 12.63 "Deer management unit 063 (Oakland county)" means all of Oakland county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989, Am. 12, 1996, Eff. Sep 1, 1996; Am, 3, 1997, Eff. Jun 1, 1997; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.64 "Deer management unit 064 (Oceana county)" defined. Sec. 12.64 "Deer management unit 064 (Oceana county)" means all of Oceana county. History: Eff. Mar 31, 1989; Am. 4, 1990, Eff. Sep 1, 1990; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.65 "Deer management unit 065 (Ogemaw county)"defined. Sec. 12.65 "Deer management unit 065 (Ogemaw county)" means all of Ogemaw county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.66 "Deer management unit 066 (Ontonagon unit)" defined. Sec. 12.66 "Deer management unit 066 (Ontonagon unit)" means that area of Ontonagon and Gogebic counties bounded by a line beginning in Ontonagon county at the mouth of the Ontonagon river in the city of Ontonagon, then southeasterly/ upstream along the center of the Ontonagon, southeasterly on M-64 in city of Ontonagon, northeasterly on M-64 to highway M-38 in city of Ontonagon, southeasterly on M-38 to highway M-26 near village of Greenland, southwesterly on M-26 to highway M-45, southerly on highway M-45 to highway M-28 near the city of Bruce Crossing, westerly on highway M-28 to highway M-64 (near Merriweather, section 11, T48N R43W), southerly on highway M-64 into Gogebic county past the western shore of lake Gogebic to highway US-2, westerly on highway US-2 into city of Wakefield to county road 519, northerly on county road 519 to South boundary road near the Lake Superior shoreline, easterly on South boundary road to the Presque Isle river, northerly/downstream along the center of the Presque Isle river to its mouth on the Lake Superior shoreline, into Ontonagon county to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 19, 2005, Eff. Feb 10, 2006.

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- 12.67 "Deer management unit 067 (Osceola county)"defined. Sec. 12.67 "Deer management unit 067 (Osceola county)" means all of Osceola county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.68 "Deer management unit 068 (Oscoda county)" defined. Sec. 12.68 "Deer management unit 068 (Oscoda county)" means all of Oscoda county, excluding that part defined in section 12.452 as deer management unit 452. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001.
- 12.69 "Deer management unit 069 (Otsego county)"defined. Sec. 12.69 "Deer management unit 069 (Otsego county)" means all of Otsego county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.70 "Deer management unit 070 (Ottawa county)" defined. Sec. 12.70 "Deer management unit 070 (Ottawa county)" means all of Ottawa county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.71 "Deer management unit 071 (Presque Isle county)" defined. Sec. 12.71 "Deer management unit 071 (Presque Isle county)" means all of Presque county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.72 "Deer management unit 072 (Roscommon county)" defined. Sec. 12.72 "Deer management unit 072 (Roscommon county)" means all of Roscommon county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.73 "Deer management unit 073 (Saginaw county)" defined. Sec. 12.73 "Deer management unit 073 (Saginaw county)" means all of Saginaw county, excluding that part defined in section 12.73b as deer management unit 273. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 8, 2013, Eff. Jun 14, 2013.
- 12.73a Repealed. Am. 8, 2013, Eff. June 14, 2013. Publisher's note: The repealed section pertained to deer management unit 173. History: Am. 8, 2001, Eff. Jun 1, 2001; Am. 8, 2013, Eff. Jun 14, 2013.
- 12.73b "Deer management unit 273 (Shiawassee deer management)" defined. Sec. 12.73b "Deer management unit 273 (Shiawassee deer management)" means the posted lands of the Shiawassee river state game area and the Shiawassee national wildlife refuge. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.74 "Deer management unit 074 (St. Clair county)"defined. Sec. 12.74 "Deer management unit 074 (St. Clair county)" means all of St. Clair county bounded by a line beginning at the split of the north and south channels of the St. Clair river, then south-southwesterly along the south channel of the St. Clair river to Lake St. Clair, northwesterly to the end of the middle channel of the St. Clair river, northwesterly along the far west points of Strawberry, Middle, and North islands to the north channel of the St. Clair river, easterly along the north channel of the St. Clair river to the point of beginning, excluding that part defined in section 12.74a as deer management unit 174. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.74a "Deer management unit 174 (St. Clair flats)" defined. Sec. 12.74a "Deer management unit 174 (St. Clair flats)" means that area of St Clair county bounded by a line beginning at the split of the north and south channels of the St. Clair river, then south-southwesterly along the south channel of the St. Clair river to Lake St. Clair, northwesterly to the end of the middle channel of the St. Clair river, northwesterly to the southwest end of Strawberry island, north-northeasterly along the far west points of Strawberry, Middle, and North islands to the north channel of the St. Clair river, easterly along the north channel of the St. Clair river to the point of beginning. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.75 "Deer management unit 075 (St. Joseph county)" defined. Sec. 12.75 "Deer management unit 075 (St. Joseph county)" means all of St. Joseph county. History: Am. 8, 2001, Eff. Jun 1, 2001.
- 12.76 "Deer management unit 076(Sanilac county)" defined. Sec. 12.76 "Deer management unit 076 (Sanilac county)" means all of Sanilac county. History: Eff. Mar 31, 1989; Am. 4, 1993, Eff. Sep 1, 1993; Am. 6, 1998, Eff. May 15, 1998; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.77 Repealed. Am. 8, 2001, Eff. Jun 1, 2001 Publisher's note: The repealed section pertained to simplifying deer management unit boundaries. [editorial note: unit was Schoolcraft county DMU 077].
- 12.78 "Deer management unit 078 (Shiawassee county)" defined. Sec. 12.78 "Deer management unit 078 (Shiawassee county)" means all of Shiawassee county except those lands defined in section 12.33a. History: Eff. Mar 31, 1989; Am. 8, 2001, Eff. Jun 1, 2001; Am. Interim Order 1, 2015, Eff. May 26, 2015, Am. 9, 2015, Eff. Aug. 14, 2015; Am. 7, 2016, Eff. May 13, 2016.
- 12.79 "Deer management unit 079 (Tuscola county)"defined. Sec. 12.79 "Deer management unit 079 (Tuscola county)" means all of Tuscola county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.80 "Deer management unit 080 (Van Buren county)" defined. Sec. 12.80 "Deer management unit 080 (Van Buren county)" means all of Van Buren county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.81 "Deer management unit 081 (Washtenaw county)" defined. Sec. 12.81 "Deer management unit 081 (Washtenaw county)" means all of Washtenaw county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.82 "Deer management unit 082 (Wayne county)"defined. Sec. 12.82 "Deer management unit 082 (Wayne county)" means all of Wayne county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001.
- 12.83 "Deer management unit 083 (Wexford county)"defined. Sec. 12.83 "Deer management unit 083 (Wexford MI-DNR-WLD geospatial metadata file (FGDC) for "Wildlife Management Units White-tailed Deer 'historical'/2021 polygons" v2022aug31- Page 69 of 17

county)" means all of Wexford county. History: Eff. Mar 31, 1989; Am. 13, 1989, Eff. Sep 1, 1989; Am. 8, 2001, Eff. Jun 1, 2001.

- 12.84 12.97 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section[s] pertained to deer management unit 84 through 97.
- 12.98 Repealed. Am. 6, 1998, Eff. May 15, 1998 Publisher's note: The repealed section pertained to deer management unit 98.
- 12.99 12.108 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 99 through 108.
- 12.109 Repealed. Am. 4, 1990, Eff. Sep 1, 1990. Publisher's note: The repealed section pertained to deer management unit 109.
- 12.110 12.111 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 110 through 111.
- 12.112 Repealed. Am. 6, 1995, Eff. Sep 1, 1995. Publisher's note: The repealed section pertained to deer management unit 112.
- 12.113 12.156 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 113 through 156.
- [12.157-12.160? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.161 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 161.
- [12.162-12.187? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.188 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 188.
- 12.189 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 189.
- [12.190-12.196? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.197 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 197.
- [12.198? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.199 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 199.
- [12.200-12.202? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.203 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 203.
- 12.204 Repealed. Am. 4, 1990, Eff. Sep 1, 1990. Publisher's note: The repealed section pertained to deer management unit 204.
- 12.205 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. History: Eff. Mar 31, 1989; Am. 8, 2001, Eff. Jun 1, 2001.
- [12.206? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.207 Repealed. Am. 4, 1990, Eff. Sep 1, 1990. Publisher's note: The repealed section pertained to deer management unit 207.
- 12.208 Repealed. Am. 7, 2000, Eff. Sep 1, 2000 Publisher's note: The repealed section pertained to deer management unit 208.
- [12.209-12.213? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.214 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 214.
- 12.215 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 215.
- [12.216-12.218? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.219 Repealed. Am. 6, 1999, Eff. Sep 1, 1999. Publisher's note: The repealed section pertained to deer management unit 219.
- 12.220 Repealed. Am. 6, 1998, Eff. May 15, 1998 Publisher's note: The repealed section pertained to deer management unit 220.
- 12.221 12.229 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 221 through 229.
- 12.229 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 229.
- 12.230 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer MI-DNR-WLD geospatial metadata file (FGDC) for "Wildlife Management Units White-tailed Deer 'historical'/2021 polygons" v2022aug31- Page 70 of 17

management unit 230.

- [12.231-12.234? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.235 12.237 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 235 through 237.
- [12.238? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.239 Repealed. Am. 3, 1997, Eff. Jun 1, 1997. Publisher's note: The repealed section pertained to deer management unit 239.
- 12.240 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 240.
- [12.241? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.242 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 242.
- [12.243-12.244? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.245 Repealed. Am. 4, 1990, Eff. Sep 1, 1990. Publisher's note: The repealed section pertained to deer management unit 245.
- [12.246-12.248? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.249 Repealed. Am. 6, 1995, Eff. Sep 1, 1995 Publisher's Note: The repealed section pertained to deer management unit 249.
- 12.250 -12.252 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 250 through 252.
- [12.253? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.254 Repealed. Am. 6, 1998, Eff. May 15, 1998. Publisher's note: The repealed section pertained to deer management unit 254.
- [12.255-12.256? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.257 Repealed. Am. 3, 1992, Eff. Sep 1, 1992. Publisher's Note: The repealed section pertained to deer management unit 257.
- [12.258-12.262? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.263 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 263.
- [12.264-12.282? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.283 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 283.
- [12.284-12.287? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.288 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 288.
- [12.289-12.290? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.291 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 291.
- [12.292-12.312? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.313 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 313.
- [12.314-12.316? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.317 12.324 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 317 through 324.
- [12318-12.325? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.326 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 326.
- 12.327 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 327.
- [12.328? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.329 12.332 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 329 through 332.
- [12.333-12.236? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.337 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 337.

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- [12.338-12.341? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.342 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 342.
- [12.343-12.387? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.388 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 388.
- [12.389-12.413? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.414 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 414.
- 12.415 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 415.
- [12.416-12.441? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.442 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 442.
- 12.452 "Deer management unit 452 (TB core area)" defined. Sec. 12.452 "Deer management unit 452 (TB core area)" means all of Montmorency, Alpena, Alcona, and Oscoda counties bounded by a line beginning at the junction of highway M-32 and highway M-33 in eastern Montmorency county, then easterly on highway M-32 past the city of Hillman and crossing the Montmorency-Alpena county line to King Settlement road near the city of Paxton, southerly on King Settlement road to Henry road, continue southerly on King Settlement road to Werth road, easterly on Werth road to Hubbard Lake road, southerly on Hubbard Lake road to Hubbard Lake road (also known as Scout road), southerly on Hubbard Lake road to Spruce road, continue southerly on Hubbard Lake road to highway M-72, westerly on highway M-72 past the city of Curran and crossing the Alcona-Oscoda county line to highway M-72 and highway M-33 near the city of Fairview, northerly on highway M-33 crossing the Oscoda-Montmorency county line to the point of beginning. History: Am. 12, 1996, Eff. Sep 1, 1996; Am. 3, 1997, Eff. Jun 1, 1997; Am. 6, 1998, Eff. May 15, 1998; Am. 8, 2001, Eff. Jun 1, 2001; Am. 14, 2001, Eff. Sep 15, 2001; Am. 7, 2016, Eff. May 13, 2016.
- [12.455-12.479? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.480 12.482 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 480 through 482.
- 12.483 "Deer management unit 351 (Mideast Upper Peninsula)" defined. Sec. 12.483 "Deer management unit 351 (Mideast Upper Peninsula) means all of the following: deer management unit 021 as defined in section 12.21, deer management unit 349 as defined in section 12.49, deer management unit 249 as defined in section 12.49b, deer management unit 149 as defined in section 12.49a, deer management unit 017 as defined in section 12.17, and deer management unit 117 as defined in section 12.17a. History: Am. 8, 2020; Eff. Feb. 12, 2021. 12.484 Deer management unit 352 (Midwest Upper Peninsula)" defined.
- Sec. 12.484 "Deer management unit 352 (Midwest Upper Peninsula) means all of the following: deer management unit 027 as defined in section 12.27, deer management unit 036 as defined in section 12.36, deer management unit 152 as defined in section 12.52a, and deer management unit 252 as defined in section 12.52b. History: Am. 8, 2020; Eff. Feb. 12, 2021.
- [12.485? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- 12.486 "Deer management unit 486 (southern Lower Peninsula multi-county)" defined. Sec. 12.486 "Deer management unit 486 (southern Lower Peninsula multi-county)" means all of Allegan, Barry, Bay, Berrien, Branch, Calhoun, Cass, Clinton, Eaton, Genesee, Gratiot, Hillsdale, Huron, Ingham, Ionia, Isabella, Jackson, Kalamazoo, Kent, Lapeer, Lenawee, Livingston, Mecosta, Midland, Montcalm, Muskegon, Oakland, Ottawa, Saginaw, St. Joseph, Sanilac, Shiawassee, Tuscola, Van Buren, and Washtenaw counties, plus deer management unit 162 (south Newaygo county). History: Am. 6, 2009, Eff. May 7, 2009; Am. 7, 2011, Eff. Jun 10, 2011. 12.487 "Deer management unit 487 (northeast Lower Peninsula multi-county)" defined.
- Sec. 12.487 "Deer management unit 487 (northeast Lower Peninsula multi-county) means all of Alcona, Alpena, losco, Montmorency, Oscoda, and Presque Isle counties. History: Am. 6, 2009, Eff. May 7, 2009.
- 12.488 12.490 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 488 through 490. 12.492 12.497 Repealed. Am. 8, 2001, Eff. Jun 1, 2001. Publisher's note: The repealed section pertained to deer management unit 492 through 497. 12.498 "Core CWD Area" defined.
- [12.491-12.497? either never were a section or were repealed before repealed sections kept in Chapter 12.]
- Sec. 12.498 "Core CWD Area" means the following: (1) All of Ionia, Kent, Mecosta, Montcalm, and Newaygo counties. History: Am. 4, 2017, Eff. June 9, 2017; Am. Interim Order 1 of 2017, Eff. Oct. 4, 2017; Am. 12, 2018, Eff. Aug. 10, 2018. 1
- 12.499 "Urban deer management zone (Macomb, Oakland, and Wayne counties)" defined. Sec. 12.499 "Urban

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deer management zone" means all of Macomb, Oakland, and Wayne counties. History: Am. 4, 2017, Eff. June 9, 2017.

- [Note: skip WCO sections 12.500 to 12.899 as these sections are not applicable to white-tailed deer.]
- 12.900 Repealed. Am. 7, 2011, Eff. June 9, 2011. Publisher's note: The repealed section pertained to a CWD surveillance zone in Kent County. [... re: the 9 townships block in Kent county area relevant to 2008-2010; previous text was "Sec. 12.900 "CWD surveillance zone" means the townships of Tyrone, Solon, Nelson, Sparta, Algoma, Courtland, Alpine, Plainfield, and Cannon in Kent County. History Note: Am. 16, 2008, Eff. Oct 10, 2008".].
- 12.901 "CWD management zone" defined. Sec. 12.901 "CWD management zone" means all of Barry, Calhoun, Clinton, Eaton, Gratiot, Hillsdale, Ingham, Ionia, Isabella, Jackson, Kent, Lenawee, Mecosta, Midland, Montcalm, Muskegon, Newaygo, Ottawa, and Shiawassee counties. History: Am. Interim Order 1, 2015, Eff. May 26, 2015, Am. 9, 2015, Eff. Aug. 14, 2015; Am. 7, 2016, Eff. May 13, 2016; Am. 12, 2018, Eff. Aug. 10, 2018; Am. 7, 2019, Eff. July 12, 2019.
- 12.902 "Core CWD Surveillance Area" defined. Sec. 12.902 "Core CWD Surveillance Area" means that area of Delta, Dickinson, and Menominee counties bounded by a line beginning in Dickinson county at the junction of the centerline of highway US-141 and highway US-2 (shared road segment) with the centerline of the Menominee river (a coincident line with the county boundary and the state boundary with Wisconsin) located northwest of the city of Iron Mountain, then westerly (about 1 mile) along the centerline on US-141/US-2 to the intersection with state highway M-95, northerly on M-95 to highway M-69 near the town of Randville, southeasterly on M-69 into Delta county to highway US-41 and highway US-2 (shared road segment) located west of the town of Bark River, southwesterly and westerly on US-41/US-2 into Menominee county where US-41 and US-2 diverge (US-41 heads southerly and US-2 heads westerly) near the town of Powers, continue on US-41 southerly into the town of Carney to county road G-18, westerly on G-18 to the junction of G-18 with the centerline of the Menominee river and the county/state boundary, northerly and northwesterly upstream along the Menominee river and county/state boundary, into Dickinson county along that river-centerline/county/state boundary to the point of beginning. History: Am. 7, 2019, Eff. July 12, 2019.
- [End of WCO chapter 12, management units defined, for white-tailed deer.]

(Yes, this is the longest MI-DNR-WLD metadata file, to date, that we have; congratulations for making it to here, reader :)).

(end-of-file)