

Evaluating and Determining Motorized Use on Department Roads

Goals, Principles, Assumptions, Considerations, and Definitions

I. Introduction

A. Background.

The purpose of this guidance is to document the department's approach and definitions used to inventory and evaluate motorized access for the public on department properties to meet the requirements of sec. 23.116, Wis. Stats. The statute reads:

The department shall inventory and map all roads that are located on each department property. Each map shall designate which roads are open to the public for the use of motorized vehicles and shall state when each road is open or closed for such use.

For each department property, the department shall work with members of the public, governmental units, and other interested parties to prepare a plan for allowing the public to use motorized vehicles on the department property. Ecological, economic, and social criteria shall be considered in preparing each plan. Each plan shall include methods for implementing the plan, and each plan shall contain criteria to be used in determining when the use of motorized vehicles may be restricted or temporarily prohibited by the department due to logging or other activities.

Roads on DNR lands could provide two types of motorized use. First, roads can be used to provide vehicle access into properties. This can be popular on the DNR's bigger properties where sizeable portions can be miles from the nearest vehicle access point. In many cases, these roads are "spur roads" that end in a parking lot. Of course, providing vehicle access must be balanced with the need to also provide large areas that, by design, are difficult to reach and provide visitors with a sense of remoteness, wilderness and isolation. Large tracts without vehicle access are also important for many types of wildlife.

Second, roads open to recreational vehicles (e.g., ATVs, UTVs, motorcycles, and snowmobiles) can provide critical linkages in larger regional trail networks. For example, currently many DNR roads provide key connections in county-wide snowmobile trail systems. The department classifies roads that are also used as trails as "routes."

The department will undertake a multi-step process to identify the most appropriate roads, vehicle types, and seasons of use to provide appropriate types of motorized use on its properties. The outcomes of this work will include:

1. Maps for each property that depict:
 - Roads open for public motorized use.
 - The seasonality of the public's use of roads.
 - The planned development level of the roads.
 - The types of motorized vehicles allowed (e.g. licensed street vehicles, ATV, UTV, off- road motorcycles, snowmobiles, etc.)
2. A database of road attributes and features that is linked to existing department GIS and land records data systems.

B. Goals for evaluating and determining motorized use:

1. Develop a comprehensive database on department roads and determine which will be open and closed for public motorized use, their seasonality, the future development level, and the types of motorized vehicles allowed.

2. Provide opportunities for motorized access within department properties where appropriate, intended and publicly supported.
3. Provide opportunities for motorized access across department properties that provide critical linkages in larger regional trail networks where appropriate, intended and publicly supported.

C. Principles for evaluating and determining motorized use:

1. Applying the considerations is not independent in nature; rather, they are intertwined, affecting one another. The considerations will be analyzed comprehensively in a balanced approach.
2. The evaluation process will consider all types of motorized use on roads and the public's desire to access and enjoy department lands using both motorized and non-motorized means.
3. The department will use the evaluation process and considerations that have been developed with public and partner input.
4. The department will monitor and evaluate impacts of changes to motorized use on properties and apply the results to properties as appropriate. Issues to evaluate could include changes to existing recreational use patterns and impacts to natural resources (e.g., populations of sensitive species, soil compaction and erosion, distribution of invasive species, and the prevalence and impacts from illegal motorized uses).

D. Assumptions in evaluating and determining motorized use:

1. To meet the range of recreational access and experiences desired by the public, the department will provide areas both where motorized use is allowed and areas where motorized use is prohibited.
2. Local conditions, demands, and opportunities vary across the state. As a consequence, although the same evaluation considerations will be used statewide, the decisions about the appropriate road network open to the public for motorized use, the types of vehicles allowed, and their seasonality, will be unique to each property.
3. The assessment and determination for properties and roads will be evaluated on their individual merits.
4. The department has the authority to designate roads for multiple uses, including ATVs, UTVs, off-road motorcycles, and 4-wheel drive trucks, on all types of its properties.
5. The recommendation of opening or closing roads for different types of motorized access will be made with the recognition that, based on a property's attributes and existing uses, motorized uses may have adverse impacts on: (1) non-motorized recreational uses and inadvertently lead to their displacement, and (2) on sensitive habitats and species.
6. Roads identified to be opened to public motorized access that are not currently in a condition to sustainably support that use, will not be opened until necessary funds or donated materials and labor are available and the improvements have been completed.
7. Department roads opened for licensed vehicles will, from a legal standpoint, be designated as "highways of the state." As such, they will be open for all forms of transportation legally allowed on highways, including bicycles, mopeds, motorcycles, horses, and animal-drawn vehicles.
8. The department has the authority to close roads on a temporary or permanent basis by posted notice to protect natural resources, maintain public safety, address recreational conflicts, and/or other issues.
9. Existing roads on dams and dikes will not be opened to public motorized access unless the road meets engineering and safety requirements for sustained vehicle traffic.
10. The department has the authority to establish speed limits by posted notice to achieve safe and sustainable use on department-controlled roads. The maximum speed for all vehicles on department roads is 25 mph.

II. Determining Motorized Use

Considerations for determining roads open to the public for motorized uses to provide access within DNR properties and to provide linkages in regional road, route and trails networks.

Select roads to be open for public motorized use within department properties, the types of vehicles allowed, seasonality, and other appropriate guidelines that:

1. *Are consistent with local opinions and desires for motorized and non-motorized access to department lands.*

In this evaluation, consider the following:

- Results of surveys, polls, or referendums indicating public views on increased or decreased motorized access to public lands.
- Existing opportunities in the area for motorized access as well as opportunities for quiet or silent sports.
- Likelihood that existing visitors' recreational experiences will be diminished or enhanced.
- Likelihood that neighboring private landowners' use and enjoyment of their property will be diminished or enhanced.

2. *Address visitor requests for access with department properties, including seasonal uses.*

In this evaluation, consider the following:

- The demand by the public to use motorized vehicles to gain access to the property, including purpose, location, density, seasonality and types of vehicles.
- The demand by the public for non-motorized uses of properties and for different types of recreation access.
- The potential conflicts that different types of motorized access may have on non-motorized visitors.
- Public safety issues.
- The current use of the road, including development level, length of use (temporary or permanent), amount and timing of use, and type of use (recreational, management purposes, or administrative).
- The potential connections to local and regional transportation and recreation trail and route networks including adjacent public lands and existing Town and County road, route and trail networks and the types of motorized use on each.

3. *Are operationally feasible for the department to maintain based on the anticipated level of use.*

In this evaluation, consider the following:

- The short and long term maintenance and development costs and the potential for supporting agreements and partnerships with user groups.
- The likely enforcement and monitoring costs.

4. *Do not significantly impact natural resources based on the anticipated level of use.*

In this evaluation, consider the following:

- The effects on vegetation, soils, sensitive resources (e.g., rare species, refuges, natural communities, etc.) and seasonally vulnerable sites (e.g., rookeries, osprey nests, roost sites, hibernaculum, waterfowl staging areas, etc.)
- Important game and non-game species habitat and the role that maintained roads (regardless of whether or not they are open to public motorized use) can have as predator travel corridors.

- Waterways, wetlands, floodplains, and surface water quality. If road work is proposed in “waters of the United States” prior authorization from the USACOE may be required. Roads on lands that were used as compensation for wetland losses may have restrictions on their use and the USACOE should be consulted before any public recreational use or repair of these roads is implemented
 - Potential impacts of dust and pollutants on air and water quality.
 - Important cultural, historical, archeological, and scenic resources and soundscapes.
 - Potential impacts from the spread of invasive species.
5. *Are physically capable of supporting the anticipated level of use (or could be capable with modest repairs to existing infrastructure).*

In this evaluation, consider the following:

- The physical conditions of the road, including surface material, soils, topography, width, sight lines, and other similar features.
 - The conditions of associated infrastructure including bridges and culverts and the feasibility of needed repairs and long-term maintenance.
 - The amount and type of vehicle use the road is designed to support.
6. *Provide net economic benefits.*

In this evaluation, consider the following:

- The net economic benefit that the anticipated level of use may have on businesses in local communities such as outdoor supply stores, outfitters and guides, restaurants and taverns, convenience stores, gas stations, shops, tourist attractions, and other establishments. Use the best available data for the evaluation.
 - The potential change in participation in different outdoor activities and the economic benefits this may have in terms of the sale of licenses, registrations and entry and user fees.
 - The net economic costs associated with opening or closing roads to motorized access.
7. *Are consistent with the property’s legal and policy framework.*

In this evaluation, consider the following:

- The property’s designation and land management classifications.
- Recent master plan decisions.
- Funding requirements and restrictions.

III. Definition of a Road for Inventory Purposes

A. Roads to be included in the inventory are defined as **linear features** that:

1. are **currently drivable** by typical 4WD pick-up trucks or sport utility vehicles,

AND

2. will be drivable for at least the next several years, either because the department intends to maintain for staff or public vehicle use (e.g., it will be mowed or graded as needed), or because it is not anticipated to require active maintenance to be drivable,

AND

3. have evidence of reoccurring or continuous past vehicle use over multiple seasons or for multiple purposes

B. Intent:

The intent of the definition is solely for inventory purposes. The definition is used to decide which linear features should be mapped where a typical four-wheel drive vehicle could use. The definition ensures that all permanent and seasonal roads, including department service roads closed for public use, are inventoried. The inventory is designed to provide a comprehensive inventory of roads, based on current and past use. The inventory does not determine which roads will or will not be open for motorized use, or the future development level, nor should that be considered when deciding if a linear feature should be mapped. The inventory provides a comprehensive basis of current conditions as well as a basis for exploring options for future road designations including use and development level.

C. Guidance:

The inventory includes all roads currently open for public use and roads closed for public use that are used for Department management purposes. All roads currently maintained, e.g. graded or mowed, must be included. Drivable is defined as able to traverse with a typical four wheel drive truck. Roads that are not formally maintained but drivable given past and reoccurring use, either for public use or department management use (e.g., two tracks should be inventoried). Roads that are not drivable due to vegetative growth, encroachment or trees over the road should **not** be inventoried. Conversely, ignore the presence of rocks, gates, berms or other access control structures at the beginning of the road; as long as the road meets the other criteria listed in this document, it should be inventoried. Temporary management roads (defined as roads used for a short-term use such as a timber sale), should be included if the road is still in a drivable condition and is expected to remain so for at least the next several years.

Reoccurring and continuous use is defined as linear features used over multiple years in the same location to provide access for habitat management activities or monitoring purposes. Examples include fire lanes, pheasant stocking lanes, drivable dikes, and access ways to remote recreation developments for emergency or enforcement purposes.

Roads that also serve as trails or are used only seasonally (by either the public or department staff) should be inventoried (e.g., seasonal roads that serve as snowmobile trails in winter),. **Designated** trails are not linear features in the context of the road inventory and should not be included in the inventory. This includes designated trails that are drivable, and indeed are in fact often driven by department vehicles for trail maintenance and management activities. Hunter-walking trails are not true designated trails as they have no defined trail standards yet are maintained and drivable; they should be inventoried.

Only linear features that the department owns, in whole or part, and has decision making authority, for use and development should be inventoried. This includes easements and land use agreements for either public or department use. Town and county roads should not be included in the department's inventory, as they are inventoried by the local authority, however these roads will be used for planning analysis and public use maps.

Linear features may be mapped as multiple segments based on conditional changes, but longer segments considering average conditions are desired. Many linear features, and associated attributes, can be

mapped using existing data, local knowledge and aerial photography. Attributes will be collected for each linear feature to provide a description of current use and conditions.

Historic Abandoned Roads

The inventory **may** include old logging roads and wildlife opening access roads used for forest management purposes **that have signs of past use, but are no longer in a drivable condition or show recent signs of use**. These roads have generally grown in naturally with vegetation but still have visual indicators of an old road, including a different vegetation type or stage of vegetation development. These roads were typically used as temporary logging roads, sometimes only in frozen conditions. These roads are not mapped for public use as they are not drivable, barely recognizable or even walkable, and only used for management operations planning in the future. If these roads are used some time in the future for management purposes and become drivable they would become part of the road inventory for future access consideration. This category of roads generally will be second priority with collection of inventory data over a longer period of time.

However, the department recognizes the value of having historical abandoned roads included in the inventory for a more comprehensive road access planning process and options. These roads will be included in the inventory as needed and only in areas where the public expresses interest for access during the planning process. At that time, and in those areas, a more detailed inventory including historical roads would be initiated to support the planning efforts. This will strategically place additional inventory efforts for abandon roads to areas of specific interest to the public. In addition, if the public knows of old abandoned roads that were drivable at one time, the public can submit those roads for both the inventory as well as ask for those known roads to be considered in the planning process. This would streamline and prioritize the inventory process for historic abandoned roads no longer in a drivable condition and use local public knowledge to populate the inventory.

Motorized Access – Required Road Inventory Attributes

An inventory of DNR managed roads will be conducted to comply with ss. 23.116. The road inventory will consist of a spatial component, i.e. a line on a map, as well as tabular data that will further describe the spatial component. The tabular data is referred to as attributes and each of the attributes will have values associated with them. Below is a listing of each attribute that will be required to define each road in the inventory; a definition, its values and additional information is listed. The attributes that are mandated for collection represent information needed for planning and evaluation of roads for motorized use. Additional attributes may be collected to meet specific program needs or desires but will not be required as a part of the standard DNR road inventory.

Attribute	Definition	Values	Comments
Road classification	Roads as defined in administrative code NR 44.07 (3) (a-d).	Primitive Lightly Developed Moderately Developed Fully Developed	A key has been integrated into LMS to automatically assign the classification (value). Data entered for Surface Type, Cleared Width and Safe Driving Speed will determine the classification. Depending on the entry, not all fields will be required for entry, LMS
Surface type	Material of the surface of the road.	Paved (i.e. concrete, asphalt) Aggregate (i.e., gravel)gravel) Native	Values referenced in NR 44 road classifications.
Road Permanence	Intended length of service of the road.	Permanent Permanent Seasonal Temporary	Values defined in NR 44.
Cleared width	Cleared width is anything being maintained for that road (ex. shoulders, mowed	12' or Less More than 12'	Values determine NR 44 road classification.

Public use	Documents the current public use of the road with cars and trucks.	Open Closed Open seasonally	Data on snowmobile and/or ATV use will be documented in a separate attribute. Roads that facilitate use via PDMD permits with no other public
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Dates Open	Range of time seasonal open roads are open to public use.	Date range by months.	Only to be populated if Public Use attribute value equals Open seasonally
Safe Driving Speed	At what speed can a vehicle safely operate on the road.	15 mph or less More than 15 mph but less than 25 More than 25 mph	Values determine NR 44 road classification. Specific values are conditional to surface type selected. Based on the property manager's knowledge and experience with the road.

<p>Condition</p>	<p>An assessment of the condition of the road.</p>	<p>Class 1, Class 2, or Class 3</p>	<p>Value definitions adapted from <i>2010 Managed Lands Needs Assessment</i>.</p> <p><u>Class 1:</u> Roads are relatively smooth, without potholes, weeds, and overhanging limbs.</p> <p>Roads surfaces are in excellent to good condition. Paved roads have no longitudinal cracks and minimal transverse cracks. Roads are newly constructed or have new overlay or sealcoat. Little or no maintenance required. PASER rating of 8 to 10. Aggregate roads are covered by ¾ inch road gravel or equivalent and are graded at least annually, with gravel added as needed to maintain a level surface and to keep the base material from being exposed. The edges are mowed twice annually, and herbicide applications occur as needed to keep weeds and grass from encroaching.</p> <p><u>Class 2:</u> These roads are serviceable, but many people using the site may be disappointed by their condition. Roads have some ruts or potholes, but not so deep that people driving cars have to avoid these spots. There is vegetation encroaching into the road so it is smaller than originally designed and no longer the shape as originally designed. There are a few overhanging limbs that make people have to stay centered in the road to avoid trees and brush growing along the road. Road surfaces are in good to fair condition. Paved roads may have cracks or surface raveling and may require patching, crack</p>
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			<p>filling or sealcoating. Road surface shows signs of aging but sound structural condition. PASER rating of 4 to 7. Native surface sites have grass taller than 4 inches and may drag on low clearance vehicles if the road is open during the summer.</p> <p><u>Class 3:</u> These sites need major renovation, some vehicles may no longer use these road due to the condition. Paved roads show severe deterioration, significant cracking and potholes. Road surface and base/road structure are in need of extensive repair or replacement. Road may need complete reconstruction. PASER rating of 1 to 3. Gravel roads are either covered by vegetation so the site no longer appears to be a gravel road or there are numerous potholes and exposed base material so people need to drive around these defects. Native surface sites, they are mowed rarely or not at all. Overhanging limbs cause people to drive on to road shoulders to avoid scratching their vehicle.</p>
ATV Access	ATV use is allowed on the road, may be seasonal.	Y/N	
Snowmobile Access	Snowmobile use is allowed on the road, may be seasonal.	Y/N	

Length	Length of road segment.	two fields: feet and miles	Auto generated by LMS
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