

- (a) The policy of allowing ORV use on non-designated forest roads and trails, as well as the designated ORV system should continue in the UP
- (b) A system of monitoring future impacts of this policy, particularly as it may impact the areas natural resources, must be developed
- (c) Enforcement of current ORV regulations must continue as a high priority across the UP
- (d) The DNR Director should work with the Forest Service, forest products industry and state forest managers to develop a consistent ORV policy across the UP
- (e) Continued review and study of this deferral of the Lower Peninsula rules is not needed unless sparked by negative impacts seen in system monitoring as recommended above

The NRC unanimously supported these recommendations.

Public Act 111 of 2003

This act amended the ORV law to transfer the ORV Safety Education program back to the DNR from the Michigan Department of Education.

2003-2007 State Comprehensive Outdoor Recreation Plan

The current SCORP has seven priorities, each of which directly relates to this plan. The highest priority of the SCORP and of the DNR is resource conservation. This includes the restoration of environmental damage to public lands and waters and the implementation of best management practices on the public lands such as proper location and maintenance of recreation facilities such as ORV trails to safeguard the environment.

Other key priorities include providing motorized trail opportunities. The SCORP (DNR 2003:20) notes “User safety and social conflict reduction are key motorized trail challenges that can be met in part through additional, appropriate trails providing safer passage for trail users to goods and services. Securing long-term trail corridors is a priority of this plan”. Another priority is to provide universal access to outdoor recreation opportunity including ORV trails to enable the full range of Michigianians and visitors to enjoy outdoor recreation.

Additional priorities include improving the state forest recreation infrastructure (e.g. ORV trail system and attendant forest campgrounds), improving the state park infrastructure (e.g. Silver Lake ORV area), improve the range, quality and quantity of community outdoor recreation opportunities (e.g. additional local public ORV opportunities with willing local entities) and improved communications and coordination among recreation providers (e.g. improved, more regular assessment of the statewide ORV trail network and integrating state, federal and local ORV opportunities).

Overview of Michigan’s ORV Program

This section provides information on the major aspects of the current ORV program. These include administration, trail maintenance and development, law enforcement, environmental damage restoration and safety education.

Administration

The overall ORV program is administered by the DNR through the Forest, Mineral and Fire Management Division (FMFM). This recognizes that 86% of the designated ORV trail/route system and the majority of the ORV area system is on state forest lands. Day-to-day management responsibility is assigned to the State Motorized Trail Coordinator in FMFM. ORV program grants are administered through FMFM and the DNR Office of Grants, Contracts and Customer Systems (GCACS). ORV licensing is administered by GCACS and ORV safety education is administered by the DNR Law Enforcement Division and GCACS.

Trail Maintenance and Development

Annually, not less than 50% of the ORV Trail Improvement Fund shall be distributed in the form of grants for the purpose of planning, improving, constructing, signing and maintaining ORV trails, areas and routes and access to those trails, areas and routes, the leasing of land, the acquisition of easements, permits or other agreements for the use of land for ORV trails, areas, and routes, to public agencies and non-profit incorporated clubs and organizations. [MCL 324.81119 (1)]

Non-profit organizations and units of government, including federal (US Forest Service), state (Michigan DNR Forest, Mineral and Fire Management and Park and Recreation Divisions) and local units all are involved in trail maintenance. Maintenance must meet standards enumerated in IC 1990 "ORV Trail Improvement Fund Procedures Manual", IC 1991 "DNR ORV Trail and Route Maintenance Handbook" and IC 3600 "ORV Trail Maintenance Grant Application Information". These standards focus on trail clearance and signage. Trail clearance standards are:

- (a) **Motorcycle trails** cleared to 24" width at ground level and 40" from handlebar height up to 8'
- (b) **ATV trails** cleared to 50" width from ground level up to 8'
- (c) **ORV routes** cleared to 72" width from ground level up to 8'

Trail sign standards involve stop signs, stop ahead signs, mixed traffic signs, triangular confidence markers, triangular guide signs (type of trail i.e. visual depiction of Michigan Cross Country Cycle Trail, Motorcycle Trail, ATV Trail or ORV Route), directional guide signs (directional arrows with the type of trail written below the arrow), information signs (includes "you are here maps" and trailhead signs with trail name, distances, emergency phone numbers, etc.) and street licensing notice (when Secretary of State licensing is required). The DNR sign policy (Sign Manual: Department of Natural Resources, 1984), for all trails (motorized and non-motorized) is to require a trail by trail sign plan. This has not been done in the ORV program.

Environmental Damage Restoration

Annually, not less than 12.5% of the ORV Trail Improvement Fund shall be distributed in the form of grants to public agencies and non-profit incorporated clubs for the purpose of

restoring environmental damage caused by ORV use to public lands. [MCL 324.81119 (5)]

The DNR’s resource management plan for the restoration of public lands has three categories of actions in priority order:

- (a) reduce or eliminate erosion into any body of water
- (b) restore damage in any designated roadless area, state natural river corridor or federal wild and scenic river corridor
- (c) restore damage to aesthetically sensitive areas

Techniques to restore damage typically involve erecting barriers to exclude illegal ORV use (natural or human made), restoring typical soil characteristics (e.g. topsoil to an eroded hillside) and reseeding or replanting with appropriate seed mixtures or root stock to reduce erosion and restore native vegetation. This may be done at small discrete locations such as illegal hill climbs or on longer sections of illegal trail. On an illegal trail, native materials such as stone, brush or stumps may be used to bar entry to the illegal trail and the treadway is reseeded or prepared in a way to promote re-vegetation.

However, based on the initial Michigan state forest certification review, Michigan’s current efforts at restoration are not fully meeting the need for restoration. Reviewers found visible ORV damage to state forest land near and away from the designated trail system. Likewise, DNR forest recreation specialists, DNR trail analysts and conservation officers in the northern Lower Peninsula and the Upper Peninsula provided considerable photographic information on current public land ORV damage sites, including digital photos and GPS location data.

The DNR Forest, Minerals and Fire Management Division supplied data for recent trail maintenance and restoration grants (Table 1).

Table 1. ORV trail maintenance and restoration grants 2002-05 (a).

Year	No. Orgs. Req. Mntc. \$ (b)	Mntc. Grant \$ Req.	No. Orgs. Rec. Mntc. \$	Mntc. Grant \$ Recommended	No. Orgs. Req. Rest. \$	Rest. Grant \$ Req.	No. Orgs. Rec. Rest \$	Rest. Grant \$ Recommended
2002-03	17	946,951	17	916,060	4	244,811	3	226,440
2003-04	22	1,189,358	15	900,800	7	342,478	4	253,930
2004-05	20	1,134,569	16	863,619	4	262,506	3	184,766

(a) DNR counted as one organization, US Forest Service counted as one organization

(b) \$ amount rounded to nearest dollar for all \$ columns

The data suggests that the number of trail maintenance and restoration grant sponsors is static to slightly declining. In particular, very few organizations are involved in ORV damage restoration. Over the three year period, expenditures are slightly declining trail maintenance and mixed in damage restoration. Annually, these reported expenditures for trail maintenance and ORV grants represent approximately 45% of the annual revenue from ORV licenses, while 324.81119 provides a formula that 62.5% of the appropriated revenues will be used for these two functions (50% for trail maintenance and 122.5% for damage restoration).

A number of factors account for this difference. First, legislative appropriations have not kept pace with the annual growth of ORV license sales (see Table 11, page 41). Further, some grants/projects that are funded come in under budget or the grantee is unable to perform and the grant lapses with the money returning to the Trail Improvement Fund. The upshot is that as of September 30, 2004, the DNR Office of Budget and Support Services reported there was a balance of \$4,027,400 in the ORV Trail Improvement Fund. This fund balance provides a unique opportunity to fund substantial capital improvements to the system, but also poses a risk that needs for trail maintenance, law enforcement, environmental damage restoration and administration are not being fully met or that the current fee structure is more than sufficient to cover program costs and money could be appropriated for other purposes.

Law Enforcement

Annually, not less than 31.25% of the ORV Trail Improvement Fund shall be distributed each year for enforcement and purchase of any necessary equipment used for enforcement. Of this amount, 24% shall be available to county sheriffs and the remaining balance shall be used by the DNR for enforcement and the purchase of any necessary equipment for enforcement. In considering funding for county sheriffs, the DNR shall consider the:

- (a) Number of miles of ORV trails, routes or areas within the county
- (b) Number of sheriff department employees available for ORV enforcement
- (c) Estimated number of ORVs within the county and that are brought into the county
- (d) Estimated number of ORV days within the county
- (e) Any other factors the DNR considers appropriate

County sheriffs are also required to file reports with the DNR Office of Contracts, Grants and Customer Systems concerning their enforcement activities to verify expenditures. The US Forest Service also provides enforcement of ORV rules in the Lower Peninsula, as the Huron-Manistee National Forests have the same ORV regulations as Lower Peninsula state forests. However, currently the Forest Service is not eligible to receive ORV enforcement grants. The following table provides payments to counties for ORV enforcement for 2001-2005 (Table 2).

Table 2. County ORV enforcement grant activity, 2001-05 (a).

Year	No. Counties Provided Enforcement Grant	Grant \$ Provided to Counties	No. Counties Receive Payment	\$ Payment Made to Counties	% Grant \$ Available Paid to Counties
2001-02	NA	NA	20	160,934	NA
2002-03	20	247,133	19	182,444	74%
2003-04	22	227,700	20	152,970	67%
2004-05	26	227,700	NA – FY not complete	NA – FY not complete	NA

(a) Source: DNR Grants, Contracts and Customer Systems

The table illustrates that some counties intend to provide ORV enforcement, but are not always able to follow through due to a variety of circumstances, most relating to a lack of personnel. As a result, each year actual payments to counties have not risen to the level of enforcement grant funds allocated to counties. Counties who have continued their involvement with ORV enforcement have expressed concern that due to requests for funds exceeding available funds, the DNR has not allowed ORV enforcement grants to support equipment purchases by sheriffs in recent years. It is also noteworthy that the number of counties applying for enforcement grants is increasing.

Regarding enforcement costs, unlike its sister programs, Marine Safety Enforcement and Snowmobile Enforcement, which allow counties to use deputies who do not have state certification from the Michigan Council on Law Enforcement Safety (MCOLES), ORV enforcement requires MCOLES certified officers. This increases the costs for counties per hour of patrol, but it also provides a more highly trained, better equipped enforcement officer.

What are the similarities and differences in ORV enforcement efforts by DNR conservation officers and county sheriffs? Conservation officer data is available for 1998 – 2000 for the counties of Clare, Gladwin, Roscommon, Ogemaw, Crawford, Iosco and Oscoda (DNR Law Enforcement District 7 during the period) provided by Lt. Walt Mikula, District Law Supervisor. This was previously published in Nelson and Lynch (2002) in an evaluation of the AuSable Pilot Project, an effort to improve compliance in part of DNR Enforcement District 7 through additional enforcement effort and improved signage. Data from 2002-03 from participating county sheriffs is from reports required by the ORV Law Enforcement grant agreement and submitted to the DNR Office of Grants, Contracts and Customer Systems by most counties. Enforcement can be compared on the number of contacts per citation and contacts per warning and citation (Table 3).

Table 3. Comparison of recent ORV enforcement activity between counties and DNR Law Enforcement Division enforcement (a).

Agency/Year	Contacts	Citations	Warnings	Contacts/Citation	Contacts/Citation + Warning
DNR LED	3,512	1,537	1,443	2.3	1.2

District 7 1998					
DNR LED District 7 1999	3,977	1,340	1,297	3.1	1.5
DNR District 7 2000	2,431	842	823	3.0	1.5
20 County Sheriffs 2002	22,144	441	1,077	50.2	14.6
12 County Sheriffs 2003	32,483	649	1786	50.0	13.3

(a) Source: DNR 1998-2000 data from DNR Lt. Walt Mikula, DNR Law Enforcement Division as reported in Nelson and Lynch (2002). County 2002 and 2003 data from DNR Grants, Contracts and Customer Systems.

The data strongly suggests that conservation officers tend to be more likely to cite an individual when they make a contact. This may be due to the circumstances of the contacts, such as DNR conservation officers targeting contacts at those they believe are in violation of the law or sheriff deputies making many contacts at trailheads before people are actually riding, encouraging people to return home for forgotten equipment, purchase a proper ORV license, etc., thus not issuing a citation or a warning.

When examining statewide patrol efforts, conservation officers provide approximately $\frac{3}{4}$ of the patrol hours annually (Table 4).

Table 4. Statewide patrol hours and citations for ORV enforcement by DNR conservation officers and county sheriffs participating in ORV enforcement grant program, 2001-2003 (a).

Year	Conservation Officer Patrol Hours	Conservation Officer Citations	Conservation Officer Citations/Hour	Sheriff Patrol Hours (b)	Sheriff Citations (b)	Sheriff Citations/Hour (b)
2001	18,328	3,771	4.9	NA	NA	NA
2002	20,634	3,810	5.4	6,099	441	13.8
2003	17,670	3,776	4.7	6,715	649	10.3

(a) Source: DNR data from DNR Law Enforcement Division; Sheriff data from DNR Grants, Contracts and Customer Systems.

(b) Sheriff data is for 20 of 21 counties participating in ORV grants in 2002 and 12 of 21 counties participating in ORV grants in 2003.

Each patrol hour by DNR conservation officers is two to three times more likely to result in a citation than a patrol hour by a county sheriff deputy. The proportion of the ORV patrol hours provided DNR Law Enforcement Division appears to be similar to the 76%

of ORV enforcement funds provided to the DNR, while the county sheriff patrol hours are similar to the 24% of ORV enforcement grant dollars provided to county sheriffs.

Safety Education

The DNR shall implement a comprehensive ORV information, safety education, and training program that shall include the training of operators and the preparation and dissemination of information and safety advice to the public. The program shall provide for the training of youthful operators and for the issuance of ORV safety certificates to those who successfully complete the training under the program. The safety program instruction may include separate instruction for each type of ORV. The DNR shall cooperate with private organizations and associations, public and private corporations, other state departments and local units of government. The DNR shall also consult with ORV and environmental organizations and associations in regard to the subject matter of a training program and performance testing that leads to certification of ORV operators. It is **only** lawful for youthful operators (those under 16 and above 9) to operate some types of ORVs with both a safety certificate **and** the direct visual supervision of an adult. [MCL 324.81129 selected sections]

From 1991 to 2003, ORV safety education was under the purview of the Michigan Department of Education. They provided grants primarily to non-profit entities to conduct hands-on education and certification testing. Based on information provided to the DNR from the Michigan Department of Education, for years 1998 through 2003, 12,156 youth were certified, or 2,026 per year.

However, DNR Law Enforcement officials deemed that the training was taken by and available to too few youth. That relatively few youth who ride licensed ORVs had completed the training was substantiated by the most recent (1998-99) statewide ORV use and user study. That research concluded that about 1/3 of youth 12-15 who rode licensed ORVs had completed the safety certification course. For youth 10-11 who rode a licensed ORV, the proportion was 1/6 completing the course (Nelson et al. 2000). It is estimated that approximately 8,000 youth annually need to be certified to provide certification for all youth who ride licensed ORVs. This low level of certification and concerns about the availability of education led the DNR to not fully enforce certification requirements. Recently, Public Act 111 of 2003 transferred the authority for ORV safety education back to DNR. The DNR is currently seeking ways to increase the proportion of youth ORV riders completing ORV safety training (including certification) and is poised to fully enforce the safety certificate provision for youth.

Accommodations for Persons with Disabilities

The DNR recognizes, consistent with applicable state and federal laws, the needs of persons with disabilities to use ORVs. Currently persons that meet the following criteria are permitted to operate licensed ATVs/ORVs less than 50" wide on forest roads that are open to public vehicular travel on state lands (including those not posted open to ORVs):

- Those persons issued a valid temporary or permanent handicapper parking permit issued by the Secretary of State.
- Those persons holding Permits to Hunt from a Standing Vehicle.
- Those persons with a physicians certification for the following disabilities:
 - Loss of 1 or both legs or feet;
 - Inability to walk more than 200 feet without having to stop and rest;
 - Inability to walk without prolonged use of wheelchair, walker, crutches, braces or other devices to aide in mobility;
 - Lung disease from which the person's expiratory volume for 1 second is less than 1 liter when measured by spirometry;
 - Lung disease from which the person's arterial oxygen is less than 60 mm/hg of room air at rest;
 - Cardiovascular disease from which the person measures between 3 and 4 on the New York heart classification scale/
 - Cardiovascular disease from which a marked limitation of physical activity causes fatigue, palpitation, dyspnea or anginal pain;
 - Other disease or disorder including but not limited to severe arthritis or neurological-orthopedic impairment that creates a severe mobility limitation.
- Persons with *obvious* severe disabilities (i.e., paraplegics, quadriplegic).

Operation of the ORV is subject to licensing and all other requirements and restrictions, and shall only be at a speed and in a manner which does not degrade the environment. These privileges may extend to one companion of the disabled person serving as operator or passenger of the disabled person's ORV, if the ORV is designed for passenger use.”

The disabled operator must carry a physician certification (form PR 9137 available from the DNR Law Enforcement Division, the DNR website or a DNR Operation Service Center) of the disability on his/her person. The certificate lists the disability or disabilities and whether the condition is judged to be permanent or temporary by the physician.

ORV Trail, Route and Area System

Initial Inventory Criteria

The 1979 ORV Plan reported that the state forest system was being inventoried for potential ORV opportunity by modifying the State Forest Operations Inventory (OI) to include a more detailed inventory of roads and trails. Prior to this time, OI had primarily focused on timber, wildlife and general forest recreation. Ten percent of the state forest was and still is annually inventoried.

Initial Identification and Evaluation Criteria

State forest areas, roads and trails were initially identified and their suitability for ORV use assessed based on the following criteria as reported in the 1979 ORV plan:

Unsuitable for any ORV activity: (e.g. closed to all ORV use)

(a) Dedicated wilderness, quiet or natural areas