

2012 Monitoring of the Proposed Eastern Off-Highway Vehicle Connector Routes - Summary Report

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Background

In spring of 2012, the Ottawa National Forest Travel Management Steering Team developed an Off-Highway Vehicle (OHV) monitoring strategy. This strategy was geared towards answering some of the key questions in the Land and Resources Management Plan (Forest Plan) Monitoring program (see Chapter 4 of the Forest Plan) and was also intended to provide information so management of OHV use on the Forest could be improved through implementation of a more useful Motor Vehicle Use Map and more clear direction to OHV riders on the ground (signs, closure devices, etc). In addition, the Monitoring strategy was focused on identifying areas where resource damage was occurring so it could be corrected and further damage could be prevented. A portion of the monitoring strategy (item number 3) is post-opening monitoring. The objectives of this are to *“help us further understand the effects of opening new routes/trails to motorized vehicles. This monitoring would be focused on the locations where new routes are open, which could include the opening of proposed “Connector Routes” and opening of trails through VMPs, MVUM changes, or other projects. In particular, this monitoring would focus on resource damage and the potential development of user-created routes.”* In order to understand the effects of opening a route or several routes, as baseline inventory (prior to opening) of conditions must be conducted. In addition, a baseline inventory could also help Forest managers understand potential impacts of opening a route.

Eastern OHV Connector Route Project Methods

The Project was proposed in the spring of 2012, and if implemented, would likely begin implementation in 2013. Therefore, according to the Forestwide OHV Monitoring Strategy (and the Strategy proposed in Chapter 4 of the Project Environmental Assessment) the baseline pre-opening monitoring was needed in the 2012 field season. A Forest Service Enterprise Unit (TEAMS) was contracted to complete the work for this pre-opening monitoring, in addition to completing the forestwide inventory noted in the OHV Monitoring Strategy (item 4). For use by TEAMS, The Ottawa created a data dictionary for use in a Trimble GPS Unit for inputting monitoring data in addition to the recording of GPS location information. TEAMS was directed to inventory all Forest Service System roads (closed and open to motorized use) that intersected or were adjacent to the proposed Connector Routes. In addition, any unclassified or user-created routes (including evidence of cross-country travel) directly adjacent to the connector routes were inventoried. Finally, some roads and trails that are accessed by roads directly adjacent to the proposed Connector Routes were inventoried. The staff traveled each route on ATVs where they were passable and

collected the information along the way (including spatial locations of closure devices and resource damage). Note that the group was not able to complete formal monitoring on the far northern portion of the proposed route, but that we do have some data on this area from IDT Field Review notes.

Data Parameters Collected

- Road number/name
- Date
- Type of Motor Vehicle Permitted (according to the current MVUM)
- Presence/type of closure device (including spatial location data)
- Type of motor vehicles using the route
- Evidence of closure device being breached (including spatial location data)
- Presence of a sign indicating appropriate use (including spatial location data)
- Estimate of the amount and type of motorized use (based on tire tracks)
- Evidence, amount, and season of resource damage (primarily water quality or soil damage) (including spatial location data)
- Presence of user-created routes and unauthorized use (including spatial location data)
- Spatial data for the route location

Results

We have not been able to verify the data with additional field checks and some issues with data interpretation should be noted. One primary issue is that in some cases, individuals are permitted to travel system or unclassified roads to access private property or other special uses of the Forest. To the monitoring crew, these would have appeared to be unauthorized use even though there is administrative authorization for the use of the route. Therefore, numbers for unauthorized use are possibly slightly exaggerated below. In addition, some of the system and non-system roads may be accessed by Forest Service employees for administrative use. For example, the northern portion of the connector routes is within a forest management project planning area where timber and road inventories are currently being conducted. These roads may also have appeared to have unauthorized use. Finally, the assessments of resource damage were made by trained individuals, but have not been field-checked or evaluated by Forest staff that specializes in soil and water resources. However, we believe that this data serves as a reasonable baseline for future monitoring to measure change.

The results refer to sections of roads instead of numbers of roads because a few roads have multiple types of designations (ex. open to all vehicles for a portion and then open to OHVs only). Each portion of a road or trail that had a different designation was counted as a section. A total of 266 road sections of 255 roads were monitored. They total 122.5 miles of road (some roads may not have been monitored until the end because they were impassable by motor vehicle). The data was analyzed to answer the following questions.

A. To what extent are closure devices present on the system roads and to what extent are they effective in prohibiting use as intended??

Closure devices have historically been installed on Forest System roads after completion of timber sales or as needed to prohibit highway vehicle use. The majority of closure devices forestwide are earthen berms, many of which can be legally breached by OHVs per the MVUM. This is also true in the project area, therefore, it should be clarified that the percentage of unauthorized use represents use inconsistent with the MVUM. See Table 1 for a display of the results.

From this data, it appears as if the “other” category of closures, including rocks, slash, stumps, and planting is the most effective closure device in this project area. The monitoring crew also included roads that have naturally grown in, in this category, which may inflate the results. Also, gates are likely much more effective than they appear here, since a number of the gated roads are accessing private property and may have special use authorization for those individuals to access an inholding. A large portion of these roads have no closure device (42% of the sections) and this is where the majority of the unauthorized use is occurring. Also note that some sections may have multiple closure devices on two ends of the road or in the middle of the road so the total will not add to 266. Finally, the vast majority of the routes do not include a sign indicating appropriate motor vehicle use. This is because it has been Ottawa National Forest policy to sign roads with the appropriate number and direct visitors to the Motor Vehicle Use Map (MVUM) for directions on the appropriate and prohibited motor vehicle use of these roads. This data confirms anecdotal evidence that this has not been effective in managing unauthorized use and that signs indicating use will likely reduce unauthorized use.

Table 1: Summary of Data– Presence and effectiveness of signs and closure devices on system roads.

Road Condition		Sections		Miles	
		Total	Unauthorized* (%)**	Total	Unauthorized
With Closure Devices		60	17 (28%)	36.3	8.4
Type	Berm	49	17 (35%)	22.6	7.6
	Gate	11	6 (55%)	13.7	2.5
	Other***	11	2 (18%)	6.1	0.6
	None	120	56(46%)	61.9	25.2
With signs		17	7 (41%)	15.8	3.2
With no signs		168	81 (48%)	84.7	34.2

*The unauthorized column represents the number of sections with that type of closure device that show evidence of unauthorized use (likely vehicle tracks on the roadway).

** The number in parenthesis is the percent of sections with that type of closure device that show evidence of unauthorized motor vehicle use.

***Other includes rocks, stumps, planting, slash or signage.

B. To what extent is resource damage occurring and what portion of that has resulted from unauthorized use?

The monitoring found that 38% of roads inventoried had some resource damage. Of these, 45 sections (38.7 miles) had a high amount of resource damage, meaning that more than 25% of the road bed was affected, rutting was greater than 6 inches, or the damage was resulting in a stream or wetland impact. The remainder, 56 roads and 34.9 miles, had a low amount (minor rutting or trail getting wider with use). Resource damage primarily occurs when roads are in sensitive soils or there have been periods of wet weather. Future monitoring efforts (post-opening) will help to determine if resource damage shown in this inventory was the result of a short period of wet weather, or if the routes have continuous damage.

In addition, 27% of the roads inventoried had some unauthorized use (i.e. use that is not consistent with designations on the MVUM). Unauthorized use could include any motor vehicle use of a closed road, or highway vehicle use of a road open only to vehicles 50 inches or less, which are receiving about equal amounts of unauthorized use as shown in Table 2 below. 16% of routes have unauthorized use and resource damage.

Table 2: Summary of data – System roads with resource damage and unauthorized use

Issue		Roads	Miles	Percent of road sections monitored
Resource damage		101	73.6	38%
	Open to all	17	18	-
	Open to <50"	61	44.3	-
	Closed to all	23	11.3	-
Unauthorized use		72	34.2	27%
	Open to <50"	37	20.3	-
	Closed to all	35	13.9	-
Unauthorized use AND resource damage		46	24.1	16%
	Open to <50"	22	13.6	-
	Closed to all	21	10.6	-

C. To what extent are unclassified routes receiving use or creating resource damage?

There are a number of unclassified routes adjacent to the proposed connector routes. These unclassified routes are any route that is receiving or has received motorized use that is not a Forest System road. Forest System roads are assigned a number and needed for forest management activities. These unclassified routes could be logging roads that the Forest previously constructed but no longer utilizes, or some of them may be user-developed. The average length of unclassified routes is ¼ mile. At the time of survey, these routes did not have signs on the ground, nor did they have carsonite posts indicating a road number since they are not system roads. Most of the unclassified routes are receiving unauthorized use, primarily by OHVs. About half of that use is resulting in some resource damage; primarily this is rutting or damage to stream or wetland water quality. A small portion has a high amount of resource damage (rutting deeper than 6 inches, or more than 25% of the road length affected). See Table 3.

Table 3: Summary of data - Unclassified routes with unauthorized use and/or resource damage.

Issues		Sections	Miles
Unclassified routes		90	22.1
Unclassified routes with unauthorized use		84	20.8
Type of vehicles using the route (all of these would be unauthorized use)	All vehicles	20	3.8
	OHV only	59	15.3
	Highway vehicle only	5	1.8
Unclassified with resource damage		41	11.3
	High amount	23	5.6
	With closures	11	2.7

Summary and Action Items

This data can be used to inform management actions to reduce unauthorized use and resource damage in the vicinity of the Eastern OHV Connectors. The Forest Supervisor is considering appropriate actions to take to address these issues and plans to work with partners to assist in implementing appropriate measures. These management actions would be taken regardless of the outcome of the Proposed Eastern OHV Connector Project to address ongoing management concerns with the existing condition. For

example, installation of signs indicating appropriate use (MVUM designations) on all adjacent routes was completed November of 2012 by partner organization, Mi-TRALE volunteers.

Post-opening monitoring of effectiveness of closures, unauthorized use and resource damage would follow for at least 2 –years after implementation of the proposed Eastern OHV Connector Route Project. Where signs have been installed, monitoring can focus on the effectiveness of signs in prohibiting unauthorized use. Where these signs are not effective, additional closure devices, such as berms, gates, or other closures, may be considered. In addition, where there is unauthorized use, despite clear signs indicating appropriate use, further law enforcement actions can be taken.

The data is a nearly complete inventory of adjacent routes and thus can be used to comprehensively discuss use trends in the project area; however, it may not represent use trends and issues Forest wide. The Forestwide OHV inventory (item 4 in the OHV Monitoring Strategy) is a stratified random sample which will provide more information upon which further forestwide analysis and action plans can be based.

OHV Connector Route Monitoring

Map #1
Type of Use, and Resource Damage

L137

* Resource Damage

--- Unauthorized Use

LEGAL USE

— OHV ONLY; SPECIAL DESIGNATION

— BOTH OHV and PASSENGER VEHICLES

East Connector Routes

— County Road

— Forest Service Road

□ Non-Forest Service Land

■ USDA Forest Service



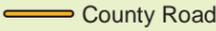
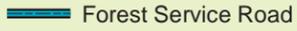
0 0.25 0.5 1
Miles

1250

2210

OHV Connector Route Monitoring
 Map #2
 Type of Use, and Resource Damage

East Connector Routes

-  County Road
-  Forest Service Road
-  Non-Forest Service Land
-  USDA Forest Service

N

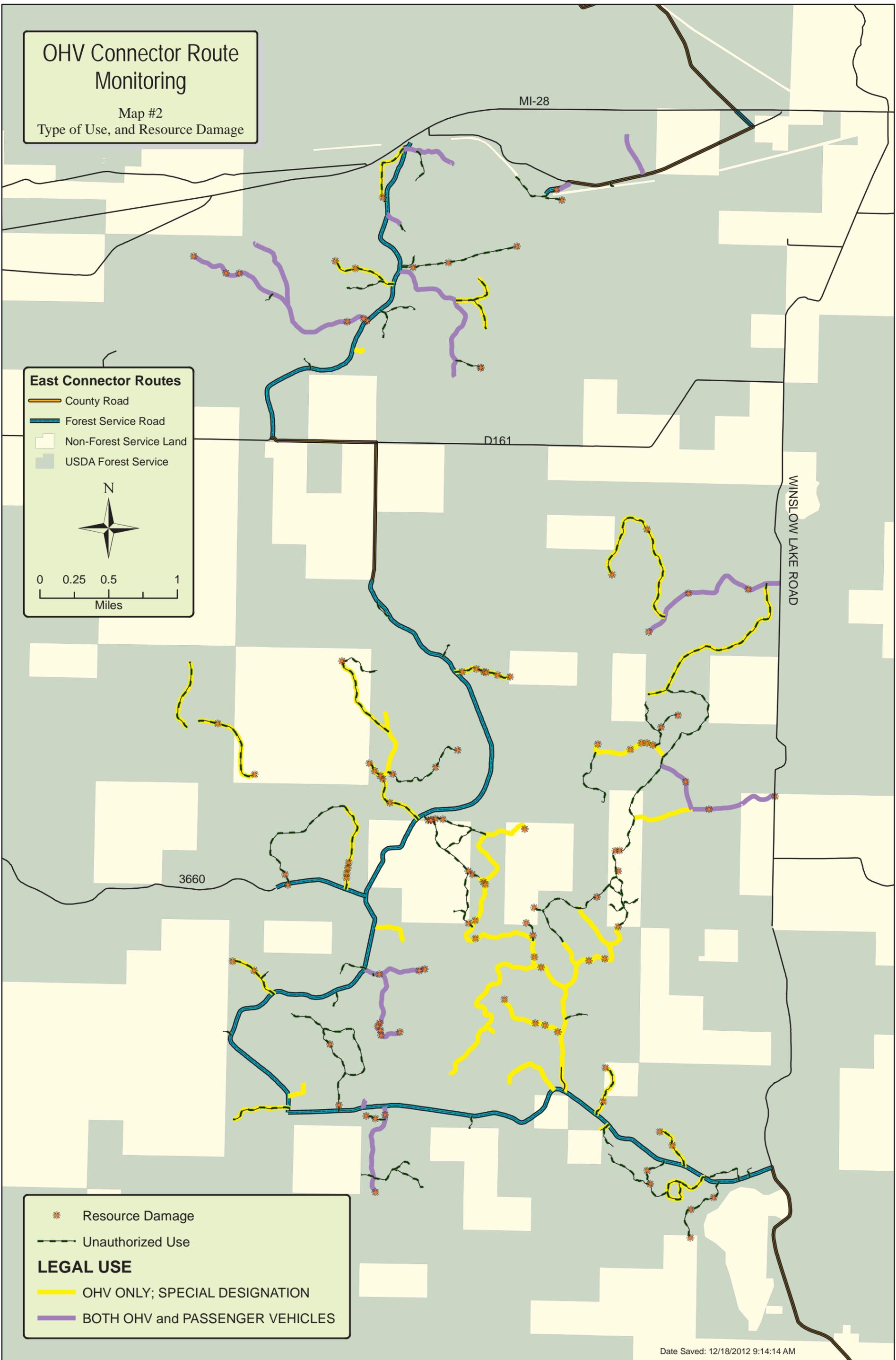


0 0.25 0.5 1
 Miles

-  Resource Damage
-  Unauthorized Use

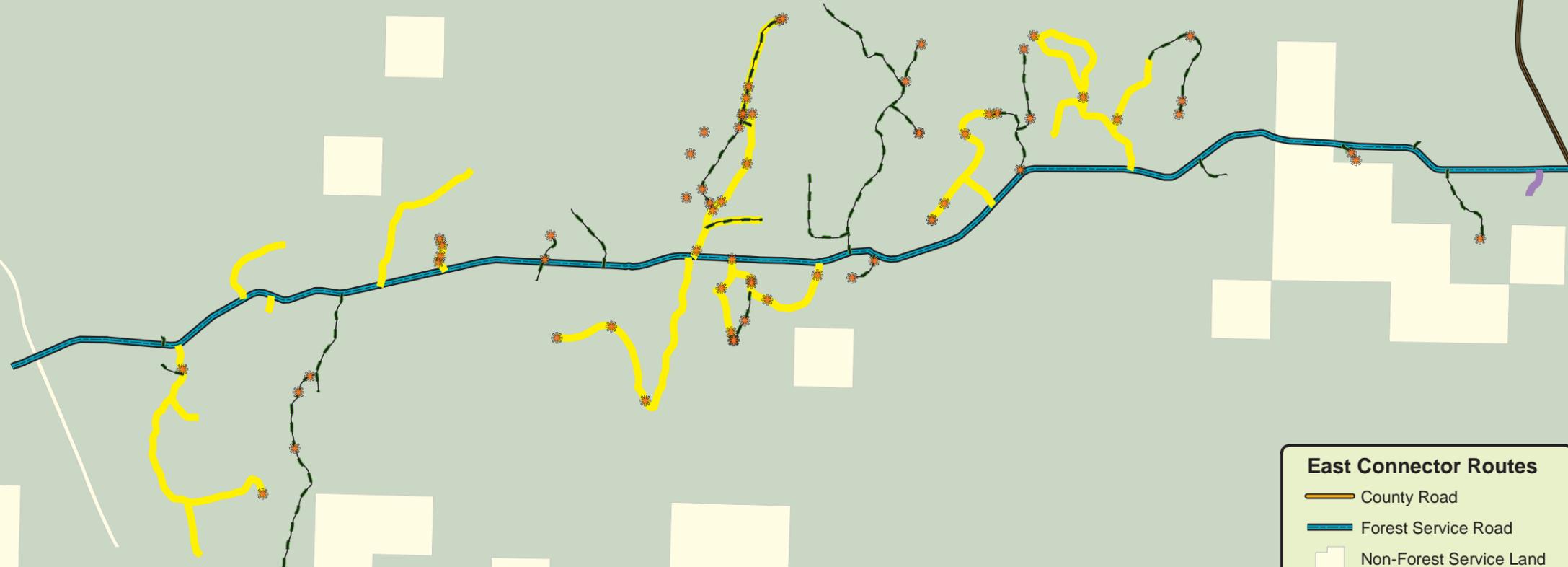
LEGAL USE

-  OHV ONLY; SPECIAL DESIGNATION
-  BOTH OHV and PASSENGER VEHICLES



OHV Connector Route Monitoring

Map #3
Type of Use, and Resource Damage



Resource Damage

Unauthorized Use

LEGAL USE

- OHV ONLY; SPECIAL DESIGNATION
- BOTH OHV and PASSENGER VEHICLES

East Connector Routes

- County Road
- Forest Service Road
- Non-Forest Service Land
- USDA Forest Service

N

0 0.25 0.5 1
Miles

3257

3240

3400