STUDY 1: ROUTES LOCATIONS & TYPES

'EVERY LAND MGMT PROJECT IS TIED TO A LOCATION ON THE GROUND'

A. STUDY GOAL

Continue efforts towards developing a travel management plan

Winnemucca BLM has had a team in the field GPS-capturing route data and photographs every year **since 2005.** Nearly **2,200 miles of route** in the Winnemucca BLM have been collected with standardized **NV BLM data dictionary.** GPS-enabled photos support collected attributes and document route conditions. Some areas are listed in multiple years. This is not duplication in efforts but rather shows how the travel network is being connected over time. **Mileage totals for each season's efforts are outlined below and displayed on Map 0.1 in the Executive Summary.**

2005

207 miles (691,000 acres [*])

The focus was on Wilderness Study Areas in Washoe County for a Washoe County lands bill proposal. Data was also collected in Sonoma and Buffalo Ranges southeast of Winnemucca.

2006

582 miles (1,613,000 acres)

The focus was on Blue Wing Mountains, North Sahwaves, Lava Beds, Fencemaker and Tobin Crest. These areas were involved in a Pershing County lands bill proposal.

2007

311 miles (821,000 acres)

Data was collected in the northwest corner of the district in Pine Forest, Trinity range by Lovelock and select areas south of Winnemucca.

2008

744 miles (2,331,000 acres)

Data was collected in the Mt. Limbo and Selenite Wilderness Study Areas, as well as in the Sonoma Range and area surrounding Trego. Areas covered are in the proposed Nightingale Special Recreation Permit Area (SRMA).

NCA Inventory

345 miles (969,000 acres)

Efforts driven by ongoing projects within the NCA

2009 Travel Route Inventory

480 miles (1.2 million acres)

The focus in this report was on **routes accessed by motorcycle**. Not only are this routes not detectable on aerial imagery but the biggest challenge in inventorying these routes is the high level of riding skill and local knowledge needed for access. Previous team traveled by pickup truck or OHV are not accessible to most of these routes. A majority of the routes inventoried in this report cannot be reached by these vehicles. The 2009 field staff was drawn from the Motorcycle Racing Association of Northern Nevada (MRANN). The team members have decades of experience designing and riding routes in the area. They also have the motorcycles, gear and other necessary equipment that the BLM lacks to catalog these routes.

* Reported acreages reflect a buffer of 0.5 miles on each side of the route.

B. METHODS

The NV BLM route inventory data standard was established in 2005 by a team which included the current BLM Travel Management Program National Lead and an individual from this project team.   BLM's Comprehensive Travel & Transportation Management (CTTM) Program addresses **all conditions of travel** as follows:

> *'CTTM defines and categorizes its linear assets (travel routes) into the following three "Transportation Asset" designated categories: roads, primitive roads, and trails. Further categorization includes low clearance, high clearance or single track.'*

Project data was collected in accordance with BLM state and federal standards.   Collected attributes are defined and discussed in both text and photos in the following pages.   For further details, consult the CTTM materials [Ref 9].

Routes

rt_type
    "Single Track"
    "Drivable Wash"
    "Unimproved; 2-Track"
    "Improved; Dirt/Blad"
    "Improved; Grvl"
    "Paved"

Route points

Point type (Point type)
    "Y,T Intersection", "4 Way", "5 Way", "6 Way",
    "End of Route", "Other", "End of Day"

NOTE: Grayed values were not encountered in this project.

C. DATA AND RESULTS

i. Surface Management

63 % of the routes inventoried in this project are on the public lands.

Most of the other areas were on the alternating sections of private land as the project area is in the 'checkerboard lands',

Miles detailed by ownership and project area -

Miles						
	NTG	TOU	N WLk	SAH	S WLk	TOTAL
BLM	34.3	43.5	69.5	76.9	77.1	**301.4**
Private	26.2	49.5	0.5	45.1	56.6	**178.1**
Bureau of Reclamation		0.3				**0.3**
TOTAL	**60.5**	**93.3**	**70.0**	**122.0**	**133.8**	**479.7**

Acres detailed by project area based on a buffer of 0.5 miles to each side of the route.

Acres	
	Total
South of WMCA Lake	342,585
Sahwaves	310,620
Toulon	227,740
Nightingales	200,473
North of WMCA Lake	126,662
Grand Total	**1,208,080**

ii. County

Miles detailed by county and project area -

Miles						
	NTG	N WLk	TOU	SAH	S WLk	TOTAL
PERSHING		66.9	74.1	80.5	21.1	**242.5**
CHURCHILL	60.5		19.2	41.6	26.2	**147.5**
WASHOE		3.1			86.5	**89.7**
TOTAL	**60.5**	**70.0**	**93.3**	**122.0**	**133.8**	**479.7**

Gaps in routes are areas lacking GPS satellite and/or team coverage
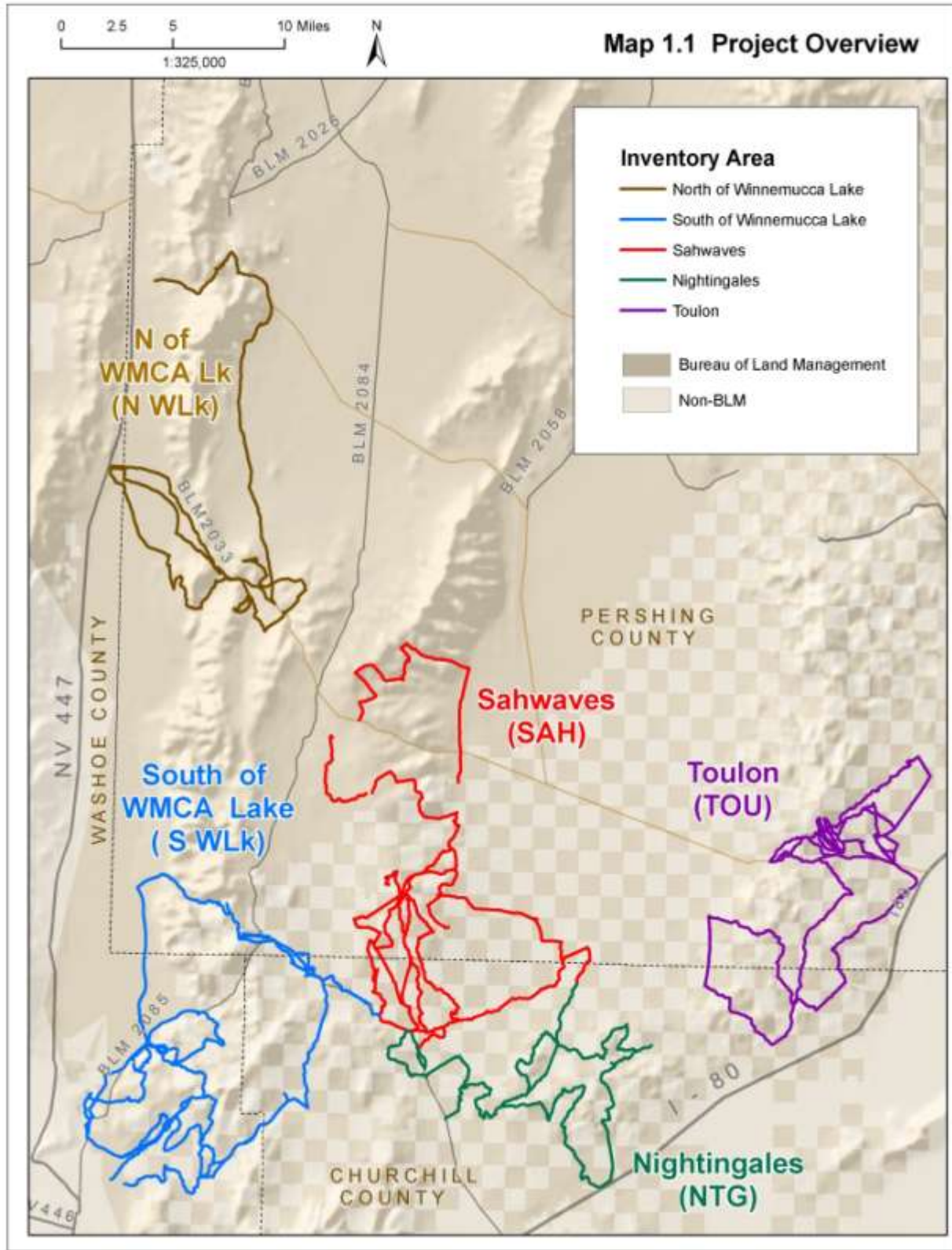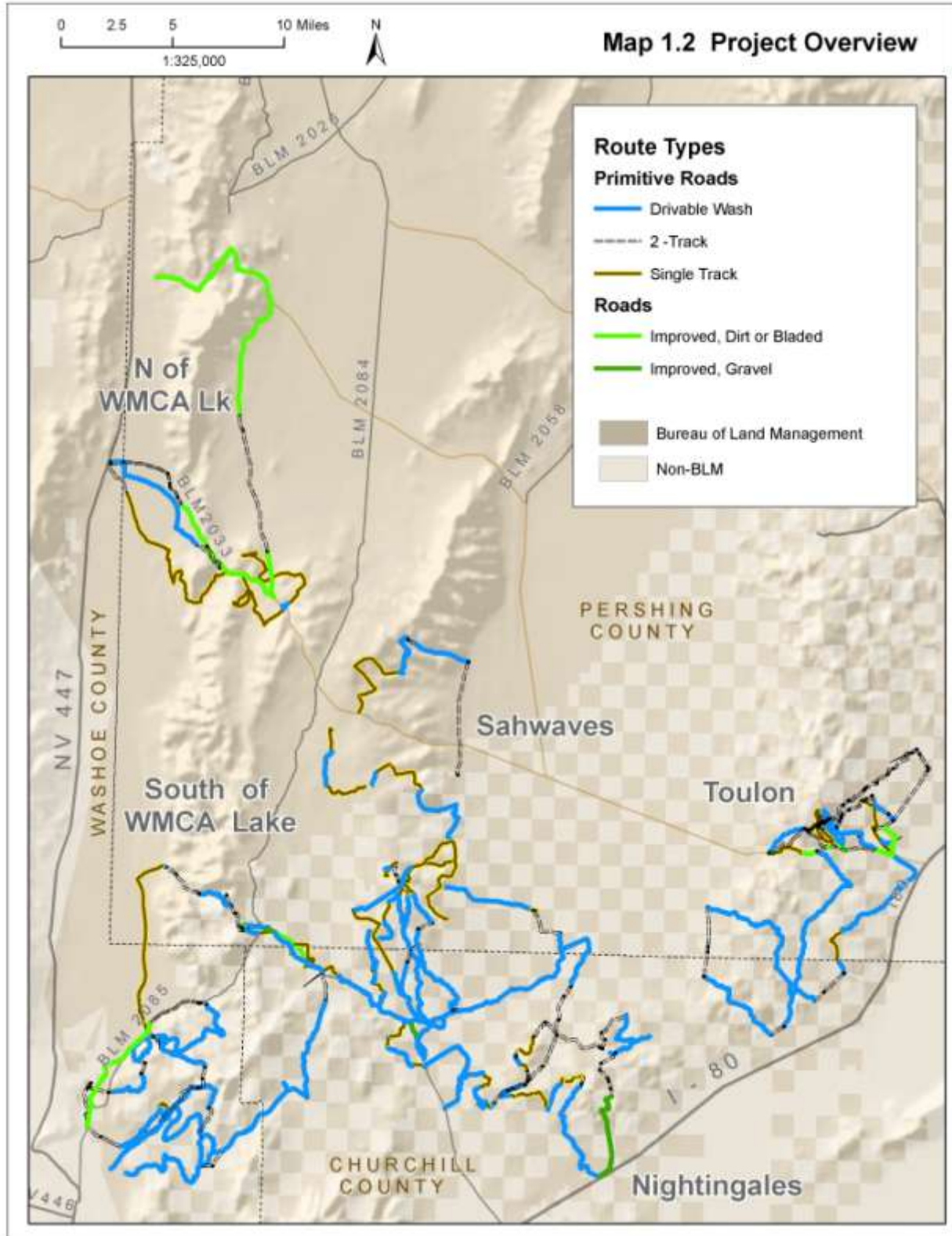
ii. Route Types

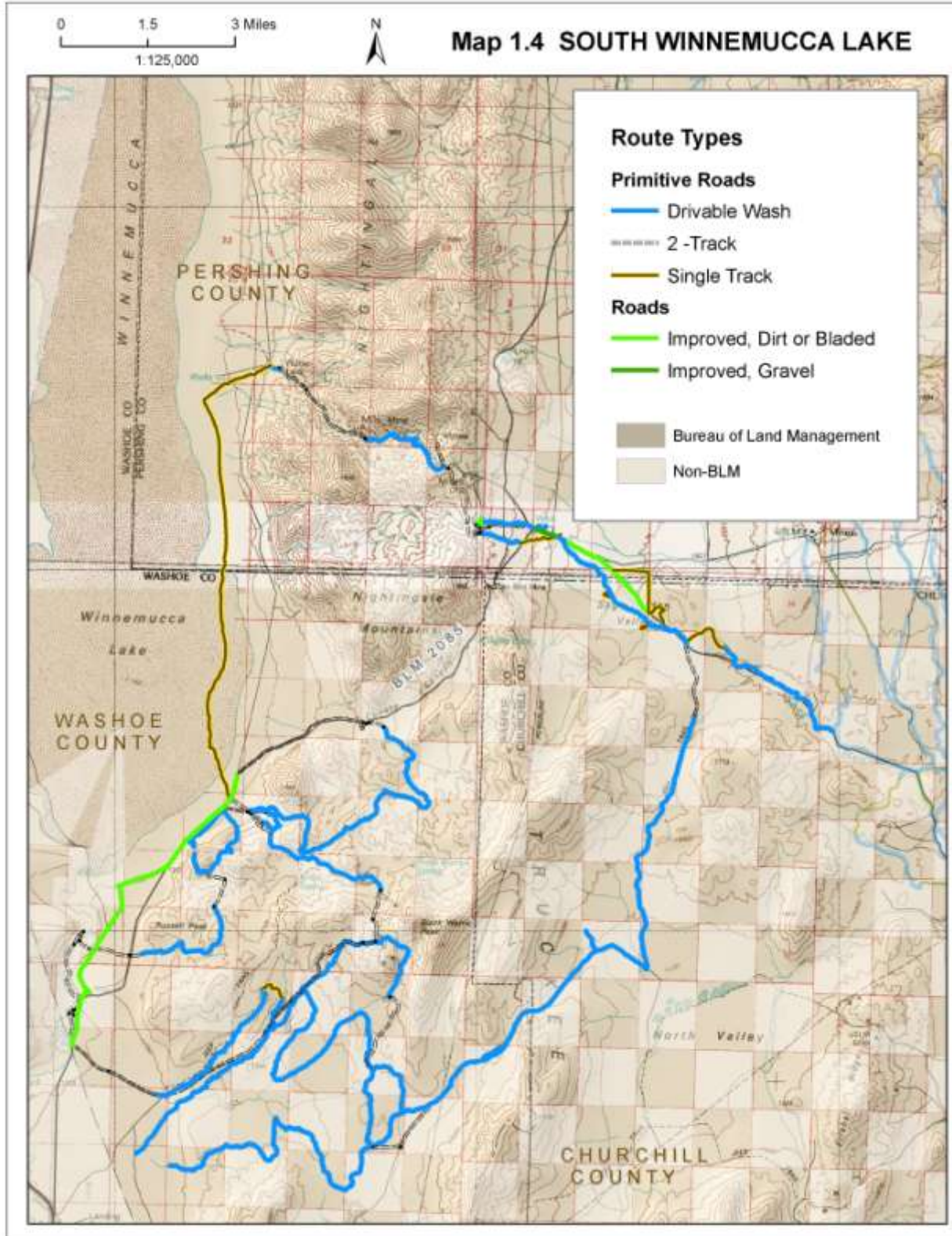**91 % of the routes in this project are Primitive Roads (Wash, Single or 2-track)**
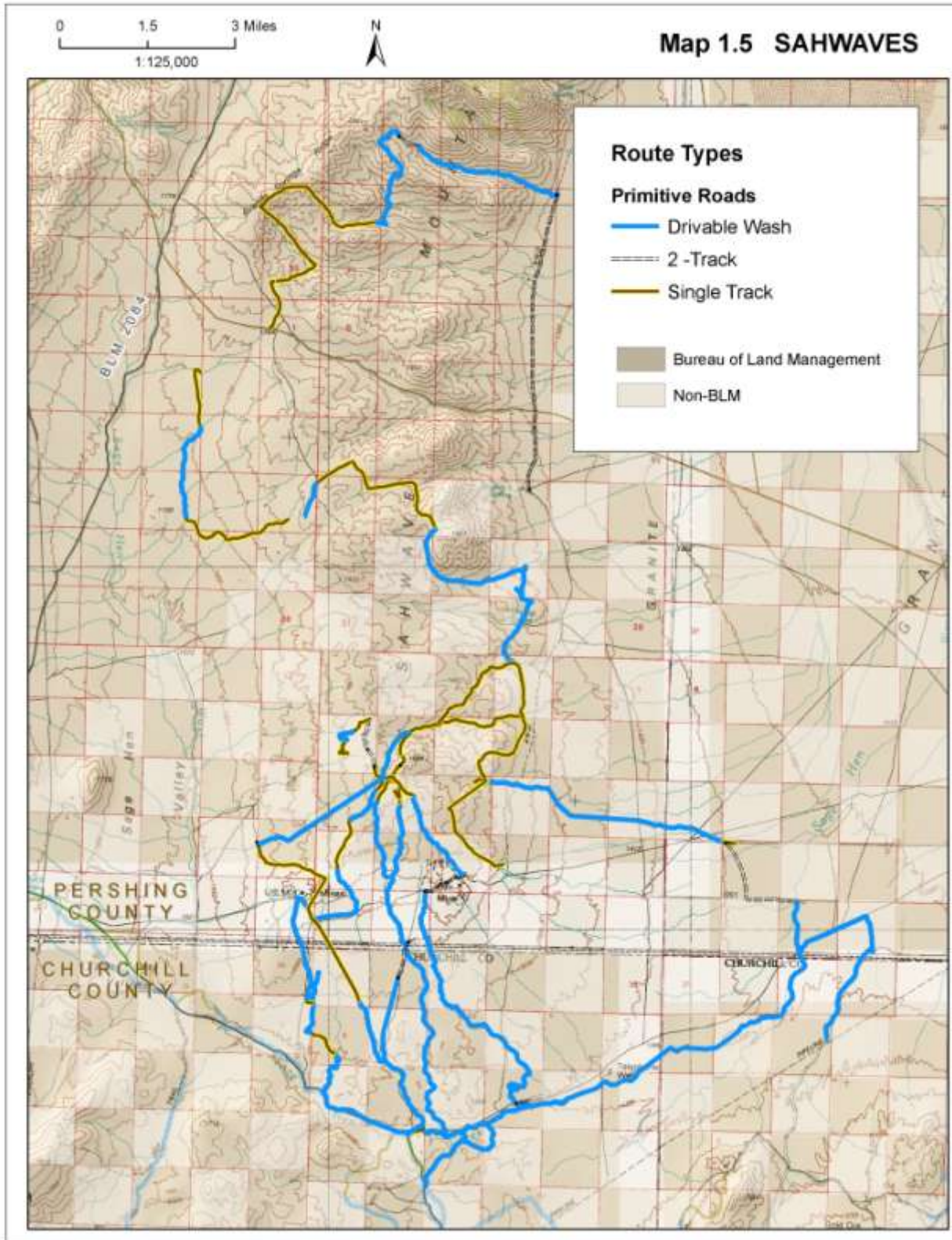
 9% are Improved Dirt/Bladed or Gravel Roads
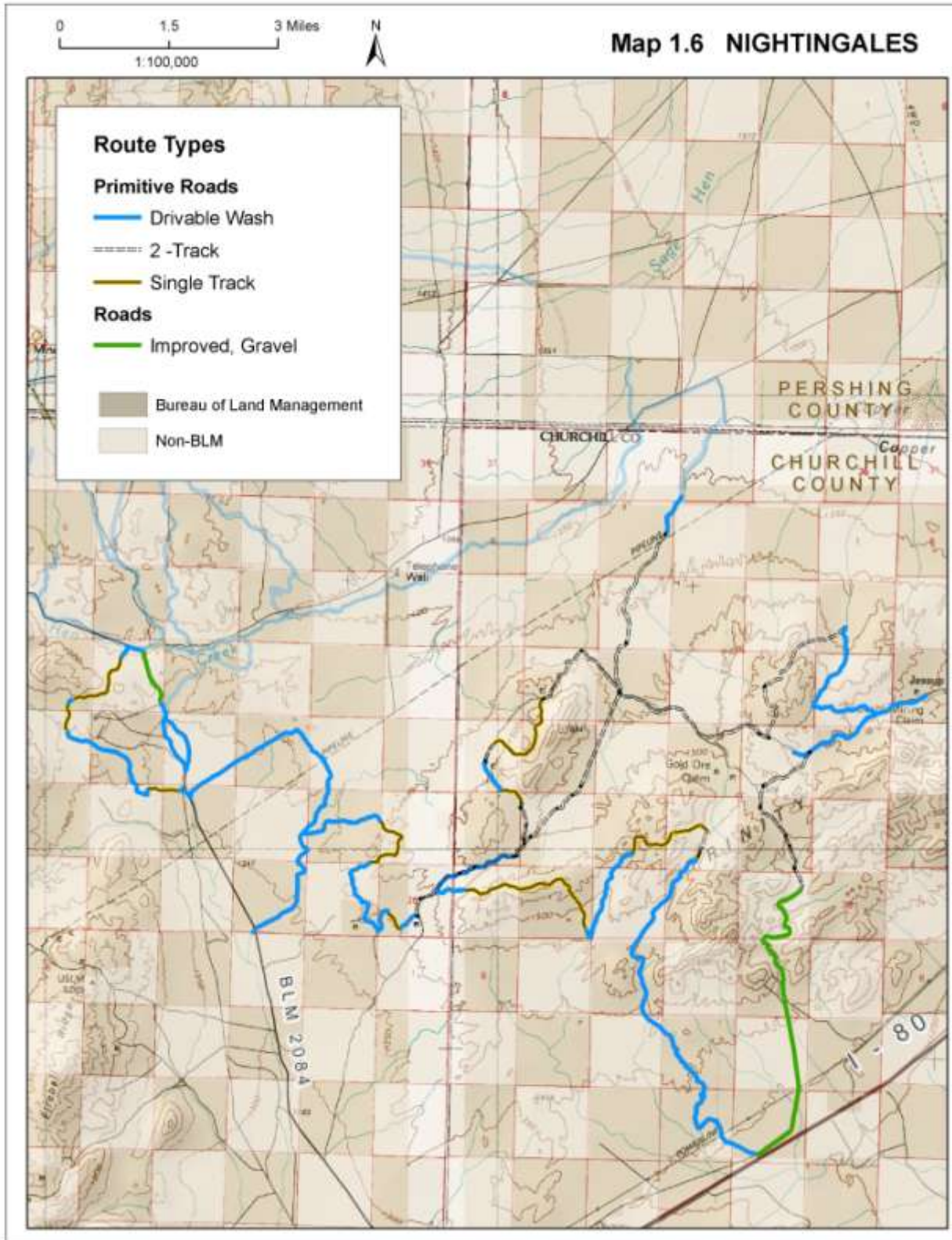

Miles detailed by route type and project area -

Miles							
	NTG	N WLk	TOU	SAH	S WLk	TOTAL	%
Drivable Wash	28.1	7.2	46.7	76.1	68.3	**226.4**	47.2
2-Track	18.0	16.3	31.1	10.3	40.5	**116.3**	24.2
Single Track	9.0	23.6	11.4	35.6	15.5	**95.2**	19.8
Dirt/Blade		22.9	3.8		9.1	**35.8**	7.5
Gravel	5.4		0.3		0.4	**6.1**	1.3
TOTAL	60.5	70.0	93.3	122.0	133.8	479.7	

Gaps in routes are areas lacking GPS satellite and/or team coverage

Map 1.4 SOUTH WINNEMUCCA LAKE

Map 1.5 SAHWAVES

Route Types

Primitive Roads
- Drivable Wash
- 2 -Track
- Single Track

- Bureau of Land Management
- Non-BLM

Map 1.6 NIGHTINGALES

Map 1.7 TOULON
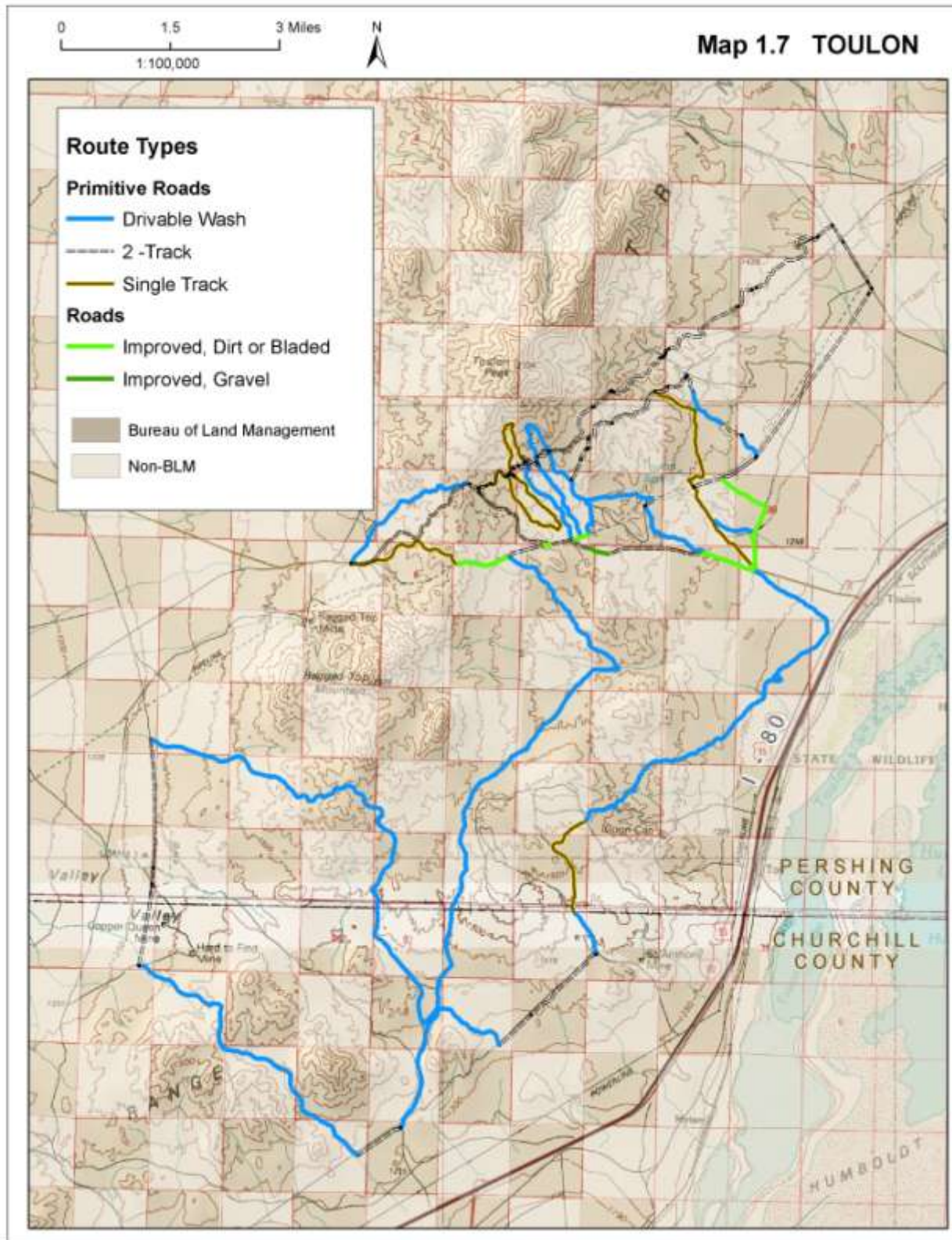
D. DISCUSSION

i. Primitive Roads

The vast majority of routes **(91 %)** in the project area are -

- **user-created**
- **not maintained**
- **lack an assigned owner**
- **are located on the public lands, but**
- **not a part of the BLM transportation system**

The BLM Roads and Trails Terminology Team [Ref 13] defines **'primitive roads'** as …

> 'Routes presently used by a number of organizations to describe high-clearance and 4 × 4 routes that are not designed to an engineering standard, but are available for use and should be identified on transportation systems.'

The National Team has proposed a national data standard for primitive roads but it has not yet been officially adopted. Since most of the routes GPS-captured by this project's team are not part of the BLM transportation system, it is not required the collected data meet this standard. **However, the collected project data does encompass the information targeted by the proposed standard for primitive roads.** [App A]

ii. Roads

The BLM Roads and Trails Terminology Team defines a **'road'** as …

> 'A linear route declared a road by the owner, managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use.'

Only a few route segments in this project follow established BLM or county maintained roads. **However, the collected project data does encompass the information targeted by the proposed standard for roads.** [App B]

iii. Route points

Team-collected route points indicate the number of routes at each intersection. For example, a 4-way intersection should have 4 routes originating from that point. If not, this indicates a need to inventory the missing routes. While route points are not displayed on the printed maps within this report, their locations are stored in the project geodatabase. These can be used to **guide future route inventories** and field work.

E. BENEFITS AND APPLICATIONS

Location and route type data are relevant to all office projects.

Manage all travel route data in the project geodatabase

This travel management recommendation is discussed in detail in the Executive Summary.

Capitalize on collected route points to continue inventories and assessments

Create Travel Management Areas (TMAs) to prioritize areas and use route points to **integrate existing data and guide future inventories.** Currently route points must be inspected manually to determine if all intersecting routes have been collected. Topology rules could be added to the geodatabase to flag intersecting routes that remain to be inventoried.

Utilize route locations for analysis for all office projects

NEPA review

All route locations and attributes can be analyzed with project components, land status, wilderness and other base layers. This will help locate projects by legal description, ownership and other administrative boundaries. It will also **alert resource specialists** of possible cultural, wildlife, mining and other potential issues.

Identify and evaluate areas with wilderness characteristics

Areas of 5,000 sq acres lacking maintained roads must be identified and reviewed for their wilderness value for **all office projects.** The project database will help identify these areas in the district.