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MANUAL TRANSMITTAL SHEET

Subject

9115 – Primitive Roads Manual

1. Explanation of Materials Transmitted: This is new Manual with associated Handbooks on primitive roads. Attached is the Manual Section only, per Directive's instructions. Handbooks 1 and 2 are under separate clearance sheets for each.

2. Reports Required: None.

3. Material Superseded: None.

4. Filing Instructions:

REMOVE

None.

INSERT

9115

(Total: 12 Sheets)

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Reference Handbooks

H-9115-1	Primitive Roads Design Handbook
H-9115-2	Primitive Roads Inventory and Condition Assessment

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.01 Purpose. This Manual Section provides policy and guidance for planning, design, and construction of new primitive roads; reconstruction of existing primitive roads; and inventory and maintenance of all primitive roads.

- A. A primitive road is defined in the Roads and Trails Terminology Report (April 2006) as, “A linear route managed for use by four-wheel drive or high-clearance vehicles. Primitive roads do not normally meet any BLM road construction standards.”
- B. Many primitive roads are incorporated into a transportation management system through the Comprehensive Travel and Transportation Planning process. Most primitive roads are not constructed and are developed over time by various resource uses.

.02 Objectives. The objectives are to:

- A. Identify the role each organizational unit, (as described in .04 below) plays in providing engineering expertise for the management of BLM primitive roads.
- B. Provide direction for appropriate coordination with other organizations.
- C. Provide adequate information to ensure that inventory, planning, design, construction, and maintenance activities for primitive road projects meet BLM needs and are performed in an acceptable manner.

.03 Authority. The authority for providing transportation facilities is contained in the Federal Land Policy and Management Act of 1976 (FLPMA), as amended. See Manual Sections 9100.03 – Facilities Planning, Design, Construction, and Maintenance - Authority, 9103.03 – Facility Construction - Authority, and 9104.03 – Facility Maintenance - Authority.

.04 Responsibility. The responsibilities described below are commensurate with those approved functional statements and Manual Sections 9100.04 – Facilities Planning, Design, Construction, and Maintenance - Responsibility, 9102.04 – Facility Planning - Responsibility, 9103.04 – Facility Construction – Responsibility, 9104.04 – Facility Maintenance – Responsibility and 9110.04 – Transportation Facilities - Responsibility.

- A. The Chief, Division of Business Resources at the Washington Office (WO), as exercised through the Chief, Engineering and Asset Management Policy Branch, is responsible for:

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1. Providing bureau-wide leadership and guidance for planning, design, construction, inventory, and maintenance of primitive roads associated with managing public lands.
 2. Establishing bureau-wide primitive road guidelines.
 3. Developing bureau-wide systems and guidelines for primitive road inventory, classification, and maintenance intensity.
 4. Providing overall direction, quality, and stewardship of the Bureau asset management system for the BLM primitive roads inventory.
 5. Coordinating with other federal agencies, national interest groups, and road associations to ensure Bureau interests are represented regarding primitive road-related activities.
 6. Providing technical manual sections and related handbooks for approval and issuance by WO.
- B. The State Engineer in each State is responsible for:
1. Providing state-wide leadership and guidance for planning, design, construction, inventory, and maintenance of primitive roads associated with managing public lands within their geographic area of responsibility.
 2. Providing overall direction and quality of the state's asset management system data for the BLM primitive roads inventory.
 3. Ensuring that personnel assigned to primitive road design or construction inspection duties are qualified.
 4. Ensuring all primitive road designs receive an independent review.
- C. The District Manager or Field Manager, as appropriate is responsible for:
1. Coordinating an interdisciplinary review and approval of all route selections for new or relocated routes.
 2. Making determinations on the location of new or relocated primitive roads based on environmental and route analysis reports generated by the interdisciplinary review team.

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3. Ensuring the overall quality of the District/Field Office Bureau asset management system database for the BLM primitive roads inventory.
 4. Ensuring that proposed primitive roads are planned and constructed to BLM guidelines and approved plan/permit.
- D. The District Engineer, Field Engineer, Zone Engineer, or other engineer designated by the responsible line manager, is responsible for:
1. Accomplishing assigned primitive road project tasks, such as inventory work, designs and reviews.
 2. Assigning construction inspection tasks to personnel who have completed the required training or are otherwise qualified.
 3. Recommending training for local personnel to ensure that primitive road design and construction inspection capabilities meet the District or Field Office requirements.
 4. Providing overall direction and quality of the District or Field Office asset management system data for the BLM primitive roads inventory.

.05 Policy. It is Bureau policy that:

- A. Bureau primitive roads must be planned, designed, and maintained to an appropriate standard no higher than necessary to accommodate their intended functions. Planning, design, construction, inventory, and maintenance must be consistent with national policies for; safety; esthetics; protection and preservation of cultural, historic, wildlife, scenic values, etc.
- B. Bureau primitive roads are for use, development, protection, and administration of public lands and resources and although administered by a public agency, do not meet the criteria for public roads. Bureau primitive roads are subject to rules and regulations of the Secretary of the Interior. Even though limited public use may be allowed, primitive roads may be closed or use restricted to fulfill management objectives such as protecting public health and safety, preserving resources, or in support of security requirements.

Reclamation/decommissions, closures, and use restrictions, except for emergency reasons, are identified through the Land Use Planning Process.

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Bureau primitive roads which no longer support management objectives may be reclaimed/decommissioned and removed from the Asset Management System.

- C. Coordination with other agencies is undertaken to assure that land use, resources, and public interests are represented and that Bureau road management actions and activities are appropriate.
- D. The location, design, construction, inventory, and maintenance of primitive roads crossing public lands must comply with all applicable Federal laws.
- E. All primitive roads controlled by the Bureau must meet appropriate Bureau primitive road definition and guidelines, whether or not they are constructed by Bureau initiative.
- F. Primitive Roads constructed by non-governmental entities across public lands must be reviewed by or under the direction of a Field Manager or Bureau personnel appointed by the Field Manager. The Field Manager, will identify primitive road safety and resource protection issues warranting a primitive road design. The Field Manager should take into consideration low average daily traffic, low design speed, topography, soil types, seasonal weather conditions, and intended use.
- G. The acquisition of easements may not be initiated until a route analysis has been completed and approved by the appropriate District or Field Office Manager or designated representative.

.06 Scope of Primitive Road Program. The management of public lands and resources is affected by continually changing social, economic, and political needs. As management objectives change, primitive road needs could also change. An effective program to provide a primitive road system needed to support these changing management objectives must be predicated on current and future needs and must allocate limited resources by the most effective method.

A current inventory of facilities and a method of measuring their adequacy are basic to managing a road system. The Bureau asset management system has been designated as the central repository of all BLM primitive road condition and inventory data. Although comprehensive condition assessment of primitive roads is not required by Bureau policy, information collected in the course of other activities such as inventory updates and deferred maintenance is maintained in the asset management system and included in the Bureau's reporting.

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.1 Primitive Road Management. The management of primitive roads requires limited data collection, information dissemination, and inter- and intra- bureau coordination to determine the need to construct, improve, maintain, acquire, transfer jurisdiction, restrict use, or close and reclaim/decommission certain primitive roads.

- .11 Primitive Road Inventory. The Bureau's official inventory of primitive roads is contained within the Bureau's asset management system. Bureau policy does not require Geo-spatial data and comprehensive condition assessments as part of the inventory.
 - A. Route Numbers. Use the same route number throughout the length of the route. Do not duplicate route numbers within the state. The State Office may assign blocks of numbers to each District or Field Office to assure that no duplication occurs. Numbers are assigned by the District or Field Office in which the route originates and continues into the other Resource area or District or Field Office jurisdiction if the route crosses a boundary.
 - B. BLM's Transportation System. Changes to the BLM's transportation system, as recorded in the asset management system, may occur as part of the formal evaluation and designation process through one of four events:
 - a. Record of Decision (ROD) for a Resource Management/Environmental Impact Statement (RMP/EIS) or an amendment of an RMP/EIS.
 - b. Decision Record for an Activity Plan, Plan Amendment/Environmental Assessment (EA).
 - c. Federal Register Notice Action (under authority of 43 CFR 8341.2, 8364.1, 8365.1-6, or 9268.3) that has a follow-up land-use planning action and associated NEPA action.
 - d. Management decision regarding appropriate routes in an area where off-highway vehicle use is allowed.
 - C. Requirements. Primitive Roads provide a transportation alternative across BLM land that minimizes resource impact, construction, and operation and maintenance costs. Primitive roads by definition do not conform to traditional "design standards" but are rather designed and maintained to provide a balance between the transportation and access requirements and low-impact development.

The intended functions and level of use for each Primitive Road dictate the design and construction considerations as well as the appropriate

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maintenance intensity for each Primitive Road. Each road requires a unique solution that balances resource protection and transportation access.

Best Management Practices (BMP) should be specific to each primitive road. An example of BMP's for Primitive Roads is provided in the Bureau's "Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development, the Gold Book".

Primitive Roads require an "outcome based" design and management approach rather than an adherence to specific industry standards. Consequently, the Primitive Roads manual is intended to communicate a management philosophy that meets BLM functional requirements with a site specific approach that minimizes impacts on the land.

- .12 Functional Classification. The Bureau does not classify primitive roads by functional classification. The Bureau primitive roads are for use by high-clearance or four-wheel drive vehicles and typically have very low traffic volume. The location and design of these primitive roads are governed by environmental compatibility, expected uses and minimizing Bureau costs, with minimal consideration for user comfort, or travel time.
- .13 Use of Bureau Funds on Non-Bureau controlled primitive roads. Appropriated Bureau funds may not be used to construct, improve, or maintain primitive roads not owned or controlled by the Bureau, or otherwise authorized.
- .2 Primitive Road Guidelines. Bureau primitive roads are designed and constructed primarily to support the protection, development, use, and administration of public lands and resources with minimum impact on the environment. Designers of primitive roads must recognize possible impacts on the environment which could be caused by the accumulation of drainage, changes in runoff patterns, or removal of critical vegetation. Bureau primitive roads must consider safety, respect the natural setting, esthetics, protection, and preservation of historic and cultural values.

Bureau primitive roads are typically not designed to a strict set of standards. However, primitive roads developed for public or commercial use should consider BLM Manual Section 9113 – Roads, as appropriate.
- .3 Primitive Road Planning. Primitive road project planning ensures that the project provides adequate service and is compatible with environmental values. Prior to final selection of a route, alternative locations and environmental factors should be considered. Refer to Manual Section 9113.31 - Route Analysis, as appropriate.

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- .4 Design. Any designer and reviewer assigned responsibility for the design and/or review of any primitive road must have a working knowledge of engineering principles and procedures.

All "in-house" designs must receive an independent technical review. The State Engineer reviews and determines the procedures and organizational level for such reviews. Primitive roads designed by non-Bureau personnel are approved for technical correctness by a qualified designer and are reviewed by the State Engineer, qualified District engineering personnel, or a qualified reviewer appointed by the District Engineer, to assure that the design meets the appropriate Bureau primitive road guidelines.

- .5 Construction. See Manual Section 9103 - Facility Construction.

- .51 Inspection. Construction inspection must be performed by qualified inspectors regardless of the method of construction, such as force account, contract, timber sale, etc.

- .6 Maintenance. See Manual Section 9104 - Facility Maintenance

- .61 Maintenance Management. Follow guidance in Manual Section 9104 - Facility Maintenance for the establishment of a maintenance management program.
- .62 Maintenance Intensity Levels – Transportation System Assets. BLM Maintenance Intensities provide route appropriate “Guidelines of Care” to recognized routes within the BLM system. Recognized routes by definition include primitive roads carried as assets within the Bureau asset management system.

Maintenance Intensities provide consistent objectives and Guidelines for the care and maintenance of BLM routes based on identified management objectives. Maintenance Intensities are consistent with land-use planning management objectives (for example, natural, cultural, recreation setting and visual). Maintenance Intensities provide operational guidance to field personnel on the appropriate intensity, frequency, and type of maintenance activities that should be undertaken to keep the route in acceptable condition and provide guidance for the minimum care for the annual maintenance of a route.

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Maintenance Intensities do not describe route geometry, route types, types of use or other physical or managerial characteristics of the route. Those terms are addressed as other descriptive attributes to a route.

Maintenance Intensity provides a range of management objectives and Guidelines. See Appendix A - Primitive Road Maintenance Intensities.

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Appendix A – Primitive Road Maintenance Intensities**Level 0**

Maintenance Description: Existing routes that will no longer be maintained and no longer be declared a route. Routes identified as Level 0 are identified for removal from the Transportation System entirely.

Maintenance Objectives:

- No planned annual maintenance.
- Meet identified environmental needs.
- No preventative maintenance or planned annual maintenance activities.

Maintenance Funds: No annual maintenance funds.

Level 1

Maintenance Description: Routes where minimum (low intensity) maintenance is required to protect adjacent lands and resource values. These routes may be impassable for extended periods of time.

Maintenance Objectives:

- Low (Minimal) maintenance intensity.
- Emphasis is given to maintaining drainage and runoff patterns as needed to protect adjacent lands. Grading, brushing, or slide removal is not performed unless route bed drainage is being adversely affected, causing erosion.
- Meet identified resource management objectives.
- Perform maintenance as necessary to protect adjacent lands and resource values.
- No preventative maintenance.
- Planned maintenance activities limited to environmental and resource protection.
- Route surface and other physical features are not maintained for regular traffic.

Maintenance Funds: Maintenance funds provided to address environmental and resource protection requirements. No maintenance funds provided to perform preventative maintenance.

Level 2 *Reserved for Possible Future Use***Level 3**

Maintenance Description: Routes requiring moderate maintenance due to low volume use (for example, seasonally or year-round for commercial, recreational, or administrative access). Maintenance Intensities may not provide year-round access but are intended to generally provide resources appropriate to keep the route in use for the majority of the year.

Maintenance Objectives:

- Medium (Moderate) maintenance intensity,
- Drainage structures will be maintained as needed. Surface maintenance will be conducted to provide a reasonable level of riding comfort at prudent speeds for the route conditions and intended use. Brushing is conducted as needed to improve sight distance when appropriate for management uses. Landslides adversely affecting drainage receive high priority for removal; otherwise, they will be removed on a scheduled basis.
- Meet identified environmental needs.
- Generally maintained for year-round traffic.
- Perform annual maintenance necessary to protect adjacent lands and resource values.
- Perform preventative maintenance as required to generally keep the route in acceptable condition.
- Planned maintenance activities should include environmental and resource protection efforts, annual route surface.
- Route surface and other physical features are maintained for regular traffic.

Maintenance Funds:

Maintenance funds provided to preserve the route in the current condition, perform planned preventive maintenance activities on a scheduled basis, and address environmental and resource protection requirements

Level 4 *Reserved for Possible Future Use***Level 5**

Maintenance Description: Route for high (maximum) maintenance due to year-round needs, high volume of traffic, or significant use. Also may include route identified through management objectives as requiring high intensities of maintenance or to be maintained open on a year-round basis.

Maintenance Objectives:

- High (Maximum) maintenance intensity.
- The entire route will be maintained at least annually. Problems will be repaired as discovered. These routes may be closed or have limited access due to weather conditions but are generally intended for year-round use.
- Meet identified environmental needs.
- Generally maintained for year-round traffic
- Perform annual maintenance necessary to protect adjacent lands and resource values.

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- Perform preventative maintenance as required to generally keep the route in acceptable condition.
- Planned maintenance activities should include environmental and resource protection efforts, annual route surface.
- Route surface and other physical features are maintained for regular traffic.

Maintenance Funds: Maintenance funds provided to preserve the route in the current condition, perform planned preventative maintenance activities on a scheduled basis, and address environmental and resource protection requirements.